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Purpose

To investigate professional learning and development and its implications for Adventure School by:

A) Discussing the management of professional learning and development in several schools (utilising a case study approach).

B) Investigating how these schools plan for professional learning and development that is aligned with school priorities and focuses on improving learning and teaching.

C) Investigating differing strategies for embedding and sustaining new practice.

D) Exploring review processes for evaluating the effectiveness of a school’s professional learning and development programme.

Rationale

Professional learning and development (PLD) concerns the formal and informal processes used to improve the knowledge and practice of teachers, with the purpose of improving student learning outcomes. Effective professional learning and development promotes change in teacher practice, yet it is difficult to find evidence supporting direct links between PLD and teaching and learning (Irvine-Piggott, 2007).

I have utilised a case study methodology visiting six schools thus inviting colleague participation, as well as a literature review and personal reflection during my sabbatical term. At each school I conducted a ‘semi structured interview’ with the school principal. This qualitative research approach allowed me to follow up responses and discuss issues in depth with principals about their personal perspectives and strategies (Bell, 2009).

I utilised Thomas Guskey’s (2000) work to assist in developing questions for the case study visits. I focussed on how each school plans for professional learning and development; how they attempt to sustain new practice that evolves from PDL, and how they evaluate the effectiveness of their professional development.
My ultimate goal is to construct a framework to improve the current professional learning and development processes at Adventure School. The development of a comprehensive professional learning and development programme that incorporates evaluation about the effectiveness of the PLD provisions for student achievement outcomes is a recognised development need.

**Literature Review**

At Adventure School we are continuing to improve and develop the delivery of our professional learning and development programme. Changes in school wide and site based initiatives have evolved in recent years, and a positive impact from professional development experiences is being evidenced in many classes. The Education Review Office’s publication: Managing Professional Learning and Development in Primary Schools (2009), examines the characteristics of schools and divides them into three distinct developmental groups for PLD. Currently, Adventure School would be represented in the middle group of these schools; having PLD programmes well aligned with school priorities and having a school culture in which professional learning is fostered and supported. At Adventure, we recognise the need to establish robust self review systems which monitor and evaluate the impact of our PLD investment on directly improving the quality of teaching and student outcomes.

The ERO report (2009) notes that, “**Teachers need a range of knowledge, skills and attitudes to meet the diverse learning needs of students today. On-going professional learning and development is therefore critical to maintaining training and improving teacher quality.**” (Education Review Office, 2009, p. 9)

The report also suggests many schools could do a better job at managing the quality of professional learning, and that good planning for professional learning and development is essential. Factors which the Review Office found as crucial included initiatives being led by the principal and senior teachers, that PLD is aligned with teaching goals, co-ordinated and school wide in practice, based on student achievement information, and is inclusive and well monitored.

Many factors influence student learning, however what teachers know and can do is one of the most important. Understanding is needed about the kinds of learning that can help teachers develop and grow to serve students well. Much recent research has been directed towards understanding the gap between the acts of teaching and student outcomes, however Timperley, Wilson, Barrar, and Fung (2007) sought to shed light on what they described as a second ‘black box’; the gap between professional learning opportunities and their impact on teaching practice.
“Little is known about how teachers interpret the available understandings and utilise the particular skills offered during professional learning opportunities, or the consequent impact of these on teaching practice and student outcomes.” (Timperley et al., 2007, p.xxii)

Yet promoting teacher learning in ways that enhance student learning must be the central objective of any professional development programme. Schools need to develop learning cultures which seek ongoing improvement in all aspects of their operations. Teachers need to consider new ideas and where relevant, transfer these into their classroom practice. Student outcomes are clearly linked to the changes teachers make to their teaching approaches, and the changes they make in their thinking and attitudes. (Timperley et al., 2007)

My interest is in this process of professional learning and transference of new learning back into change in classrooms. Research is clear that the single most important factor in raising student achievement is effective teaching (Alton-Lee, 2003) and raising teacher capacities is a stated government priority. New Zealand makes a large annual resource investment into teacher development, but the effects in terms of student learning outcomes are not always obvious. As far back as 2000 the Education Review Office was questioning the Government’s investment return on professional development,

“Neither the Crown nor any other stakeholder is yet able to determine how effective in-service training is in meeting its objectives. It is not known whether $60 million is enough, too little or too much – whether it adds value or limits the development of the capacity of teachers individually and collectively.’ (ERO, 2000, p.70)

The estimated total annual spend is now over $200 million (ERO, 2009); and I contend not a great deal has changed in regards to our knowledge about the effectiveness of professional learning and development.

If, as Viviane Robinson’s (2007) research suggests, school leadership promoting and actively participating in professional learning has the largest effect factor in facilitating pedagogical change, then what strategies are current leaders adopting to ensure that the highest quality possible learning is gained from professional learning. From my examination of the literature three themes have emerged – the challenges of bringing about educational change, the needs of the adult learner, and the importance of effectiveness evaluation.
**Discussion of Themes**

**Change**

The educational context of schools continues to change at a fast rate and teachers need to rethink and adapt their teaching practice to best cater for changing student needs (ERO, 2009).

"Every modern proposal to reform, restructure or transform schools emphasises professional development as a primary vehicle to bring about needed change.”

(Guskey, as cited in Zimmerman and May, 2003, p.37-38)

There is considerable literature about the complex nature of educational change – change is loaded with uncertainty and threatens existing interests and routines. Fullan (1982), described change as, ‘... what teachers do and think. It’s as simple and complex as that’ (cited in Fogarty and Pete, 2006, p.2). Fullan goes on to suggest that there are three stages to educational change - initiation, implementation and institutionalisation, a process he suggests takes three to five years (Fogarty and Pete, 2006). Zimmerman and May (2003), believe principals recognise the need for school renewal through PLD and should ensure student learning by developing a shared vision, a focus on learning, and a culture of continuous improvement.

Fullan and Hargraves (1996), emphasise the need for a community of learners, in which teachers are self-directed and inquiring about their own practice. Collaborative and supportive behaviour by principals is seen as critical to creating a safe environment where change can take place. Effective change should be outcome driven, with evaluation based on its impact, that is, what students actually know and are able to do.

My case study interviews reflected an understanding of these fundamental features of educational change. Every interviewed principal acknowledged the need for extended time, and resource investment to see evidence of change in teacher practice.

“You can’t expect to see changes overnight – it takes teachers time to process and apply innovations – they don’t just pick up and run with it.” - Principal E

Schools tended to plan PLD programmes over a two or three year cycle, allowing for design, data gathering and facilitation in the first year; full implementation of initiatives in the second year, followed by effectiveness evaluation. All case study schools recognised that data should drive teacher development needs, with the results of self-review linked in with strategic and annual planning. Case study principals participated in or led whole staff PLD areas, seeking to support the learning of teachers and develop a collaborative culture. Of course it was also recognised that while,
“...whole school is our main focus, but it can’t shape everything, whole school development would take 50 years, so only major areas are with everyone.” - Principal E

Case study schools previously have used internal self-review processes and school strategic plans to determine professional development foci; however increasingly principals felt that external Government decisions and initiatives were determining PLD.

“...the Government’s particular priorities tend to drive our decisions,.. this year’s focus is on National Standards, last year was the New Zealand Curriculum.. externally Government driven areas – these are areas money for PLD is provided in, these are the areas they will give us support.” – Principal F

External requirements for schools, such as NZC, National Standards, and ATOL were seen by most principals as influencing and inhibiting other PLD choices, as principals were acutely aware of the risk of overloading teachers by taking on too many PLD programmes (ERO, 2009). Some decisions about focus were reported as emerging from reflections within the senior management team, some from external reviews by ERO, some following incidental professional discussions which led to wider reviews, some came as part of a regular literacy/numeracy development cycle, and some were simply ‘serendipitous moments’ that the school tapped into capturing professional enthusiasm and opportunities that were presented.

ERO's 2009 report editor acknowledges a tension in schools between areas set by Government initiatives, and existing school priorities which require mediation. External pressures driving PLD decisions has been a trend over the last ten years, being a feature of both successive Labour and National governments. Some schools approach change and PLD in fragmented fashion, engaging in initiatives just because support is available, and before previous development work is embedded (Zimmerman and May 2003). Zimmerman and May’s research in Ohio schools suggests the three major inhibiting factors in educational change are lack of time; lack of resources; and teacher resistance.

Change in any setting brings with it fear, uncertainty, and resistance. It therefore requires time, energy and patience to take hold in schools. When opportunities are provided for teachers to engage with new knowledge, involving theoretical understandings, pedagogical content, assessment knowledge and consideration of implications for their practice; a substantial impact on student learning results, as New Zealand studies by Phillips, McNaughton, and...
MacDonald (2001); Timperley (2006); English and Bareta (2006) have shown. (as cited in Timperley et al, 2007, p.xxv)

Timperley et al (2007) describes three conditions for creating effective and extended opportunities for teachers to learn. These conditions are: cueing & retrieving prior knowledge, developing an awareness of new information, and creating dissonance with the current situation. Hirsh and Killian (2009) discuss the theme of dissonance, believing that change rarely engages stakeholders in examining their own beliefs and suggest that it is only through a change in individual teacher beliefs that we can sustain and institutionalise new practices in schools.

New Zealand schools are socially and structurally diverse institutions which operate in quite different contexts. Accordingly, site specific planned innovation models have proven more successful than pre-packaged PLD programmes (Hirsh and Killian, 2009). The capacity of different people in schools means engagement with new ideas needs to be tailored to the particular stage teachers are at in their professional lives. The autonomy and solitude of teaching may create a culture resistant to change, even within a collaborative work environment.

“The veteran staff member is not interested in change or learning new techniques. Many staff members have not bought into learning communities; instead the teachers are isolated rather than sharing and learning from one another.” (Zimmerman and May, 2003, p.42)

Case study interviews revealed recognition that initial teacher enthusiasm for a particular professional development programme had little influence on actual long term classroom practice. Interviewed principals believe it is usually competent teachers with higher professional self-esteem who benefit the most from PLD. Veteran teachers were sometimes seen as a stumbling block for PLD in schools, but it was those, (veteran or otherwise) with fixed mindsets about what they knew and could do, who were seen as the most challenging teachers to move,

“We are dealing with the complexities of people’s motivation and life stages.”- Principal A

ERO discussions also cautioned about assuming a particular cohort of teachers were more reluctant to embrace change. Where PLD is directly connected to student learning, and positive change in learning can be demonstrated, commitment is much more likely to follow. Fogarty and Pete (2006) advise school leaders to go with the teachers who are ready to move in their practice, and not to let reluctant teachers become a drain on the entire PLD process. They use Gladwell’s ‘The Tipping Point’ (2000), as an illustration. Gladwell argues the power of the few can create momentum for change, and can generate the ‘stickiness’ that gives complex ideas the glue of staying power, while drawing
other teachers in to involvement with the innovation (Fogarty and Pete, 2006, p.8).

The problem of ‘over assimilation’ where new information is perceived as congruent ‘I already do this’ when a teacher’s actual practice is in reality quite different is common (Timperley et al., 2007). Fogarty and Pete say that, “...it is impossible to teach someone something they think they already know.” (Workshop presentation March 2009)

Several of my case study principals related their reluctance to spend additional money on teachers who were unwilling to embrace change,

“Everyone is involved in school wide PLD – there is no choice – however you have to keep feeding resources/opportunities to those who are running with new ideas – they will drag others along with them.”- Principal E

“These teachers are not incompetent, just unwilling to change practice – so you don’t water the rocks.”- Principal A

PLD needs to challenge teacher’s expectations of student achievement, what constitutes curriculum, and how that curriculum should be taught. Combs states,

“Learning always consists of two parts: confrontation with new information or experience; and the discovery of personal individual meaning.” (As cited in McLellan n.d. p.27)

When such confrontation has not been undertaken and new learning strategies go wrong, teachers readily become defensive, screen out criticism, and ‘blame’ other aspects of the PLD process for the failure.

Argyris (1991) makes the distinction between single loop learning, where teachers solve problems or undertake changed practice using their existing teaching values and beliefs, and double loop learning where reflective thinking about their own behaviours comes into play. Double loop learning manifests as deeper learning in which teachers identify ways that they may inadvertently be contributing to a problem; and may change how they act, think and feel as a result.

“People consistently act inconsistently, unaware of the contradiction between their espoused theory and their theory in use, between the way they think they are acting and the way they really are.” (Argyris, 1991, p.9)

The Te Kotahitanga project (Timperley, et al., 2007) highlights a recent New Zealand example of challenge to teacher’s value bases, leading to positive professional practice change in a group of North Island secondary schools. The values gulf exposed between Maori student’s reality, and their teacher’s belief
OF WHAT WAS HAPPENING IN CLASSROOMS, WAS PRESENTED BY ALIGNING STUDENT
COMMENTS WITH TEACHER COMMENTS IN AN EXAMINATION OF UNDERLYING BELIEFS AND
ATTITUDES.

“CULTURAL AND COGNITIVE DISSONANCE WAS CREATED BY EXPOSING TEACHERS TO THE
CONSIDERABLE GAP THAT EXISTS BETWEEN THE ASSUMPTIONS THAT TYPICALLY UNDERPIN
TEACHER ANALYSIS OF CLASSROOM DYNAMICS AND THE ACTUAL EXPERIENCES OF THE
STUDENTS, AS REVEALED IN THEIR STORIES.” (TIPERLEY OP CIT. P.261)

THE EUROCENTRIC VIEW AND SPIRAL OF LOWERED TEACHER EXPECTATIONS EXPOSED LEAD
TEACHERS TO RETHINK THEIR DEFICIT THEORIES IN A CONSTRUCTIVE MANNER, AND THE
INTRODUCTION OF THE TE KOTAHITANGA PROFESSIONAL DEVELOPMENT MODEL WHICH
EMPHASISED EXAMINING MAORI STUDENT EXPERIENCES, TEACHER REPOSITIONING OF
BELIEFS, AND ESTABLISHING NEW RELATIONSHIPS, AS PART OF THE PLD MODEL LED TO
POSITIVE CHANGE. (TIPERLEY OP CIT.)

THE BEST EVIDENCE SYNTHESIS ITERATION (TIPERLEY 2007) PRESENTS A STRONG CASE
FOR EXTERNAL FACILITATORS CHALLENGING DISSONANCE AMONGST STAFF BY FOCUSSING ON
LEARNERS AT RISK AND ASKING THE ‘HARD’ QUESTIONS ABOUT MEETING DIVERSE NEEDS. THIS
ALIGNS WITH FULLAN’S (1982) CALL FOR SCHOOL LEADERS TO ADOPT AN ETHICAL AND
MORAL PURPOSE IN EXAMINING THE PEDAGOGICAL IMPACT OF TEACHERS WORK.

DESpite defensive reasoning being common at both secondary and primary school
levels, I believe teachers do genuinely strive to act in the best interests of the
students they serve. Many teachers do embrace change voluntarily, and are
willing to face challenge and examine their beliefs and assumptions because they
value acting competently and performing effectively as teachers. School leaders
responsible for implementing change need to find ways that challenge teacher
values without alienating them or undermining self-belief. Guskey’s (2000)
research assists by suggesting the best way to gain teacher commitment and
sustain educational change is to follow a four step process. Firstly, introducing
the PLD (theory, practical strategies) to teachers; secondly, ensuring teachers
actually change their classroom practice in accordance with what is introduced;
thirdly, measuring the positive change in student achievement; which in turn will
lead teachers to the fourth step, reflection about practice that will cause a
change in teaching beliefs (as cited in Fogarty and Pete, 2006, p.12).

THE ADULT LEARNER

PROFESSIONAL LEARNING AND DEVELOPMENT NEEDS TO BE CAREFULLY PLANNED FOR. TO BE
EFFECTIVE, PLD NEEDS TO INCLUDE TEACHERS AT ALL STAGES AND ESTABLISH THE CLEAR
BELIEF THAT IT WILL DEVELOP POTENTIAL AND IMPROVE LEARNING OUTCOMES. PLD SHOULD
BE BASED ON RESEARCH, WITH SUFFICIENT BUDGET AND RESOURCES ALLOCATED. IT SHOULD
ALSO, ACCORDING TO ANDREWS RESEARCH (CITED IN CAMPBELL, 1997, P.28), BE HELD
DURING NORMAL SCHOOL HOURS OR BE AFFORDED LEAVE TIME COMPENSATION FOR THE
TEACHERS INVOLVED.
PLD design needs to acknowledge context, and content may require a variety of approaches. The needs of the group, including creature comforts and preparing the site for optimal learning experiences, must be taken into account.

Facilitation by credible presenters, who are realistic about teacher workloads, and can empathise with difficulties, is crucial. School leadership needs to establish transparent systems for the selection of lead teachers and classroom release timetabling. Implementation must be sustainable and undertaken in several small bites, with topic inclusion at regular staff and syndicate meetings.

There needs to be the expectation that all teachers will trial initiatives and share experiences, either through professional readings and discussion, or the collection of relevant classroom data.

There has been a paradigm shift from ‘one off’ type courses to ongoing, in house, PLD which Campbell (1997) sees as part of the shift from a behaviourist to constructivist view of education. It is now widely recognised that it takes more than a single course to modify teacher practice and encourage the examination of their beliefs. ERO’s 2009 report editor defines the one day course as ‘training’ as opposed to ‘professional learning’. The one day course fits within a school wide PLD structure, but should not be seen as the development platform itself. ERO observed one day courses being used for personal development, and as vehicles to keep school development momentum going. The one day course’s redeeming feature is that it gives participants the opportunity to increase their awareness about an innovation or approach, which may be worthy of further learning on an individual or school wide basis.

While agreeing with the concept of site based PLD, believing internal expertise probably can generate the best answers; Hirsh and Killian caution that a “dependency prone school community may lose their identity as professionals”, and may “result in a revolving door of innovations.” (Hirsh and Killian, 2009, p.469) if they only draw on their own collective knowledge, and fail to look ‘outside’ for up to date knowledge. Piggott Irvine (2007) also warns about school focussed development becoming too insular or introspective. There is another danger inherent in design if development is planned with the view that all teachers start in the same place in their learning and attitudes. PLD needs to be differentiated for teacher learners in the same way as learning should be differentiated for student needs.

Case study schools reported that most PLD was undertaken by the whole staff and was site based, however all schools still utilised some single day courses. Schools tended to send two or more teachers at a time to single day provisions, believing synergy resulted through the ensuing discussion opportunity with the greater likelihood of implementation. Single day courses also,
“...allowed the school a smorgasbord of provision ... to see what is worthy of investing time, and resources in.” - Principal A

Several schools reported appointing two or more lead teachers for each professional learning and development area. These lead teachers were expected to attend conferences and courses so that their knowledge would be as up to date as possible. The knowledge and strategies learnt would be brought back to school and disseminated through workshops, staff meetings, professional readings and the provision of some classroom coaching support. The lead teacher was regarded as the in house expert, the ‘go to person’ if a teacher was having difficulty with a particular child’s learning in the PLD focus area. Lead teachers tended to meet to pool ideas and collaborate together, as they supported other teachers in the school. This lead teacher model had been found to be successful in most cases by case study schools.

Collaboration builds shared responsibility to improve student learning and ‘codifies and institutionalises best practices’ (Hirsh and Killan, 2009, p.469), because every child deserves to experience great teaching in a uniformed manner across a school. They recommend that teachers are involved in the decision making about professional development, are given time and support to embed their new learning into practice, and that professional development is tailored to fit how adults learn best.

In their writing about adult learning, Fogarty and Pete (2006), outline critical qualities they believe are essential for productive professional development that leads to changes in practice and benefits for students. These qualities are: that learning is sustained over time, that it is job-embedded and includes elements of coaching, that it is interactive and collegial, and that it integrates a diverse range of approaches and methods. The findings of Hill, Hawk and Taylor (2002), in their research conducted in Auckland also concluded that, “quality professional development happens on-site, where teachers have access to the ongoing support and encouragement of their colleagues.” (p.15)

The majority of my case study schools made primary use of external providers. Only one school led and organised most of its PLD internally, though that was supported with some outside facilitation. A representative view was

“Almost all provisions are led by external facilitators – until we build up our own base, if we only use our own people we only get what they know.” - Principal D

Cost was an issue for schools with some highly sort after private providers an expensive option. One school felt the investment of taking the whole staff to a
TWO DAY CONFERENCE DURING ‘NON-CONTACT TIME’ A BETTER INVESTMENT WHEN THE CONFERENCE THEME MATCHED THE PRE-DETERMINED SCHOOL DEVELOPMENT AREA.

ERO’s 2009 report editor recognises the ‘DOUBLE EDGED SWORD’ for schools who seek to empower and grow internal staff members working in development teams, but at the same time need to ensure hard questions are asked which shape expectations. Internally led PLD must have the depth and critique to make sustainable change, and must gain momentum within the school culture.

While acknowledging that PLD should be driven by identified teachers’ needs and school priorities, the reality is that accessing external expertise to assist with development is becoming increasingly problematic. ERO (2009) acknowledge availability and quality of PLD facilitators as a challenge for schools. The days of schools being able to access an advisor to support their identified learning needs are all but over. Since the amalgamation of schools of education with universities, who now compete with private providers for Ministry of Education contracts; it is the Ministry which largely sets the agenda on what teachers can access by way of PLD. In the past year, the Ministry has set new priorities for PLD, centred on supporting National Standards, and so while literacy and numeracy assistance is available, PLD in areas like art, gifted and talented, or science is no longer readily accessible. Private professional development provider quality is variable, and sharing of resources across schools is being undermined because private providers now compete against each other.

These points were raised by case study schools and several questioned the variability between different provider expertise,

“... IN SOME CONTRACTS IT HAS SOMETIMES APPEARED PRESENTERS ARE LEARNING THE STUFF AS IT IS DELIVERED TO US.” - PRINCIPAL F

“...AN INCREASING ISSUE IS WHERE WE CAN GET GOOD PD FROM – THIS IS WHAT WE WANT AND NEED, WHERE CAN WE SOURCE IT? WE HAVE NOT ALWAYS BEEN ABLE TO ACCESS WHAT WE WANT.. HAVING TO WAIT UNTIL QUALITY PD FACILITATORS BECOME AVAILABLE.” - PRINCIPAL E

One model successfully utilised by some schools was having an externally led facilitation session, followed by release on the next day for lead teacher participants. These lead teachers were tasked with mapping out just what the presented content and strategies could mean for the school, and considered implementation implications.

The literature emphasises the recognition of teachers as adult learners, who are self-directing, have accumulated professional experience and prefer for this experience to be integrated with their learning. Fogarty and Pete (2006) quote
the research work of Malcolm Knowles, who in 1973 wrote ‘The Adult Learner A Neglected Species’ in which he developed the concept of ‘andragogy’ as opposed to ‘pedagogy’ – a focus on the specific learning needs of adults. Adult learners want control of their learning and they want immediate utility of the concepts and strategies they are introduced to. Fogarty and Pete suggest teachers, as adult learners, seek to focus on issues that concern them, and test their learning as they go, anticipating how they will use their professional learning. Teachers seek programmes focussed on practical and relevant issues, which link theory and practice, incorporate different learning approaches and are ‘hands on’. However, Fogarty and Pete (2009), urge facilitators not to assume that teachers automatically make the connection for themselves between what is presented and underlying strategies, ‘what is obvious to us is obvious to us’. They suggest those leading PLD name strategies, label them, give metacognitive explanations, and provide concrete ‘take away and try it’ ideas to guide teachers in their learning.

The move in New Zealand schools towards the deprivitisation of professional practice has led to teachers engaging in discussion about why they teach the way they do, and how they are moving students forward based on achievement data. Fundamental to deprivatisation is conducting observations in one another’s classrooms. Another pair of eyes can be very powerful in bringing about change in a supportive environment. For any observation to be meaningful it must be followed by non-judgemental questions by the observer to encourage professional reflection.

It is important that observation processes which look at embedding PLD are kept separate from teacher appraisal processes according to Joyce and Showers (2002), Wong and Nicotera (2003), and Robbins (1991). Collegiality plays a dominant role, and the need for trust, and the understanding that observation is not being used as an evaluation tool, having a significant impact on behaviour and attitudes towards new learning.

In my case study schools the distinction between the school processes for appraisal, and observations supporting the embedding of PLD were only clearly separated in two out of the six schools. Most schools aligned both teacher development needs and school PLD observations with the appraisal process. Observations were conducted by deputy principals, assistant principals or senior teachers and looked to see evidence of development practices being incorporated into classroom programmes. End of year appraisal meetings with principals followed up these observations with teachers asked ‘what changes have you made in your teaching this year?’ The approaches described tended to be of a
compliancy, evaluation orientation, rather than one of collaboration and support. Adventure School’s current appraisal approach would mirror this.

A distinction is made between coach and mentor by some writers; with coach being more supporting of the teacher in the improvement of professional practice and questioning about pedagogical alternatives; while a mentor is described as providing more general support of the teacher as a person. However, for the purpose of this report I am going to use the term ‘coach’ to encompass all practical, job embedded mentor/coaching situations.

Research indicates that the vast majority of transference from professional development into practice only occurs when school wide professional development is followed up with in-depth coaching and on-site support (Fogarty and Pete, 2006). Fogarty and Pete suggest there is the need to give as much attention to transfer strategies, as to the initiative itself.

The research on professional development conducted by Joyce and Shower (2002) led to the development of their training model which incorporates the four essential elements of theory, demonstration, practice and on-site coaching. It is the onsite coaching component that they believe contributes ninety five percent of the transfer and application of the training. The importance of on-site coaching is supported by the recommendations made in the Education Review Office report which stated that “establishing a system to embed and sustain new practice” (2009, p.3), was a vital part of schools’ professional learning and development programmes.

A coach needs not to be an outside expert, but can be a colleague entering into a reciprocal process. Coaching is not seen as having all answers, but provides a method for sustaining PLD which helps about ninety percent of teachers reach a level of competency with a new skill or method in around two to three months according to the research of Rhodes & Beneicke (2002), and Wong & Nicotera (2003). The sharing of what each teacher is doing in their classroom can overcome pre conceived notions that only those in difficulty need help, and rather, can provide the opportunity to reflect on one’s own and other’s practice in a guided supportive atmosphere. Peer coaching incorporates elements of discussion, sharing of ideas, and observing each other’s teaching, giving and receiving feedback, and reflection. A link also needs to be made between student learning outcomes and the changes teachers make to their approaches as a result of their professional learning.

‘When peer coaching becomes a real part of school operations, schools maximise their capacity to meet the challenges of today’s world. Teachers…feel responsible for the programme’s success. Coaching is no longer a superficial innovation tacked onto the school year; rather, it is part of the school’s inner workings, its soul – deep and enduring.’ (Robbins, 1991, p.63)
Teachers bring prior knowledge to coaching situations. It is important that experiences need to be valued and taken into consideration. Teachers need to make informed decisions about participating, to be reassured about professional confidentiality, and should feel that they are ‘good but growing’ in their professional practice as a result. Peer to peer coaching can encourage this and can encourage a professional learning culture that is positive about its own practice.

The structure of a pre-conference discussion about the lesson, which clarifies exactly what the observed teacher wants the coach to focus on, and how data will be gathered is important. The observation phase follows, where only factual data relevant to the focus is recorded, as coaching is not an evaluation process. In this situation, the observed teacher has control over process, and it is the coach’s role to help facilitate the observed teachers thinking. Finally, a post observation feedback session is held, during which it is vital according to Joyce and Showers (2002), that the observer does not dominate, but rather asks open ended questions, withholds praise and criticism, and prompts the teacher to think about their instructional decision making.

Showers and Joyce (1996), note that the process needs to be seen as valued by school leadership, and teachers need to feel they are supported and treated as professionals. School leaders must allow teachers time to build trust, and should establish small measurable goals from coaching, which enable teachers to see benefits for themselves and their students.

Case study schools recognised the need for leadership commitment to coaching, although the amount of coaching varied from school to school. All principals acknowledged that individuals were influenced in their practice by what others in the school are doing. Observation and feedback was seen as key to embed changed practice. Coaching was often done by more than one person, and allowed senior teachers to get to know what is actually happening in syndicate classrooms. In one school the BOT employed additional specialist teachers to lead PLD foci and to provide follow up in class support and coaching.

However the challenge of coaching lies in the extent to which coaches receive adequate training, and whether the programme receives sufficient resources (Wong and Nicotera, 2003). Teacher coaches require training in interpersonal skills to provide the quality feedback required. Coaching is a combination of support and challenge, with the objective of professional growth. Teacher coaches often do not want to risk their professional relationship with their partner, so do not apply enough rigour and challenge to the coaching scenario.
The coach’s role would appear vital to sustaining and embedding long term change, and in order to do so the coach must overcome these difficulties, and have the interpersonal confidence and competence to challenge colleagues practice.

"Some teachers demonstrate excellent 1980’s pedagogy, not today. They can speak the rhetoric of current PD but not change their actual teaching practice in light of it.” - Principal A

Training for the role of coach appeared piecemeal in case study schools, and is perhaps a major development need for teachers responsible for bringing about change in the practice of others. In some schools teachers had had some training in the coaching role, but in most it just seemed an assumed skill set for experienced teachers. Schools tend to be extremely busy places and while new or rewritten PLD expectations uniformly seemed to be produced as schools undertook a new development area, limited interpersonal and observational training is provided for those acting as coaches. This aspect, of coach/observational training was a major factor in the success of the Te Kotahitanga project (Timperley et al., 2007).

Evaluation

Teaching is about transfer, motivating and engaging learners to integrate new information, skills or attitudes with their existing world view. Most experts agree planning for the transfer of new learning into practice is important but occurs far less than PLD designers anticipate. Transfer is related closely to specific content and context. In some cases transfer is ‘simple’ where the learner automatically models behaviour. For example, when teachers learn about co-operative learning by participation in co-operative learning, the learning situation ‘hugs’ classroom situation (Fogarty and Pete, 2004, p.19). However more complex ‘bridging’ transference requires the teacher to infuse thinking skills, undertaking some abstraction from the content of initial learning, to ‘place’ these in new classroom contexts.

In education, unlike the private sector, there has traditionally been no mandate or stated obligation that expects teachers to transfer new learning directly into their professional practice. Joyce and Showers (1996) and Robbins (1991), suggest as few as ten percent of teachers who attend PLD implement what they have learnt. This figure remains about the same whether the professional learning was voluntary or mandatory in nature. School expenditure on PLD is set annually, yet limited accountability to apply new learning is made in many schools. Forgarty and Pete (2006) urge explicit goal and expectation setting, as part of PLD to foster the realisation of goals.
It is necessary to understand how transfer works, realising that the motivation of learners is key. Therefore practice relating ideas to different classroom contexts, and supporting learners needs to be developed. Teachers need to be encouraged to transfer thinking, to engage in practice and feedback, and given time for transfer to develop.

Fogarty and Pete (2006) suggest for portable learning back to classrooms, PLD must be: sustained over time; job embedded at the actual work site; collegial to support a community of learners; interactive – inviting, involving and engaging. The professional learning needs to set high expectations in workshop settings; drawing on, as Showers and Joyce (1996) state, explicit classroom models that connect teachers to past experiences and elicit specific transfer conversation.

To deliberately and intentionally promote and foster transfer as part of a PLD plan, school leaders must look to see evidence of strategies incorporated into classroom lessons and expanded teacher repertoires. Almost all teachers can take back to their classrooms useful information when PLD presents theory, is data driven, demonstrates strategy, allows for initial practice, and gives prompt feedback. Social cohesion and shared understandings do facilitate teacher willingness to try new ideas and teachers are more likely to keep utilising new strategies when they receive coaching.

The role of evaluation is both to provide information on the impact of PLD and also to provide data for refining and adjusting development activities to ensure that programmes can be improved on an on-going basis. This means evaluation must be undertaken at planning stages (conducting needs assessments, determining approaches and the timing of activities); during implementation (monitoring approaches, changing procedures, modifying goals & timelines, identifying factors influencing PLD); and after – reviewing (conducting needs assessments, determining the extent to which goals have been met, changing instructional approaches, disseminating results).

There are several different transfer evaluation methods, however no one method of evaluating professional development is appropriate for all PLD approaches. As Piggot-Irvine (2007) notes, contextual issues also impact on PLD effectiveness, the cultural norms of the school, the role of the principal and individual teacher beliefs. Guskey (1986) states for professional development to be successful it must take account of and adapt to these complexities of context. As discussed earlier, successful professional learning challenges teachers to examine their personal beliefs, for if a teacher sees ‘deficits’ in any group of children, then principles and practices will reflect this. Practitioners appear to be most motivated to change their practice after they observe learner success, but this does not occur immediately, it takes time and patience.
ERO (2009, p.35) state,
‘ONE OF THE MOST IMPORTANT DETERMINANTS OF SCHOOLS’ EFFECTIVENESS IN MANAGING PLD WAS THE EXTENT TO WHICH SCHOOL LEADERS KNEW THEIR INVESTMENT WAS HAVING THE DESIRED EFFECT ON CHANGING TEACHER PRACTICE OR IMPROVING STUDENT ACHIEVEMENT.’

However, for my case study schools this was recognised by each principal as most difficult for school leaders to determine. Each school had different systems of monitoring and self-review for PLD effects. All schools recognised the need for this element of PLD and attempted to gauge effectiveness for reporting back to staff, Boards of Trustees, and the school community. However school leaders struggle to measure change as a result of professional development activities. While accepting some measure of pre and post activity is necessary, it was reported to be difficult to show clear cause and effect relationships in regards to PLD.

“IT IS VERY HARD TO EVALUATE BEYOND OBSERVATION AND KNOWING THE HISTORY OF SCHOOL, ...A FEELING FOR EFFECT OF CHANGES.” - PRINCIPAL C

“THERE IS NO WAY WE CAN SAY THIS IMPROVEMENT WAS CAUSED BY THAT PROFESSIONAL DEVELOPMENT. CHANGE IS FAR MORE ORGANIC THAN THAT...RESULTS MIGHT BE DUE TO WHAT’S IN THE WATER.”
- PRINCIPAL E

One school expressed concern that evaluating effectiveness of PLD came from a ‘compliancy mindset’ and wanted teacher energies to go into action sustaining changes rather than evaluation. ERO (2009) states that schools being accountable for effectiveness is important, and believe methods which show a ‘PROBABLE EFFECT’ (INTERVIEW 2010) are those which a school should utilise, as research level testing is completely unrealistic in a school setting.

Pennington and Young (1989), present the advantages and disadvantages of several effectiveness tools for PLD: interviews, student evaluations, student data achievement, teacher competency tests, and self-evaluation/reporting. All have benefits and but also deficits in approach, and so I conclude only a combination of approaches which attempt some form of triangulation in methods can give a measure of PLD effectiveness.

In case study schools classroom observations were common. Monitoring of recent PLD was often undertaken by trained senior staff, with a clearly agreed upon agenda for what to look for in effective classroom programmes in the development area. Observers looked for identified changes in classroom practice, growth in teacher knowledge and student attitudes towards learning. Observations in the PLD area tended to be one to two years after PLD implementation, to allow teachers the time needed to embed new change. This
approach is of interest when reflecting on Adventure School, where a high staff turnover within the last three year period has not allowed the adoption of such a long term evaluation strategy.

Analysis of student achievement data, pre and post PLD implementation, was a standard evaluation approach in case study schools. As teachers become more familiar with ‘teaching as inquiry’ they are increasingly sharing data together, and accepting collective accountability for student progress. A staffroom ‘data wall’ displaying every child’s current literacy/numeracy achievement level, colour coded by school year age, was utilised in one school.

Matrices were found useful in national areas of interest like National Standards and Self Review reporting. Here external experts prepared matrices which teachers completed personally and fed through to an overall school matrix, upon which development progress could be plotted.

Teacher surveys and interviews, gauging confidence and knowledge, were used in several schools and students were interviewed with responses video recorded by senior students in another. Tracking achievement data for specific groups of children within classes was utilised by several schools.

“Teachers then had seven weeks to develop strategies with a specific group of target students aimed at lifting poor achievement. Following that teams get together to evaluate implementation effectiveness and make adjustments to future PLD as necessary.” - Principal C.

Professional learning and development is about change – to improve learner outcomes by changing the instructional behaviours of teachers. Learning about new innovations or initiatives may be relatively easy but applying them in a consistent and insightful manner is quite another matter. As Principal A from a case study school reported

“..it is easy to do PLD, yet hard to embed or evaluate.”

Three themes emerged as features during this research project. Firstly, teacher attitude change following demonstrated learner improvement (to do with change theory); secondly, the issues of complexity and contextuality (to do with the adult learner needs); and finally, learning transfer (to do with effectiveness evaluation processes).

Conclusions
My research focus was to examine professional learning and development methods used by schools to improve teacher practice and subsequently to raise student achievement.
Following an examination of the literature, discussions with case study principals, analysis of good practice and my personal reflection, I believe that the transfer of professional learning into classroom practice is a complex and multi-faceted process in which there is no clear ‘recipe’ that a school can adopt. There are, however, several key principles that can demonstrate positive effects on teacher performance and raising student learning outcomes.

The design of professional learning and development is crucial. Schools must maintain a central focus on teaching and learning, and devise shared goals and ownership of the PLD based on teacher and student learning needs. Teacher values and beliefs about teaching and learning in the development area need to be shared, discussed and challenged, using data and research evidence. Methods of evaluation to determine the effectiveness of the PLD, need to be incorporated into the design phase to collect data before, during and at the conclusion of the process. PLD must be planned with realistic timeframes and given the necessary resourcing.

Teachers need to have high expectations for learning success. Teachers, who believe they can make a difference to their student’s achievement levels, and who are motivated, are the most successful in enhancing student outcomes. School leaders need to be actively involved in new learning, supporting and encouraging teachers. The establishment of professional learning communities, which undertake collaborative data inquiry, and unpack what effective practice looks like, sounds like, and feels like, are effective in meeting learner and teacher needs.

Credible external facilitators, working primarily on site, providing job embedded new learning and feedback, can assist in positive professional growth. An understanding of the process of change, its challenges, and particular needs of the adult learner, are beneficial. Strategies for the transfer and sustainability of the PLD content, including coaching and observational feedback to support practice, are essential.

Implications for Adventure School - feedback to Adventure School BOT

I have attempted to synthesise my thoughts, and will engage in some planning with senior teachers at Adventure School about possible changes we could make to enhance the professional learning and development opportunities we offer in the future.

I believe we need to build our leadership capacity. Time must be found for senior teachers to undertake observations of their team members teaching on a regular basis. We need to initiate training in carrying out effective in-class observations.
AND GIVING MEANINGFUL FEEDBACK THAT WILL BRING ABOUT CHANGE. I NEED TO ENSURE THAT OBSERVATION FEEDBACK DISCUSSIONS ARE HELD AS PROMPTLY AS POSSIBLE FOLLOWING VISITS TO CLASSROOMS, AND THAT COACHING FEEDBACK IS CLEARLY DIFFERENTIATED IN TEACHER’S MINDS FROM APPRAISAL OBSERVATION/FEEDBACK.

TRAINING FOR COACHING NEEDS TO BE PLANNED FOR, AND SHOULD BE PROVIDED BEYOND THE LEADERSHIP TEAM, TO INCLUDE LEAD TEACHERS IN SCHOOL PLD AREAS. THESE LEAD TEACHERS CAN THEN PROVIDE CHALLENGING AND SUPPORTIVE MODELLING TO COLLEAGUES (AS WE HAVE TRIALLED WITH MATHEMATICS THIS YEAR). WE SHOULD ALSO PLAN TO RELEASE LEAD TEACHERS FROM TEACHING RESPONSIBILITIES FOR THE DAY FOLLOWING MAJOR ‘PROVIDER LED’ PLD SESSIONS; PROVIDING REFLECTION TIME TO EXPLORE TOGETHER WHAT THE PRESENTED CONTENT MAY MEAN FOR OUR SCHOOL DEVELOPMENT NEEDS.

UNDERTAKING DATA INQUIRY SHOULD BE CONTINUED SO THAT ANALYTICAL AND PROFESSIONALLY CHALLENGING TALK IS TAKING PLACE REGULARLY AT SYNDICATE MEETINGS. THE DATA EXAMINATION MEETINGS AND DEVELOPMENT WORK IN 2010 LED BY AN EXTERNAL FACILITATOR HAS BEEN A GOOD FIRST STEP, BUT WE ALSO NEED TO LOOK AT DATA AS A WHOLE STAFF, AND COLLABORATIVELY SHARE ‘TARGET’ STUDENTS DATA AT STAFF MEETINGS. INCREASING OUR USE AND UNDERSTANDING OF EVALUATION MATRICES, AND OTHER EFFECTIVENESS TOOLS, WILL ENCOURAGE REFLECTION ON PRACTICE.

TEACHERS SHOULD BE GIVEN THE OPPORTUNITY TO REFLECT ON THE CULTURE OF THE SCHOOL AS A PROFESSIONAL LEARNING COMMUNITY. WITH A NUMBER OF STAFF CHANGES SINCE 2008 IT IS TIMELY TO RE-EXAMINE OUR PLD APPROACHES AND RE COMMIT TO THE CONCEPT OF CONTINUAL IMPROVEMENT AND GROWTH. I FEEL WE NEED TO WORK ON SUSTAINABILITY AND CAPABILITY BUILDING SO THAT WHEN TEACHERS LEAVE, INITIATIVES CARRY ON. WE ALSO MUST CONTINUE TO DOCUMENT OUR EXPECTATIONS SO WE HAVE BENCHMARK DOCUMENTS THAT ARE UPDATED AS DEVELOPMENT WORK OCCURS. ADDITIONAL TIME SHOULD BE GIVEN TO GOING OVER RECENT SCHOOL PLD AREAS, AND AGREED EXPECTATIONS, WITH NEW STAFF AS A FUNDAMENTAL PART OF OUR STAFF INDUCTION PROGRAMME. FINALLY, WE NEED TO CONTINUE TO WORK ON OUR STUDENTS HAVING A VOICE IN THEIR LEARNING JOURNEY. THEY NEED TO BE ABLE TO ARTICULATE WHAT THEY ARE LEARNING, HOW WELL THEIR LEARNING IS GOING, AND WHAT THEIR NEXT LEARNING STEPS ARE, FOR ULTIMATELY, ALL PLD PROCESSES ARE ABOUT IMPROVING OUTCOMES BETTER FOR THEM.
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Appendix 1 - Case Study Schools and Professional Discussions
Peter Durrant (Principal of Upper Hutt School)
Jeremy Edwards (Principal of Northland School)
Dianne Patterson (Principal of Eastern Hutt School)
Joan Sibley (Principal of Wangaratta West School, Victoria, Australia)
Leanne White (Principal of Oxford Crescent School)
John Young (Principal St. Joseph’s School Upper Hutt)
Robert Stratford (Education Review Office – Managing Professional Learning and Development in Primary Schools - January 2009 - Report Editorial Team)