What is 21st Century learning?
“The sheer magnitude of human knowledge, world globalisation and the accelerating rate of change due to technology necessitates a shift in our children’s education – from plateaus of knowing to continuous cycles of learning” (NCREL, 2003,p5) What students learn as well as how and when they learn is changing.”

Acknowledgements
“Thanks to those who worked hard to achieve this opportunity for Principals. It has arguably been one of the most useful experiences to take stock, step back and think about what is of importance, what work is to be done and where our own sphere of influence impacts most. It has also been an opportune time for an Aspiring Leader to step up and take the reins for a term.” (David Reardon — sabbatical report 2009 /Note David also submitted an individual report that covered his research time in NZ)

We would like to acknowledge first and foremost the Riverdale, Russell street and Pahiatua School Board of Trustees for supporting our application for sabbatical leave and assisting financially towards the many kilometres we travelled on our visits to other schools.

We acknowledge the Ministry of Education for making sabbatical leave available to principals. (To have the opportunity to be able to take time out and peek into other countries Educational aspirations and practise in person and, to indulge in uninterrupted reflection with a period of refreshment is invaluable. A term wasn’t nearly long enough)

We also acknowledge our three very capable Deputy Principals, who stepped into our shoes for the term, particularly while Lynne and Debra were out of the Country and to all the others who carried the extra load as a consequence.

Our final acknowledgement is to the schools we visited, 5 in total whilst overseas and The Galileo Educational Network at Calgary University. The Principals and Senior Management enthusiastically and passionately gave us a large amount of their time and energy to share what their schools were doing.
Purpose
The purpose of the sabbatical leave scheme is listed as ‘to provide a sustained period of leave as part of a Principal’s career pathway to engage in a balance of professional learning, reflection and rejuvenation.’ We certainly did our best.

At the time of applying for a sabbatical position, Russell Street School Riverdale School and Pahiatua School were in the early stages of an EHSAS Cluster programme focused on developing a professional learning community driven by the belief that ‘all learners must achieve the highest possible levels of achievement in the competencies that would equip them for success in the 21st century’.

At the time of developing this plan, we were very careful to word this in such a way to reflect that we were already in the 21st century (and that significant changes had already occurred). In short we wanted to recognise that 21st Century skills weren’t a finite, finished framework. In essence we needed to have a strong ‘future focus’ in all of our planning and thinking on the basis that this set of skills would continue to morph.

At the time of application we had all developed a charter following extensive consultation with our community. We saw this process of engaging all stakeholders as critical and went to considerable lengths to get our community involved.

Our focus through EHSAS had begun to refine some of our plans and to sharpen our interest in other important driving forces, consistent with the notion of a 21C learner and 21C learning. One such example is that of developing the process of teacher inquiry, a framework we now see as critical in enabling the principles, values and vision of our own national curriculum to flourish. Each School set about determining their own individual flavour to the curriculum.

The initial purpose was shaped further by what we were reading. Individually we followed several lines of interest, and read several books (Some only partially), engaged in reflective chats with colleagues, regularly visited favourite blogs, visited several local schools, as well as several schools in the northern hemisphere. (Note-These visits reminded us that there are similarities in what we are all setting out to achieve but there is also a very distinct local context to it too.)

And this sabbatical also came at a time when much concern and debate surrounded National Standards, the shape of them, issues around implementation and the possible tension with the NZ curriculum. The opportunity to explore national testing and narrowed curriculums could not be overlooked, and thus provided an extended scope to our research and visits.

The main purpose of the trip was to visit the Galileo Network organisation Galileo schools are 1-1 computing and have Inquiry learning as their common base so obviously the influence of ICTs was also a strong factor. Especially given the introduction of Interactive Whiteboards, data projectors, interactive
teaching stations, digitally enhanced classrooms and increasing digital access to the world, coupled with the constraints of outmoded classroom design occurring in our own schools.

The provision and, demands of the new technologies created another strand to our questioning and observations continuing our interest in alternative learning environments, this became the centre of many discussions, both while away and at school. These discussions continue still.

We have subsequently all presented to our Board of Trustees around our thinking in the short to mid term.
We have shared interesting points of note with our staff and attempted to take on board any ideas that fit in with our current circumstances

**Methodology**

Our method of collecting information was predominantly to visit schools. We had seen Sharon present several times in NZ at Ulearn and had used the net to read and research the Galileo project.

It goes without saying that we were also going to soak up any additional educational and recreational opportunities that became available.

From here we set about contacting Calgary University and making sensible decisions about what could be achieved given distance and time.

We spent the first couple of weeks undertaking an information search on all related topics online, as well as re-reading a number of texts to support the beliefs that underpin the 21st century model of teaching and learning; Mark Treadwell, Daniel Pink, Thomas L Friedman, Richard Florida and Ken Robinson.

It is the *vision* of The New Zealand Curriculum 2007 that provides the best possible justification for synthesising and comparing / contrasting models of 21st century learning.

“Our Vision is for young people” who are “Confident”, “Connected”, “Actively Involved”, “Lifelong Learners”.

The time to research and digest information gave us a sense of the kinds of questions and information we needed to consider during our visits.

The visits to schools were set up by the Galileo Educational network based at the University of Calgary and intended to give us a flavour of both State and Charter Schools. The other schools visited were based on a very unscientific process, one of opportunity. While researching we became aware of some controversy over cuts to funding that had just been introduced during the summer break in Ireland. As Ireland was part of the travel itinerary we took the opportunity to explore this and were able to visit an independent school in Ireland set up to work outside the Ministry and Church directive. We became aware that the Scottish Curriculum appeared to have its genesis in the NZ curriculum and were keen to explore this if possible so we added in a short
side trip to Edinburgh. We approached Principals directly or via email when we were in the Country as the long summer break made contact difficult. Seeing schools in action speaking with dedicated Leaders in their space is what proved to be most valuable and this left us with a strong belief in the value of collegial visits.

FINDINGS
Thus the following pages summarise our observations.

Schools visited were "Educate Together" in Ireland "Edinburgh Council "in Scotland and "Charter Schools" in Canada.

• Each articulated a belief that legislation was hindering the development of innovation and initiative

• All schools had Govt funding but were independent of the regulated state system

• Schools were choice schools for Parents. In each instance roll growth had been significant and space was at a premium

• The parents recognised that these schools offered an alternative that fitted C21 learning and were prepared to pay for their children’s learning

• Government cuts to both special education funding and reducing teacher/ pupil ratios

• Reduction in educational spend lead to senior management promotions being frozen

• A maturing work force heading toward the end of their careers

• Expectation that all children arrive at school in uniform with their books and that Parents will pay this.

• Huge emphasis on knowledge and content rather than skills

• Many schools had deleted excursions and Parents were responsible for EOTC.

• Teachers knew about NZ curriculum and the resources available through Tki.

• Debate is raging around the place of National testing.
Scotland

- League tables do exist but were very difficult to locate
- Delayed pension and retirement age of 75 was negatively impacting on availability of positions
- Govt give educational spend to the local councils
- Property is managed by a property person who is on site for ½ a week.
- National Curriculum is capability based
- Teaching time is 35 hours per week 22 ½ hours contact
- At 120 a school is listed publically as under threat of closing
- At 160 there is no senior management positions, work is shared by all.
- Big emphasis on the journey to excellence by Scottish Government – improving the Scottish Curriculum

Calgary - Canada

- Charter School did not belong to The Teachers Professional Association (NZEI) belief that this allowed much greater flexibility in staffing and the employment of experts who may not be teacher trained.
- Charter Schools derived from choice, or lack there of, and could be initiated by educators or parents
- The provincial Tests are considered a measure of parents background rather than how well teachers teach, and students learn
- Planning and Prep was carried out in PODs having a cross section of teacher strengths in key disciplines
- Schools were Inquiry-based, Science, Maths and Humanities with personal flavour i.e. emphasis on “the Arts” and/or “Girls education” and/or “Sport”

The final pages summarise our findings and accentuate our belief in formative practise and assessment for learning
Inquiry-based Curricula

Inquiry-based curricula is a process for the teaching/learning of skills and attitudes that enables deep understandings through children constructing their own knowledge and experiences.

(This is the way knowledge is constructed. Not a teaching process, there will be deliberate acts of teaching i.e. basic facts, spelling etc, not all learning will be inquiry.)

Calgary Science School
Virtual Museum

Collaboration and Teamwork

• Learning can’t effectively take place in a bubble

• Teachers who work in an inquiry-based classroom understand it is more than a teaching method—it’s a way of being in the classroom, as well as in the world.

• An essential facet of inquiry-based learning demands the classrooms work is made public.

• Extending the classroom to a broader community, however, requires collaboration and teamwork.

• Connecting with communities—both within the classroom and beyond its walls enriches both students and schools
Assessment

• Meaningful, authentic tasks and activities hold the key to an effective review of classroom performance.

• In order for students to become engaged in assessment teachers need to work together while their students collaborate to build their knowledge.

• Students should be provided with the skills and opportunities to assess their own learning and to give meaningful feedback to their peers.

• The broader school community can also participate in assessment with opportunities for other educators to become involved.

• Procedures should also be in place to regularly review and improve both summative and formative assessment.

• A variety of guidelines — or rubrics have been developed to assist teachers in planning a comprehensive assessment plan.  
  [http://www.galileo.org/tips/assess.html](http://www.galileo.org/tips/assess.html) and follow the links

What makes a difference?

• Robust Teacher Inquiry into own learning

• Targeted Professional development - Whole school

• Strong Leadership/Coaching from senior management - In classrooms

• Regular Collaborative Planning
IMPLICATIONS
A consistent theme to emerge across the countries visited is a fear of politically driven decision making and the failure of national testing to recognise the full attributes of children. There was a shared appreciation of New Zealand’s’ slim line curriculum and schools ability to design individual content.

The journey highlighted for us the importance of Teacher inquiry (this is about developing a professional mindset of investigating, implementing and reflecting upon that, which matters most –outcomes for children- and in times of rapid change it should be the foundation of a teacher’s work.) We need to consider the points made by Daniel Pink in his book A Whole New Mind: Moving from the Information Age to the Conceptual Age talks about the different abilities people who want success in the future are going to have to possess. “The future belongs to creators and empathizers, pattern recognizers and meaning makers. These people- artists, inventors, designers, story-tellers, caregivers, consolers, big picture thinkers- will reap society’s richest rewards and share in its greatest joys.”

We are left with the following question. What can 21st century classrooms be expected to deliver given the emergence of a media rich learning environment in which learning can occur anytime and anywhere?

Russell Street School and Riverdale School have gone on to collaborate in an ICTPD contract with 4 other schools. Inquiry based learning, enhanced digital classrooms and Teacher inquiry is still fundamental to our learning and teaching beliefs.

Our thanks go to the following
David Reardon principal Russell Street School, with whom the Collective sabbatical application was submitted. David remained in NZ and challenged our thinking through his research. We have also included some aspects of David’s report within this report in particular the acknowledgements, purpose and background information.

The MOE for accepting a joint sabbatical application and agreeing to a joint report. (We are not sure if this has been tried before.)

The Principal and Staff of Abbeyhill Primary in Edinburgh Scotland.

The Principals’ and Senior Management Staff of Calgary Science School, Calgary Girls School and the University Elementary School.

And finally to Sharon Friesen and Candice Saar from the Galileo Educational Network.

Each of these people has been instrumental in helping to shift our thinking and in challenging us to reflect on our own teaching/school based practices to better respond to new emerging information about the way people learn, the use of technology and the skills required for 21st century learning and teaching

Debra Peck
Lynne Huddleston
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