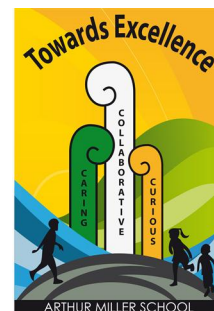# Sabbatical Report by Sandy Anderson

"The Inquiry Learning Journey" at Arthur Miller School

Executive Summary

The audience for this report is likely to be those either interested in becoming involved in an "Inquiry learning development" or those who are undertaking "professional development" in inquiry learning at present. I hope this report will provide the reader with a broader picture of the development of inquiry learning in an authentic school context, the questions, the challenges we faced and where to next?

I have written this as a narrative, taking into account our practical journey and I have tried to weave in aspects of research that my sabbatical allowed me the time to pursue. Essentially the sabbatical offered me, as principal, the time to step out of the school setting to gain a fresh view of what we had achieved, evaluate our progress and determine future goals. To that extent this report is written as a journey of our school based development. The valuable reflection time out of the school provided further impetus to review and refine our practice in inquiry learning on my return.

Since my return from sabbatical we have done just that, secure in the knowledge that shared teacher experience builds shared understanding and ownership over time, and this in turn sustains changes in teacher practice schoolwide.

Context

In 2007 a cluster of likeminded schools submitted a proposal under the Ministry of Education's Extending High Standards in Schools(EHSAS) scheme to implement an Inquiry Learning Model into our schools' "teaching and learning practice."

We employed a facilitator in a paid position and this helped relieve the demands on the principals to be solely responsible for milestone writing. The facilitator's major role was to facilitate the professional development within and amongst the schools.

Emily Nelson from Hawkes Bay (IntegratED) was our facilitator and we acknowledge her pedagogical and curriculum knowledge, her passion for inquiry learning and her ability to develop teachers' understandings of inquiry learning as a model for teaching and learning in a way that stretched but not stressed teachers.

Our three year development plan was essentially split into three phases but was intended to span four years.

- An inquiry into school practice – building content knowledge
- An inquiry into effective classroom practice- building knowledge and change though active learning
- Evaluating change and embedding a sustainable evidence – based model of improving teaching and leaning

Unfortunately the Ministry of Education cancelled the Extending High Standards Contract at the end of the second year so our development was halted just as we were looking seriously into assessment issues with Inquiry. However motivation was high, we were on the way and, we were fortunate to secure ICTPD contract funding with the same cluster of schools through which we continued our inquiry focus but with more of an ICT emphasis. However the ICTPD contract presented its own challenges, so the sabbatical afforded me time, not only to step back and appraise how our "inquiry based curriculum" was progressing alongside the ICTPD contract, but to undertake some more research into the aspect of assessment in inquiry and reporting of student outcomes, and what we needed to do to sustain the impetus of inquiry learning as integral to our practice long term.

Findings and Implications

The very key messages that we learned along the way and which, in hindsight, are key to teacher ownership and sustainability of the inquiry model we use today, are described below.

For the reader's information I have included our definition of inquiry.

Inquiry learning happens across the curriculum in all learning
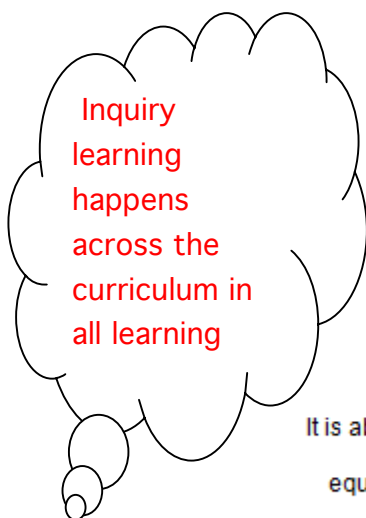
Inquiry Learning at Arthur Miller School
is all about capturing students' curiosity about topics or issues that are meaningful to them.

It is about our teachers, at this level, motivating and guiding students
into investigations about their world,
equipping them with the skills to think critically about information
available from a variety of sources,
and to create
and apply new knowledge now and in the future.

A definition is essential to develop early on, and needs to be revisited as staff understanding deepens. An interesting idea is to gather teachers' first ideas, pre development, about what they see as the essence of "inquiry learning" and then repeat the exercise as their knowledge and understanding changes. Growth in thinking is very evident as teachers realise inquiry is more than renaming "theme or topic work".

All teaching staff need to be part of any Inquiry development as it is a fundamental shift in teacher thinking. School wide professional development is key. Hill, Hawk and Taylor (2001;5) talk about the "importance of a school seeing itself as a learning community". Teams working alone or one teacher cannot effect school wide change to teaching practice. The collegial support gained from all teachers working together cannot be under rated. We now appreciate classroom release and part time teachers need to be involved as well so consistency of approach continues when the class teacher is on release.

Working with another school(s) of "like mind" is more important than geographical proximity if you intend to share the cost of facilitation with another school(s). It is valuable for collegial sharing, although "time" for this is sometimes difficult to find. But it certainly does help for, example, when junior teachers can talk to their peers from other schools as a way to extend their own thinking and also to combat the notion that inquiry doesn't work for juniors.

In the first phase of any development, knowledge building is critical within a supportive environment. We made it clear to teachers that trialing ideas was more than acceptable, it was encouraged and if an idea didn't work that was also acceptable. None of this experimentation was appraised in any way other than in open dialogue with colleagues and facilitator. We called this aspect of professional development being allowed to "play in the sandpit." Fullan and Hargreaves(1996) suggest that an "innovation won't go anywhere unless the school culture is favourable in terms of the way people solve problems and work together."

Inquiry is a change in thinking about teaching and learning and thus requires time and support to essentialise what the differences are between inquiry learning and a theme, integrated or topic-based approach. Without sufficient dialogue, debate and discussion about the differences it becomes too easy to simply introduce new "terminology," but the danger remains that practice doesn't change. We were fortunate on three counts.

- We had access to Kath Murdoch who presented a workshop to our staff on more than one occasion. Kath is a well renowned academic and practitioner whose theory and practical knowledge of inquiry learning and its implementation in Australian schools is second to none.
- Our facilitator (Emily Nelson) accessed regular pertinent research readings to challenge and provoke debate amongst our staff.
- As a staff we attended a day workshop in Hawkes Bay where Perry Rush and key staff from Island Bay School presented how inquiry learning is implemented in their school. Practical demonstration is powerful persuasion.

As a school we made a decision that since teams usually planned together in traditional integrated units, to optimise the dialogue within teams, teams would be released during school time to work with the facilitator. This allocation of time on a regular basis was key to team ownership of the process (Hill, Hawk and Taylor, 2001:4) and ensured healthy and vigorous debate.

Developing a school "model of inquiry" that teachers could use to plan with was critical once they had trialled and implemented multiple inquiry type activities in their classes. The idea of keeping the model simple is critical because it is important that children can connect with it as well. "Cognitive portability" (acknowledgement to Lestor Flockton for this phrase) is critical. In other words if teachers can't remember the elements of the model, without prompts, it is not going to be embedded in their thinking or practice, nor will children be able to remember or use the model and develop the meta cognitive aspect of appreciating and articulating their ongoing learning.

Our agreed model is a model based on Kath Murdoch's framework in Inquiry learning. Its imagery is a "ferris wheel" and has within it the idea of review at all four stages of "tuning in, finding out, sorting out and going further."

Students speak about where they are on this ferris wheel – it is has imagery students can relate to and every stage has some key questions which scaffold student inquiry at each stage (Appendix 1 Ferris wheel model).

What we now realise is that this model itself is missing the "celebrate / innovate phase, which, while not visible on this model, is a very important aspect to bring an inquiry, if not to complete closure, to a rounding off. Students enjoy this aspect immensely and ask for it. An alternative teacher model includes these aspects in diagrammatic form (Appendix 2 Teacher model).

The model helped teachers, realise that inquiry is not just something you "do" in the afternoon once the literacy and numeracy programmes are done. A staff development exercise we found to be effective in getting over this hurdle was

getting teachers to look at what "tuning in, finding out sorting out and going further" meant in each curriculum area. This had the effect of encouraging teachers to see the value of an inquiry model and its terminology as valuable across the school curriculum for use all day.

We came to realise that Inquiry learning is all about deepening understandings and therefore we needed to find a way to record or note changes in student thinking - The recording of first ideas, second ideas and third ideas is a concept from the Regio Amelio approach(favoured in the Regio Amelio schools in northern Italy). I was introduced to this approach at a course I attended in Auckland in 2011. As a consequence it made me realise the importance, where possible, to plan to include a graphic organiser which will allow these changes in thinking to be recorded in some way. As always, the nature of the inquiry; the key concept and the essential understandings will shape what is to be assessed and how teachers scaffold assessment tasks with children.

Developing authentic assessment tasks and opportunities for students was and remains a challenge. Teachers have done a lot of "playing in the sandpit" and experimentation was also encouraged in assessment. Kath Murdoch's work on assessment, as an ongoing part of our inquiry development, has coloured our thinking. What she suggests is that there are a wide range of assessment type activities that can move children's thinking from the "shallow to the deep." Teachers have appreciated the most recent Kath Murdoch resource entitled "Take a Moment- 40 frameworks for reflective thinking" for the range of activities it provides.

Assessment is no longer simply summative and end point but shapes the inquiry process and runs in parallel. It is not "separate from instruction" as Carol Ann Tomlinson points out (2008). "Effective assessment is more like a scrapbook of mementos and pictures than a single snapshot." (Wiggins and McTighe, 2005:152). What became apparent to me during my sabbatical, as I reviewed what we had achieved and what was left to do, was that the whole notion of assessment was difficult but that "reporting inquiry learning outcomes" to the Board of Trustees was even more problematic. Inquiry learning outcomes do not readily lend themselves to statistical encoding, given they are more qualitative in nature. Our board is used to receiving hard data in literacy and numeracy so how to provide them with the confidence to know that students are progressing and achieving in inquiry learning became my burning issue. Certainly it was the "elephant in room".

In discussion with other school principals and with an academic in the educational research area, it became further apparent that this was an area which many schools had not yet considered , nor was it an area where material that could give practical help was available to guide us in this next step.

Emily Nelson put me in touch with Perry Rush, the principal from Island Bay School, who was generous enough to host me for an afternoon in his school and explain how he reports inquiry learning outcomes to his board. Perry has developed, over time, a way of tracking the development of the changes in student thinking as the "inquiry" progresses. This personal professional development provided me with sufficient impetus to return to school and begin some trialling of our own in Term 3, 2011.

The visit also made it clear to me that it is often the principal's enthusiasm followed up by his or her action which is a significant key to sustaining and enhancing school initiatives. We, as principals, need to be active learners ourselves to keep developments moving forward. In a school, such as ours, where we do not have any senior managers released for more than one day per week, their schedules like all teachers are full. So if we want to be a "moving school" as described by Stoll and Fink (1996), it falls to the principal to reinvigorate and refresh, in our case, our inquiry journey.

To date, we have presented one fulsome inquiry report to the board which included a sampling of completed assessment activities (integral to the inquiry) that clearly showed the diversity of thinking and understanding amongst several sampled students. Kath Murdoch refers to these activities as "learning checkups which she says are a moment to stop and think about what we are learning and how our thoughts are changing" (Kath Murdoch, 2010). The presentation of this qualitative data to trustees resulted in a very positive and interested response.   They actually asked if next time we could show them samples of what might be considered a "below, met and above" response so they could see the diversity of sophistication in students' thinking.

In 2012 all team leaders have agreed to gather together samples of students' assessment tasks (learning checkups) completed by 3 sample students in each class across the team from one inquiry. In this way we hope to reflect the diversity of responses amongst students. The board will receive a narrative around these data. We continue to look for authentic ways and graphic organisors which might record and represent the changes in student thinking in all inquiries undertaken.

Final thoughts

The professional development framework we initiated in our inquiry development was characterised by

- full school development;
- the regular release of teams to work together in school time ; and
- full staff workshops which focused on discussion and debate

Collectively these promoted school ownership and valuing of the inquiry approach to learning. We now use this framework for all major professional development initiatives and teachers continue to benefit from the approach. Following 2009 we have used the model for other school wide developments in reading(2010), mathematics (2011) and now writing in 2012.

It has the advantage of allowing teachers in "their teaching teams "to focus on the important aspects and issues for them as teachers and to meet the developmental needs of their learners who differ in age and stage. The coming together at staff workshops encourages full school "sharing of ideas and practice", but not cloning of homogeneous practice. Some staff feel more able to share in a smaller group setting and in this way developmental needs of teachers are met successfully. Wills (2000) cited by Hill, Hawk and Taylor argues "that the content of any professional development be relevant to teacher's day to day concerns but must be located as much as possible in the teacher's real world."

It must be said that as time passes teachers, who have huge responsibility day to day to implement the curriculum and the implementation of national standards, are only human and as one development is maintained, other pressures require them to refocus and direct their energies to something else. Therefore the risk of backsliding to earlier practice increases and our inquiry development was no different. Embedding practice is a very long term commitment.

A key message I leave you with is that, if a school values a development as we do our Inquiry learning initiative, it needs to be revisited regularly and key questions asked to maintain its integrity. That task falls to the principal.

Hence, it seemed appropriate to revisit our understandings and our practice about inquiry learning before the 2012 year started. On Teacher only day in late January 2012 we did just that. It became apparent that revisiting and clarifying the difference between "key concept" and "topic" was necessary, that energy needs to go in to determining the "big understandings" as these shape the inquiry and are key to its direction. Staff used their previous year's planning and reviewed it against a set of criteria, provided by Emily Nelson to determine if we were still true to our inquiry learning course. This activity resulted in much discussion and a sharpening of the focus again on what is important to emphasise when planning inquiries. In fact, the set of criteria is going to be used regularly by teams as they plan their next inquiry, so valuable did staff find it!

Such regular review, led by the principal, is critical to sustaining key developments in school and embedding long term changes to teacher practice.

We are not finished. Our journey continues.

If there is anything you would like further information on, please email me. We are only to willing to share our experiences.

Arohanui Sandy Anderson

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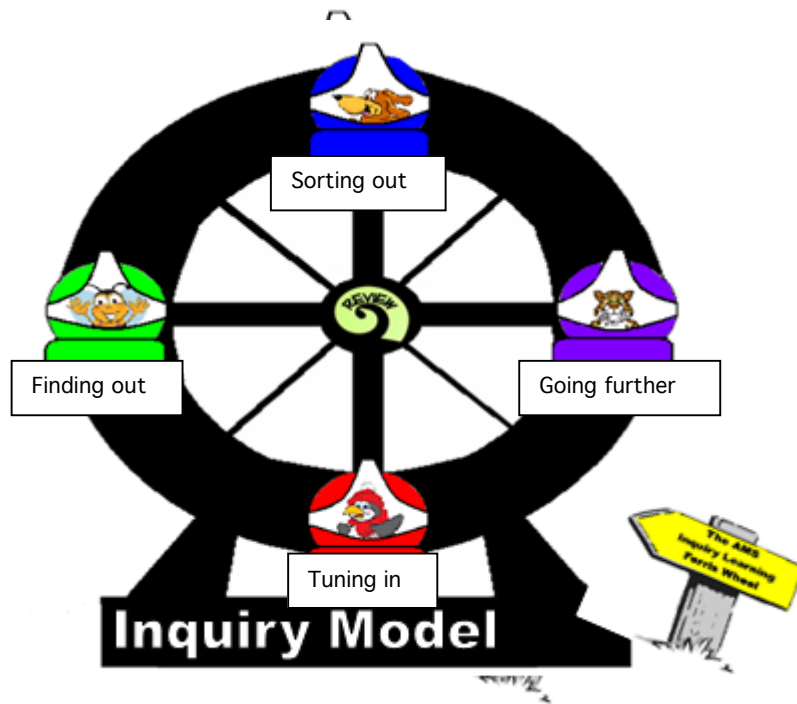
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Please see below for appendices 1&2 Ferris wheel Model and Teacher model

Sorting out

Finding out

Going further

Tuning in

Inquiry Model

Appendix 1

Arthur Miller School Inquiry Model

Student Needs	Current Issue	Opportunities	Calendar Commitments

P L A N N I G	Big Idea / Rich Concept Context / Provocation / Question

Deep Understandings
Significant Questions
Learning Intentions
Success Criteria > knowledge
> skills
Habit Of Mind
Education for Sustainability
Key Competencies
Te Ao Kori
ICT
Achievement Objectives

Tuning In

Going Further   Review   Finding Out

Sorting Out

Celebrate   Innovate
Reflect

Appendix 2