

2017 Premier’s Kingold Chinese Language Teachers Scholarship

Future-focused Language Learning Environments:

Interconnected Educational Learning Hubs

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# Introduction

Learning environments have a significant impact on how students identify with their learning experience and engagement levels; and positive student outcomes commonly correlate to students working in 21st century innovative learning spaces (Byers, Imms & Hartnel-young, 2014). Innovative learning environments are becoming a norm as many schools are transforming into one. Transformation of the school at a micro level involves redesigning the classroom. The traditional closed classroom layout of fixed student seating directed towards the teacher-centred front becomes a student-centred open learning environment. The walls between closed traditional classrooms are removed and flexible furniture such as mobile tables, lounge chairs and quiet study nooks are installed with the complete integration of multiple visual focal points (i.e. touch screens and whiteboards). Multiple visual focal point technologies bring learning to the student or student group generating a student-centred learning experience.

A study by Gislasen (2009, as cited in Academic Development Group (ADG), 2013) highlights open plan learning environments facilitate collaborative and multidisciplinary teaching practices. The transformation at a macro level involves the school redesigning itself to seamlessly integrate into its local community by acting as a resource for the wider local and global community as opposed to a discrete education institution for school students.



Figure : Innovative learning environment taken at Yew Chung International School Beijing

# Focus of Study

It is essential to redefine learning environments because the world of work is changing. Today’s students are a particularly vulnerable cohort of jobseekers as our current education setting was formed in the manufacturing era, not designed to prepare them for 21st century careers requiring them to navigate technology in a collaborative team environment (Attard, 2017).

In recognition of the evolving 21st century school learners’ needs The NSW Government’s Budget 2017/18 revealed that a record $4.2 billion dollars will be injected into NSW school infrastructure over the next four years (School Infrastructure NSW, 2017). This spending will transform public school classrooms into flexible learning spaces to ultimately support the development of our students to become leaders and innovators for the workforce of tomorrow (Karippanon, Lancaster, Parrish, Cliff & Okely, 2016).

Education institutions worldwide are reforming their education practice and learning environments making this period of change an ‘education revolution’. The rapid evolution of both learning environment, design and information communication technologies (ICT) has changed language pedagogy and language use, enabling new forms of discourse and ways for students to participate in communities (Kern, 2006). It is critical to establish strategically designed language programs to foster the growth of an integrated learning hub whereby students use language authentically with audiences at school and beyond. Dr Marie Alcock (personal communication, March 10, 2016) describes it is the time for change and teachers are the people to act now to redesign effective innovative pedagogy for contemporary 21st century learners (see Figure 2. Teaching and learning over time by Dr Marie Alcock).

| Antiquated | Classical | Contemporary |
| --- | --- | --- |
| Learning experiences entirely within the classroom | Classroom in school and other places | Learning within a range of physical and virtual environments |
| Linear delivery in class | Delivery in a range of settings | Non-linear learning |
| Set formats and structure | Limited flexibility in structure | Fluid and flexible scheduling structures |
| Strict, specific roles for students and teachers | Interactive yet specific roles for teachers and students | Fluid roles for students and teachers as they interact as both teachers and students |
| Restricted communication tools | Limited communication tools | Open-access communication tools |

Figure : Teaching and learning over time

As the learning landscape rapidly evolves much emphasis is placed on teacher pedagogical practices in these new learning environments. Thomas (2010, as cited in Byers, Imms & Young, 2014) highlights there is a distinct link between physical spaces and teacher pedagogical practices in shaping student learning experience and behaviours. My focus is on how schools and teachers navigate innovative learning environments to achieve positive student learning outcomes. Specifically, this study looks at the teaching and learning of Chinese language through varying innovative learning environments. Focusing on how space and pedagogy influence one another to maximise student language learning outcomes.

# Study tour findings

At a micro class level, half the schools visited updated their teaching and learning spaces into contemporary ‘learning communities’, as labelled by teachers at Yew Chung International School Beijing. These ‘learning communities’, as the name suggest are not classrooms, but multiple classes joined together by the removal of walls creating open flexible learning environments that offer students a place to become active participants in their learning by working collaboratively as a ‘community’ to build on their language and intercultural understanding. Chinese language learning in these innovative learning spaces is coupled with teachers using extensive ICT to share and engage students with language learning. Most of these schools use Moodle as an e-learning platform to communicate between teachers, students and parents. School work would be uploaded or downloaded on Moodle as a part of the school’s Chinese blended learning model with teaching and learning happening both in a physical and virtual medium.

Other schools use the WeChat application instead of Moodle whereby teachers can communicate with their students and parents in a closed group forum or individually. WeChat users receive instant notification updates on their mobile phone devices prompting real-time response. These software platforms allow synchronous and asynchronous formative and summative assessment, which in turn enabled teachers to monitor students learning outcomes to give formative feedback and record student progress (Byer & Imms, 2017). Rifkin (2003) highlighted the importance for students to use real-time authentic based scenarios for them to gain proficiency in language use. Students in these settings are able to work with each other on tasks using their ICT devices as focus points in the learning space and transition seamlessly from traditional teacher lead instruction at times to collaborative team-based learning. Schools interviewed who already have ‘learning community’ spaces are keen to expand by further investing into redesigning traditional learning spaces into 21st century learning environments after observing positive student language learning outcomes.

Some schools visited on the study tour have embraced their new learning environment by developing co-teaching models for each class group, involving two teachers one English speaking and another Chinese speaking working collaboratively to promote language learning. Language learning under the co-teaching model can happen in five distinct methods namely: team teaching, station model, one teacher-one support, alternative teaching and parallel teaching. Team teaching involves both teachers delivering synchronously. The station model involves the class divided into two groups and rotated between two teacher stations. One teacher – one support as the name suggests has one teacher taking the lead instructional role while the other supports student learning. Alternative teaching requires both teachers delivering different content and the students, or the teacher select which content students learn. Lastly, parallel teaching involves identical content delivered in different languages. The five models of co-teaching give insight on how co-teaching can take place in open flexible learning environments as co-teaching and learning happens more readily in these spaces because usually more than one class and one teacher operate within the space. Hence, innovative learning environments are more aligned with collaborative team work between students to students and teachers to teachers than in traditional classrooms (Karippanon, Lancaster, Parrish, Cliff & Okely, 2016).

The flexible space in innovative learning environments enables teachers to plan and deliver more collaborative lessons than in traditional classrooms due to the group layout of furniture compared to individual desks. The layout of the space guides teachers to frequently structure lessons to include collaborative team work between teachers, co-teach and between students to work collaboratively on set activities. Teachers working in innovative learning environments believed this type of collaborative work allows students to develop deep and meaningful learning; and leadership skills for later in life (Karippanon, Lancaster, Parrish, Cliff, Okely & Parrish, 2016). Karippanon, Lancaster, Parrish, Cliff & Okely (2016) also reported many schools use project-based learning (PBL) in innovative learning spaces with teachers working collaboratively across curriculum towards interdisciplinary teaching and learning, making learning significant for students.

Many schools visited seek to develop innovative teaching spaces, however due to high student numbers they cannot afford to lose teaching rooms by combining them. Therefore, rooms often become extended by replacing internal walls to corridors with glass making the corridor an extension of the classroom (Karippanon, Lancaster, Parrish, Cliff & Okely, 2016) as teachers could continue to monitor student progress outside classroom ‘walls’. These rooms are often paired with flexible furniture and integrated multi visual focal points to engage students in collaborative activities. Schools with this type of learning space engaged students with various group research tasks whereby they can exchange ideas and language discourse with one another over authentic concept-based language tasks in different areas of the ‘room’. Students readily transit within the classroom and move furniture around with their team or spill learning into the corridor or work individually in reading nooks before regrouping to share findings in the form of peer teaching. Although, the space is not completely ‘open’ innovative learning environment, it remains partially opened using glass walls giving teachers extra space to support students’ learning under a teacher guided pedagogical scaffolding.

One school visited had all language classrooms open into the library giving teachers the opportunity to merge their classroom with the library space. This was particularly useful for the teacher because students could use the library as a space and as a resource for research activities. The classrooms at this school had multi-purpose flexible furniture such as their white-board tables on wheels. This flexible furniture gave teachers and students the opportunity to rearrange seating accordingly to activity type and the table itself acts as a visual focal point too. Students and teachers were seen drawing on the desk bringing learning to the student instead teacher-centred ‘chalk and talk’ at the front of the class. The white-board table is a particularly useful tool for Chinese language learners because the hand-motion of writing the character in turn assists with memory of the character rather than using phonetic input mode on digital devices. Learning here and at various other schools using this type of furniture allows student to learn at multiple locations because of multi-visual focal points facilitating collaborative learning and greater differentiation for in depth student engagement and learning experience.

All school teachers interviewed have carefully articulated 21st century pedagogy for teaching and learning for innovative learning environments existing within and outside of school as learning extends to both the virtual and community environment. At one school, teachers engaged their students with Chinese language and culture by cleverly using the school physical technology -space and digital technologies including their Moodle e-learning platform, personal school blog webpage and personal YouTube channel to promote teaching and learning of Chinese language and culture – at a micro level.

At a macro level, through teacher networks, the school has developed into language learning hub, extending learning from the school to the community and beyond by connecting students with local and international schools. Students at this school use ICT to communicate with other language learners in Singapore on authentic tasks. This type of virtual language learning makes learning significant by having students connect in an authentic language learning medium. The school is also involved in publishing student work to assist with the wider community language learning.

Students have collectively created bilingual story books in English and Chinese which have been published in rural China as a learning resource for disadvantaged students. This exercise gives meaning to students’ work as they simultaneously learn how to illustrate and articulate language between English and Chinese. This school again has a strong community involvement by encouraging students to peer teach. Students share their research tasks such as a written article on food waste, describing the problems of food waste and solutions to minimise it; with a local public school. This peer teaching program engages students with authentic activities and ultimately develops their leadership skills for their future career pathways.

Schools visited extensively extended their students language learning program beyond the school into the broader community by either hosting members from the community such as sister school visits or participating in community hosted events such as language speaking competitions. To prepare for these events teachers regularly need to plan ahead of time to discuss the most effective method used for classroom delivery to strengthen student language and culture outcomes. They use ICT to organise ideas logically and meaningfully to connect with the community authentically, all which are core to intercultural understanding and language acquisition.

As schools become language learning hubs they also host large scale events such as China week, an annual school week event where the whole school learns about topics related to China before hosting a China day, usually in line with a celebrated Chinese festival such as Chinese New Year. This is opened to the broader school community to boost student and community awareness of Chinese language and culture. China week ultimately strengthens a student’s intercultural understanding by generating relevance of Chinese language and culture across the curriculum. On the other hand, another school has extended their students’ teaching and learning program to their staff by running weekly Chinese language classes for their school staff. This builds an integrated school Chinese language and culture model because the staff ultimately transfer these language and cultural skills into their teaching disciplines creating ripples of interdisciplinary teaching and learning. Many international schools visited also have plans to extend their student Chinese program into the wider community by inviting parents to become Chinese language learners too, making language learning a family affair. This holistic language and cultural approach redefines the school as a language learning hub acting as the heart of knowledge for the community.

## Teacher Challenges and Constraints

Language learning landscapes continue to shift at an unprecedented pace to become learning hubs for students of the global community. However, research by Abbassi and Fisher (2010, as cited in Imm & Byers, 2017) suggest teachers who inhabit the space do not always have the effective ability to match the growth. Lackeny (2008, as cited in Imm & Byers, 2017) explains some teachers who occupy new innovative learning spaces continue to use traditional pedagogical practices. For example, flexible furniture is reduced to becoming inflexible as teachers restrict their movement, placing them into static ordered rows to reinforce traditional teacher delivery in a linear flow of content through didactic pedagogy (Neil & Etheridge, 2008 as cited in Byers, Imms & Hartnel-Young, 2014). Integrated digital technologies in innovative learning landscapes such as the interactive white board may merely become replacements for the whiteboard. Lackney (2008, as cited in Byers, Imms & Hartnel-Young, 2014) highlights that teachers have limited ‘environmental competency’ when they are not provided with appropriate professional development on how to utilise the space with suitable pedagogy and technology and can revert to the safety of previous default teacher-centred pedagogy. It is imperative to make the change from traditional pedagogy towards innovative 21st century teaching and learning where space, pedagogy and technology are merged to support student-centred and collaborative approaches to learning, reflecting skills required for the workforce.

Teachers working in innovative learning spaces can experience complex challenges and constraints. Steel and Andrew (2011, as cited in ADG, 2013) have identified six issues the school leadership team should address to support teachers in developing effective pedagogy in innovative learning environments:

* **Pedagogical and technology-related beliefs,** teachers’ underlying belief about the effectiveness of innovative learning spaces and student learning can represent different and sometimes conflicting values.
* **Pedagogical image for use of ICT,** teachers maybe unfamiliar with how technology enriched spaces can be optimally used. It is essential for teachers to have time and frameworks to develop an individual pedagogical image relevant to ICT.
* **Technologies and space,** teachers may have little experience with ICT within innovative spaces and may find it difficult to identify the ‘affordances’-positive features of spaces that offer pedagogical teaching and learning potential.
* **Curriculum agendas,** the transferring of existing subject specific methodologies and practices into new spaces such as in blended learning models may be problematic.
* **Student diversity,** preparing a diverse range of learning material to address the wide range of student needs and characteristics is a challenge for all teachers. “Overlooking this can result in poor student learning outcomes in these new spaces” (Kennedy, Dalgarno, Bennet, Gray, Judd, Waycott, Chang, Maton, Krause, 2009 as cited in ADG, 2013).
* **Pedagogical design and context,** the challenge teachers have with implementing effective pedagogy design within new teaching context. Ongoing refreshing and redesigning pedagogy in innovative learning environments may lead to increased workload and demotivation to continue to improve.

To overcome teacher challenges and constraints to cultivating effective teaching in new learning environments, Steel and Andrews (2011 as cited in ADG, 2013) suggest methods to guide teachers to become active users of these spaces. Firstly, accommodating a teacher’s belief when asking them to review and adapt their practice. It is important to provide opportunities and time for teachers to reflect on their pedagogical vision. Secondly, supporting and motivating teachers to implement change by using peer review to think of new ways of using spaces. Peer review in this form gives teachers the opportunity to share knowledge and practices but more importantly gives ownership of the vision of change (Knight and Trowler, 2001; Lefoe, 2010 as cited in ADG, 2013). Finally, provide ongoing professional development in ICT to close digital gaps between teachers and students. By lessening the digital gap between students and teachers, they form stronger teacher-student dialogue hence leading to greater student engagement and learning.

# Conclusion

The ‘education revolution’ of transforming traditional classrooms to innovative learning hubs has become a catalyst for re-designing pedagogical practices to incorporate 21st century teaching and learning methodologies. By combining space, pedagogy and technology, positive educational interactions can be harnessed to foster collaborative learning, team work and creativity (Cilesiz, 2009 as cited in ADG, 2013), all important skills for students joining the workforce. As the education landscape continues to evolve “teachers are challenged to re-skill in order to maximise the instructional use of new learning environments” (Imms & Byers, 2017). The finding from the study tour highlights that schools nationally and internationally are successfully aligning digital and spatial affordances to maximise student language learning outcomes by engaging with micro – classroom spatial changes to macro – whole school community changes.

Technologies both physical and digital are always in transition and language learning environments are no longer confined to within classrooms and solely from the teacher. The fact that learning can take place anywhere a student can access computer, laptop, iPad or smart phone; or talk with another student or community member, means that these are potential learning spaces. Therefore, we need to start making changes to equip students with the right skills for the future and these changes need to start in the classroom. Teachers need to facilitate student learning by “brokering opportunities and experiences in connecting people to people, students to others and students to students” (Attard, 2017) over different physical and virtual mediums to develop student language and work required skills.

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