



## **Building Teacher Capacity: A Job Embedded Approach**

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The rapidly evolving nature of technology and the ease of access to all students to internet driven programs has seen a major shift in the ways schools engage students in learning. This has seen a movement towards the creation of flexible learning spaces to accommodate new pedagogies ([Oblinger, 2006](#)). Consequently, the new learning environments that students find themselves in today are also the same new environments that teachers are working in.

The paper offers insight into one school's alignment of innovation in teaching and learning in the creation of a flexible learning environment for both students and teachers. It illustrates how a job embedded PD program ([Kelleher, 2003](#)) or "learning in context" ([Fullan, 2002](#)) was orchestrated to foster 'whole of school' teacher professional learning on improving teacher practice. Although only in its early stages, anecdotal data suggests the crafting of professional development within the workplace, promotes an authentic, meaningful and relevant approach to teacher learning yielding beneficial results for both student and teacher.



## **Introduction**

The movement to a global economy and changes in technology, the varying nature of work, and (consequently) the changing workforce demographics are challenging traditional approaches to education. It stands to reason that if Australia is to compete effectively in a growing (global) knowledge-based economy ([Smith & Lynch, 2010](#)), our education system must equip children with appropriate skills to meet new employment opportunities and build the capacity of students to continue to learn new skills and enhance their current abilities long after they finish formal schooling.

The system of schooling predominating countries like Australia today had its genesis in the previous 'industrial era' ([Senge, Cambron-McCabe, Lucas, Smith, & Dutton, 2012](#)). In basic terms, industrial era schooling mirrored the economy in that it required conformity and adherence to long established norms and ways of doing things. Consequently schooling was not about 'opportunity', as this was believed to be an innate and born aspect of the individual (meaning their fate was sealed at conception). The schooling regime was therefore required to filter out 'young people', based on their demonstrated capacities for education, for their place in the work force based on their innate capacities. Grades, the various school exit points (infants, primary, secondary, tertiary) and the corresponding mindset of 'smart and dumb kids' captured and reinforced this circumstance ([Hirsch Jr, 2010](#)).

To make this 'system of schooling' work, the teacher was required to systematically 'present knowledge', in a disciplined environment (because the best worker was a compliant one) using the 'grade' (syllabus) and the 'filtering' process (examinations chiefly) to determine each student's time to leave school. If the student could 'handle' more education they 'stayed



on'. If they couldn't they entered the workforce or vocational education then work. In this system of schooling no attention was focused on the teacher and their capacities to teach because there was a 'free flow' of students into work and because the science of teaching and learning was nonexistent: there was no basis from which to challenge the system of schooling ([Smith & Lynch, 2010](#)).

Increasingly today, the job opportunities in society are more complex, more technologically reliant and evolving and they no longer manifest in local conditions (i.e. workers now compete or employment is influenced by the global employment market). The industrial era of schooling now has to give way for an era, which is based on technological knowledge and where one's capacity to use it in new and different and interconnected ways is key ([Beetham & Sharpe, 2013](#)). Further the emerging science of teaching and learning indicates that all students have capacities to learn albeit requiring more customized teaching approaches ([D Lynch, 2012](#); [Treadwell, 2008](#)).

The industrial era teaching approach is premised on 'pedagogic void'. This is where teaching practice is devoid of an evidence base, where teaching strategies are accommodated to a teacher's personal learning preference rather than to an evidence base for teaching and reinforced by a perception that "not all kids can learn": which is contrary to modern science ([D. Lynch & Smith, 2013](#)). This is a key challenge for schools as they focus on meeting the learning needs of today's student within the constraints of mandated curricula. Teachers simply cannot deliver learning in the same manner as they have for the past few decades. Ensuring teachers have the necessary skills to support students learning for work in the



knowledge economy is a key challenge. How teachers teach will be more important than ever before.

This echoes the words of Valerie Hannon (2012) as she provides a sobering reminder that education cannot continue on the same industrialised path it has been travelling.

*“The argument that education needs to change to adapt to the learning needs of a future that remains uncertain has been exhaustively rehearsed. Although there is considerable debate about the extent and urgency of the problem and the kinds of changes to pedagogy, curriculum and assessment required, there is nevertheless a growing consensus that conventional education systems are, on current paths, unlikely to be capable of the kind of step change that is urgently needed.”* ([Hannon, 2012, p. 2](#))

This being the case, what can schools do to tackle these ‘big picture’ issues? School leaders are at the centre of fostering cultural change and, through purposeful planning and placing the teacher at the heart of school reform, student outcomes can be improved ([Hattie, 2008](#)).

The rise of the internet paradigm ([Treadwell, 2008](#)) has seen a growth in online access to information and the increase in personal mobile devices enabling students unprecedented connectivity to online content ([Prensky, 2010](#)). This has seen a wave of innovation in (early adopter) schools not only as an enticement to capture student engagement but also to provide a more effective means of absorbing students in the learning process.

However, as today’s students are ready now to seize and shape the future by leveraging technology tools to implement their personalized vision for 21st century education ([McCrinkle & Wolfinger, 2010](#)), the consequence of this blended online world requires new skills for both the teacher and the student. The challenge for governments is to not just move



from an industrial education system to a 21<sup>st</sup> century focus by providing a forward thinking curriculum but to rebuild the physical structures of schools to meet the new pedagogy needed to meet the learning needs of students today.

### **History: Moving towards personalizing learning**

Prior to 2009 St Augustine's Primary School typified the traditional schooling structures ([Madden, 2012](#); [Madden, Wilks, Maoine, Loader, & Robinson, 2012](#)). Although a high performing school, classes were ordered and teacher centred. The curriculum was delivered by a unitized Key Learning Area scope and sequence approach. The library was a repository of containers of specified year level units for each Key Learning Area. Students were provided the same learning activities and strategies regardless of their needs or abilities. The delivery of learning was timetabled on a week-by-week, term-by-term basis and was 'checked off' as completed.

Teaching was regarded as linear with the teacher imparting knowledge and the student being the receiver. Assessment followed the same pattern and all children were critiqued and judged against the same assessment task, normally a pencil paper test. Knowledge of content was focused on a 'recall and regurgitate' design.

Teacher conversation centred on the content of the syllabus and how to resource the prescribed units of work. The abilities of the child did not influence the curriculum planning and decision-making. There was little scope to venture outside the 'norms of teaching' to allow students to inquire and research.



This industrial model of schooling perpetuated the isolation of teachers working in individual classrooms. Although being a three stream school, grade teachers shared planning and resources however, teaching was undertaken individually.

The catalyst for the current innovation was a review of the school's results of its participation in the annual Basic Skills (now NAPLAN) standardized testing program for literacy and numeracy. Over the life of the program up until 2006 the data highlighted a flat lining of results. That is, no real growth.

Subsequent discussions around the data offered a renewed enthusiasm to review the school's teaching and learning framework. Coinciding with staff conversation on learning was the school's involvement in the systems' quality assurance program, School Review and Development (SRD).

The consequence of the SRD led to the formation of the 2009-2013 strategic plan titled, "Personalising Learning ~ Pursuing Excellence". A substantial move from operating in the traditional model of school with the "one teacher, one class, one room" structure whereby the teachers implemented a teacher directed, single KLA unitized curricula approach.

Extensive staff professional learning during 2008 and 2009 was held around key educational issues including personalization ([Andy Hargreaves & Shirley, 2009](#)), globalization ([Giddens, 2002](#)), digitalization ([Prensky, 2010](#)) and brain theory ([Reigeluth, 2013](#)). The ensuing planning and decision making saw the development of a new learning landscape to foster the teaching and learning in a 21<sup>st</sup> century learning environment ([Madden, 2010, 2012](#)). The St



Augustine's teaching and learning framework is now based upon the premise that all children can learn and that the provision of targeted, differentiated learning strategies undertaken within a flexible learning environment facilitates improved student learning. The physical facilities design phase of the 2009-2013 strategic plan received a timely boost with the intervention of the Federal Government's BER program. This allowed for an alignment of the unfolding philosophy for learning with the building of the new learning spaces.

After an initial implementation phase, an action research project in 2011 focused on the interim establishment of the school's flexible learning environments. This action research guided further planning and changes to the school's learning framework. More specifically, it allowed the school to study the learning journey of teachers implementing significant educational change within our school environment.

More importantly, the findings of the action research highlighted a need for targeted teacher professional development that is rooted in the day-to-day function of our school's learning framework. Such a job embedded professional development program supports current research ([Andy Hargreaves & Fullan, 2012](#)).

While catering for the learning needs of the child growing up in the digital world by fostering a culture of collaboration and personalized learning, the school's teaching and learning framework is also aimed at building teacher capacity to function within the flexible open learning spaces. No plan for sustainable educational change can ignore or bypass the teacher ([Andy Hargreaves & Fullan, 2012](#)). As schools, like St Augustine's, embrace a student-centered, achievement-based focus teachers will need necessary up skilling to meet the ever-



changing needs of students. Building teacher capacity requires changes in school attitudes about how to best support teachers as they improve their teaching ([Harris & Lambert, 2003](#)). By developing the capabilities of teachers to be better practitioners of teaching and learning, they are more able to meet the diverse needs of each student. For Fullan and Hargreaves (2012), this is the building of professional capital (defined as the function of the integration of human capital, social capital and decisional capital) and is the solution for improving the teaching profession.

St Augustine's has embraced a differentiated teaching and learning approach, engaging students through a personalized learning process using collaboration and self-reflection as key vehicles for enhancing the learning process. Using a deprivatised teaching and learning approach the focus on the personalization of learning enables a collaborative teaching process ([Madden, 2012](#)).

For Hargreaves and Shirley in *The Fourth Way*, the vital 21st century skills that will drive new knowledge economies are integral to the growing agenda of personalization ([Andy Hargreaves & Shirley, 2009](#)). With advances in the science of learning (eg brain based learning, learning styles and habits of mind) our knowledge of how learning occurs will help support and shape different learning experiences to meet the needs of the individual. Deciding on what to learn, when to learn and how to learn will become more tailored to the individual learner.

Arguably the way forward requires a change in the way we deliver learning in our schools. This is the function of teachers and the need to provide experienced classroom teachers



opportunities to develop new pedagogies for addressing the learning needs of the 21<sup>st</sup> century student is an urgent task ([Madden, 2013](#)).

### **Focusing on Teacher Initiated Action Research**

As has been written elsewhere on the educational reforms at St Augustine's ([Madden, 2012](#); [Madden et al., 2012](#)) coupled with the changing Australian educational landscape ([Ministerial Council on Education Employment Training and Youth Affairs, 2008](#)), implementing change begins with the classroom teacher. The introduction of the Australian Institute of Teaching and School Leadership (AITSL) Performance Development Framework and the implementation of the St Augustine's 2009-2013 Strategic Plan have been a catalyst for focusing on teacher improvement.

Supporting this are four assumptions underlying teacher initiated action research at St Augustine's Primary School:

1. All teachers should have multiple opportunities to engage in professional growth and development that is related to classroom practice.
2. Effective teachers have an intrinsic desire to improve their practice. Consequently teachers need relevant and contextual data to work with.
3. Teachers can undertake research that can inform their (current) practice at the classroom level.
4. No matter how decisive research findings may be in one cohort, they may not be applicable to other cohorts, given their individual nuances.



In short, the main reason for encouraging teachers at St Augustine's to engage in action research is to learn from each other, to improve their own teaching expertise and to lead others in the process.

This building of a 'teacher as researcher' culture emerged out of a study into understanding the process of teacher change and the impacts on student learning ([Madden et al., 2012](#)) conducted in the school during 2011. This study looked at a whole of school approach to deprivatising the classroom to enable a more flexible personalized learning approach for students, allow teachers to be more collaborative in their teaching and to provide peer-to-peer feedback on teaching practices.

Guiding this study were three critical research questions:

1. In what ways does the school's curriculum framework reflect and respond to the learner of today?
2. In what ways are teachers experiencing and involving themselves in cohort learning and what are the impacts on their own perceptions of self-efficacy and well-being?
3. What are the students' own experiences of cohort learning innovations and what evidence is there that these innovations are bringing about positive learning and well-being outcomes for students?

Key findings offered a platform for building a way forward to supporting improvement in teacher practice. The five significant themes that emerged from the data were related to:

1. Planning Time
2. Learning Spaces



3. Assessment and Reporting
4. Student Engagement
5. Teacher Engagement and Support

Furthermore, supporting the research by Fullan and Hargreaves (2012) on teacher professional development, the findings of this study reiterated the need for teachers to take responsibility for their own professional learning. More specifically the mandate to focus on building teacher capacity to work in the new environment is summed up in the following:

“The ongoing role of the school leadership team in undertaking carefully designed professional development to support the teachers around whole-school change was vital, and needs to be ongoing, targeted and effective if it is to mitigate teachers’ fears and anxieties and address their learning needs.” ([Madden et al., 2012, pp. 32-33](#))

Using a teacher as researcher framework advocates a means to emphasise the professional nature of teachers and to provide an “evidence based process” to inform ‘big picture’ decision-making around student learning. Teachers as researchers foster teachers’ ability to think critically/systematically about their teaching and to work collaboratively with others to achieve improvement ([Babkie & Provost, 2004](#)).

### **Developing An Action Plan**



The pathway to the future of learning<sup>1</sup> at St Augustine's began with an intensive staff inquiry around the future of learning, how children learn today and the impact of technology/internet on student learning. The purpose of such an inquiry was threefold:

1. To engage all staff (not just the teachers) in the conversation on learning.
2. To examine the current influences on learning. With the view that to support student learning, staff needed to understand the influences so as to make informed decisions on improving student learning.
3. Once our understanding of how children are learning in today's 21<sup>st</sup> century context, the need to create appropriate learning environments to facilitate optimum learning conditions was necessary.

With the need to build staff capacity to implement the school's new learning framework, a number of key strategies were initiated. These are explained below:

**1. Learning Management System.** The first being to introduce an online learning management system that would not only enable staff and students to engage in the digital world but also foster the school's focus on key skills (ie collaboration, problem solving, critical thinking, interpersonal skills, showing initiative). This initiative supports recent research into the use of technology to support the intervention of new pedagogies ([Beetham & Sharpe, 2013](#)).

The decision to utilise the online program "KnowledgeNET"<sup>2</sup> enabled staff and students to not only demonstrate learning outcomes but also allow personalized feedback, parental

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<sup>1</sup> [http://www.youtube.com/watch?v=\\_BFup7LME8A](http://www.youtube.com/watch?v=_BFup7LME8A)

<sup>2</sup> <http://knowledge-networks.co.nz/services/knowledgenet.php>



communication tools and opportunity to engage in the digital arena via a closed password protected site.

Central to this initiative was the whole school approach and the nurturing of staff to become proficient in the use of digital technology as a vehicle to engage students in the learning process. This was based on the assumption that if teachers were not using the technology themselves, then technology wouldn't be featured in lesson plans ([Heppell, 2010](#)). The move from using technology as an end point process (ie publishing final work or simply searching for information) to integrating technology into the learning space has engaged both students and teachers alike.

**2. New Pedagogy.** With a focus on how students learn in today's world, the way learning at St Augustine's was delivered was being challenged. Notwithstanding the excellent results in all forms of assessment over the years, meeting the needs of students growing up in a digital world necessitated a renewed look at how learning was delivered ([Prensky, 2010](#)). With staff discussion centred on the common phrase "If we keep on doing what we've always done, we'll keep on getting what we've always got", the decision to deprivatise teaching and learning at St Augustine's was realized. This decision necessitated an intensive professional development program aimed at upskilling teachers in working collaboratively.

Strategies that supported the initial stages of the deprivatisation process included school visitations. This key strategy saw many staff members visit like-minded schools to observe first hand how other learning institutions were adopting deprivatisation practices. With research advocating collaborative professional learning ([A Hargreaves, 2003](#); [Levine &](#)



[Marcus, 2010](#)) the visits ranged from day trips to spending a few days of quality time shadowing teachers inside classrooms, observing peer to peer interactions on the teaching process and studying school based documentation.

Such a strategy led to the conclusion that St Augustine's needed to develop our own personalized school wide pedagogy and not simply adopt another school's approach. This view resonates with the findings of the work of Frank Crowther and the IDEAS project ([Crowther, 2012](#)). After an inhouse inquiry study ([Thornton, Phelps, & Graham, 2011](#)) in 2011 on the new learning framework at St Augustine's and after much "brainstorming" and "think tank" planning with the school's leadership team a key package for supporting professional learning was established. This package is formalised in a partnership with Southern Cross University titled "Teachers as Researchers Project 2012 to 2014".

**3. Pedagogical Project with Southern Cross University.** With a number of opportunities to study and workshop with John Hattie on his Visible Learning research ([Hattie, 2008](#)) the school leadership team wanted to use the research to inform teacher practice. Consequently, the aims of the SCU project were developed:

- Building a process for an on site professional learning model that engages each individual teacher in professional improvement.
- Creating a whole school pedagogical framework to enhance the school's 21<sup>st</sup> century learning philosophy.
- Explore and record the school's journey of an evidenced based framework on the deprivatisation of teaching and learning that will further enhance school improvement in this digital age.
- Supporting staff to obtain postgraduate masters of education qualifications through Southern Cross University. This research driven degree will support teachers in our school in developing essential research skills and will support their mentoring of other staff in this area. The area of research is intimately involved in the school's learning framework.
- Ensure the Diocesan Contemporary Learning Framework guides the project.



More specifically, the project's goal, using John Hattie's effect size formula, is to enhance, in a sustainable fashion, the learning outcomes of students equivalent to an effect size of 0.4.

## **Conclusion**

Research has emphasized [the importance of teacher leadership](#) in improving outcomes for a school and its students. It is the teacher leader who is capable of transforming a school environment so that its students and teachers can flourish.

Building teacher capacity is central to the school improvement process ([Andrews et al., 2011](#)). Having teachers critique and reflect on their practice ultimately leads to an improvement in the instructional process. In a job embedded professional development program the subsequent learning provides a way forward for the teaching profession (and schools) to address Hargreaves and Fullan's viewpoint:

“What is needed is a profession that constantly and collectively builds its knowledge base and corresponding expertise, where practices and their impact are transparently tested, developed, circulate and adapted” ([Andy Hargreaves & Fullan, 2012, p 50](#))

With the chief aim of improving teachers to become high performing in their practice, the teacher as researcher phenomenon at St Augustine's was embraced as the vehicle to raise both student achievement and teacher learning.



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