

New Zealand-Cognition Inst

Discovery 1 & Unlimited Paenga Tawhiti

This case describes both an innovative primary school (grades 1-8, age 5-12) and a secondary school (grades 9-13, age 12-18), governed by the same independent Trust and located in close proximity to each other. The philosophy of the school is that everyone involved in the school community is a learner and a teacher, and that learning happens everywhere, all the time. The schools are located in the centre of Christchurch's commercial area and extensive use is made of nearby facilities. The aim is to provide an environment where a child's curiosity and wonder at learning is retained and nurtured, which builds on children's inquisitive passions, fosters curiosity, and encourages students to challenge themselves personally, academically and socially. Students have an active role in the design of their individual learning programmes, following personal interests and enthusiasms while making sure their programme provides the key skills and competencies right for them. Teachers function both as curriculum experts and as learning advisors who help the students make the right decisions, give regular feedback on progress and monitor whether the students' planning needs modifying. In the secondary school, students do not work in fixed cohorts; instead, each student creates the timetable that fits their learning plan and selects the classes or community context which best fits what they need to learn. The student, parents and learning advisors meet regularly and all of them take responsibility for supporting the students' progress. Many parents engage in the schools on a daily basis. The physical environment in both schools is characterized by large communal areas with beanbags and couches to make it easy for students and their families to feel comfortable. There is collaboration between the two schools, for example, when older students contribute to learning at the primary school or when younger students join a class at the secondary school.

Main Focus of Innovation: TEACHERS, CONTENT, RESOURCES, ORGANISATION

Other keywords: alternative philosophy, blended/non-formal, learning space

General Information

Name of the ILE: Discovery 1 & Unlimited Paenga Tawhiti

Location/Address: Discovery 1 - 690 Colombo Street, Christchurch 8140

Unlimited Paenga Tawhiti - 263 High Street, PO Box 4666, Christchurch 8140

Website: www.discoverylearning.co.nz

ILE submitted by: The New Zealand Learning Discovery Trust

Rationale

Why do you suggest that it should be included in the project? How does it respond to 21st century learning challenges?

This application is submitted for consideration as an observatory project within the OECD – CERI Innovative Learning Environment Project on behalf of the New Zealand Learning Discovery Trust.

The two schools established by the Trust - Discovery 1 and Unlimited Paenga Tawhiti, have been pushing boundaries in relation to learning and the school experience for nearly 10 years. Both schools have grown rapidly from small initial enrolments to their current maximum roll sizes of 200 and 400. Within the last year both schools have received very positive external reviews from the New Zealand Education Review Office. Both schools are currently experiencing demand for places and have to administer enrolment schemes (as required by legislation) and this means balloting for places and the establishment of waiting lists. Currently Discovery 1 has a waiting list of 230 students and Unlimited Paenga Tawhiti a waiting list of 83. Both schools have applied for maximum roll increases to meet demand pressure but the outcome of these applications is not yet known.

In the last 10 years there has been interest from across New Zealand and around the world in the unique and different approach being taken by Discovery 1 and Unlimited Paenga Tawhiti to the school experience. Between them, the schools have hosted well over 4000 educational visitors to see how they use new ways of teaching and learning and how they involve the whole community in the teaching and learning processes.

Both schools are proud of the way they are constantly nudging at the edges of education innovation and now that they have come through establishment and development phases there are some new strategic thinking about next steps. To this end partnerships with the University of Canterbury and an independent policy research institute within New Zealand, the Cognition Institute, are being developed.

With these partners there is a belief that there is a good 'fit' with the aims of the CERI Innovative Learning Environment Project. The Trust would value the opportunity to document our progress to date and be critically supported as we create new practices and evidence, as well as ensure that our future developments meet a 'test' of quality in terms of improved outcomes for learners.

For Discovery 1 the strategic intent is:

To be a quality special character school that pushes the boundaries, and places the learner at the centre of learning by finding out first what their passions, interests and needs are. The core aims of the school are to keep children's inquisitive passions alive, to foster curiosity, to encourage students to challenge themselves personally, academically and socially and to exceed expectations of the national curriculum

For Unlimited Paenga Tawhiti the drive is to stand out as a secondary school through:

- **IDENTITY:** Our 'special character' and a focus on student individuality, high trust, relationships and parent partnership.
- **EXCELLENCE:** Personal best, high expectations, and the achievement of goals.
- **INSPIRATION:** Passion, excitement, and awesome learning.
- **OUTREACH:** Sharing talents, giving and supporting, and celebrations and success.

Learning Aims / Intended Learning Outcomes of the ILE

What are the core learning aims and which knowledge, skills or attitudes are to be acquired? (These may include outcomes related to learners' social, interpersonal, or meta-cognitive development)

Discovery 1 and Unlimited Paenga Tawhiti both have a requirement to follow the national *New Zealand Curriculum* (2007) and base learning on the learning areas, values and key competencies as stated in the document. The New Zealand curriculum provides guidelines and overarching intent, rather than specific details of content and pedagogy. The system is highly personalised and does not prescribe specific learning outcomes. These are developed in schools. Every school in New Zealand is required to translate the curriculum document into practice that may be unique to the school because schools need to meet the needs of their individual students.

Within this framework Discovery 1 has a curriculum that has been designed by the children, parents staff and the Board of Trustees. This can be viewed at <http://www.discovery1.school.nz/useful-documents-discovery1-school.html>

At Unlimited Paenga Tawhiti a distinctive "Look of Learning" is underpinned by the New Zealand Curriculum and this leads towards and is aligned with the New Zealand qualifications pathway framework through either student directed inquiries or Learning Advisor facilitated learning. All learning is supported by individual education plans (IEPs) and regular one on one (1:1) meetings.

The vision statement from the current strategic plan at Unlimited Paenga Tawhiti is to provide an innovative learning environment where students:

- are engaged and challenged as learners;
- understand about and take responsibility for their learning;
- are valued and trusted as individuals;
- are nurtured and supported by peers, staff and parents;
- can achieve through diverse learning pathways; and,
- learn from and contribute to learning in the wider community;

so that they will be enthusiastic, confident and competent individuals who contribute as active, thinking and responsible members of society now and in the future.

Learners

Which group(s) of learners is it aiming at? Who is eligible to take part? How many learners are there? What are their ages?

Both schools - Discovery 1 and Unlimited Paenga Tawhiti, are open to any student seeking enrolment. Commitment to, or empathy with, the 'special character' is the only entry requirement. Entry to both schools requires an enrolment application and an interview with parents and student by senior staff and current student panels.

If you have a passion, or even if you do not, the schools will assist you to meet your needs/requirements.

Discovery 1 caters for primary students aged 5 – 12 years, while Unlimited Paenga Tawhiti is aimed at high school students (Aged 12 – 19 years). The proximity of the two schools enables primary students at Discovery 1 to join classes at Unlimited and conversely for Unlimited students to contribute to learning at Discovery 1.

Facilitators

Who are the teachers/facilitators? Who are the leaders? What are their professional backgrounds? What are their roles?

In both Discovery 1 and Unlimited Paenga Tawhiti, teachers are called Learning Advisors and are on a first name basis with the learners. This Learning Advisor term is deliberate to emphasise a role comprised of facilitation, mentorship and colleague. Learning Advisors are dedicated to supporting students learning through individualised and co-constructed approaches established by IEPs and regular 1:1 time in support of learning. The role of the Learning Advisor encompasses facilitation of learning, mentoring, and coaching. It also includes negotiating with students and their parents to establish a timetable of learning which consist of course based topics and independent or collaborative learning options. Leadership is recognized throughout the respective communities and is celebrated in student achievements, individual initiative and personal excellence.

All Learning Advisors are trained teachers and meet the requirements of the NZ Teachers Council. There is a focus on constructivist pedagogies and ongoing professional development is provided to help establish innovative best practice.

The interview process for employment at both schools includes having to make a presentation to the school community. This community comprises any students, parents and staff interested and available to participate. Feedback from this process is included in the assessment process of the respective Boards Appointments Committees.

Organization of the ILE

How is learning organised? How do learners and facilitators interact? What kind of pedagogy do they follow? What curriculum is used?

At Discovery 1 learners are placed in multi-level Home bases of their choice. Students are involved heavily in choosing the Learning Advisor that best meets their learning needs. Students also have the opportunity to stay with that Learning Advisor for up to 4 years. This leads to very strong relationships and a good understanding of learning needs.

At the beginning of the year, then at the end of each term, all students have an Individual Education Meeting (IEM). This meeting is a three way conference between, child, parents and Learning Advisor. In this meeting the children drive the way forward, reflecting on past learning and setting new goals for the next period of time. Parents are also encouraged to participate with helping setting goals and taking responsibility for supporting goals. Staff then share their professional stand point and inform learning within literacy and numeracy, as well as exposing students to new learning. Once all goals have been set, each of the three stakeholders take responsibility for supporting/managing progress against the goals.

Staff are also resourced one day a fortnight to have individual or small group conferences with the students in their home base. This allows for constant monitoring of how well the students are progressing through their goals and whether they need modifying. All conference information is emailed home so parents are fully aware of how their student's learning is taking place.

All staff allow for students to plan their learning day. Staff will share the workshops (lessons) they have planned for the day and students will choose to either attend the workshops or work on their own goals. Students are required to prove they have knowledge of the literacy and numeracy workshops if they do not attend. Students plan using a variety of tools, from laptops, to Google calendars, to planning books. They have the ability to design a planner that works for them. At the end of each day, students are asked to reflect on the learning that has taken place and start organising their thinking for the next day.

Staff will check students' planning to allow for the rigour that is needed when allowing students to have a large amount of self directed learning time. When staff are not running workshops they will be facilitating learning by supporting small groups or individuals and often learning themselves.

Parents are also an integral part of the learning as they are also a resource for students to use to support their learning.

Learning is made as real life as possible and Learning Advisor's are encouraged to challenge all learning goals.

At Unlimited Paenga Tawhiti students direct their learning in several different ways:

- By exercising choice about the Learning Advisor they want to work with in a home base. It is the home base Learning Advisor that negotiates Individual education Plans IEPs and arranges regular 1:1 meetings.
- By choosing Learning Advisor facilitated classes/lessons from a schedule. This schedule of learning opportunities changes every five weeks - at Unlimited Paenga Tawhiti you don't ever sit in a class with the same teacher or the same class mates for more than five weeks unless you and your class mates choose to do this. This modularisation of the curriculum is one of the unique features of learning at the school.
- By choosing to undertake your own independent learning or by working with others in a collaborative way on an independent learning project. This independent study is both scaffold and supported by Learning Advisors.

Classes facilitated by Learning Advisors are open to students of any age and many of them contribute to achievement on the New Zealand Qualifications Framework. This approach means that students often undertake courses that provide credentials and build qualification pathways in advance of their year level or are able to plan a qualifications pathway over an extended period of time. This differs significantly from the more traditional locked in age-based classes that run for a whole year in other New Zealand secondary schools

Learning Context

In which context does learning take place? What does the physical learning environment look like? Are community resources used to facilitate learning and how?

As indicated above, the schools are predicated on the assumption that everyone involved in the school community is a learner (including parents, Learning Advisors and members of the wider community).

In their 2009 reviews the Education Review Office noted:

"In both Discovery 1 and Unlimited Paenga Tawhiti there are strong partnerships between students, parents and learning advisors, based on the principle that everybody is a learner and everybody is a teacher. Positive supportive relationships exist among students and between teachers and students. Students told the Education Review Office in 2009 that Unlimited Paenga Tawhiti was a safe environment without bullying".

"Students who are engaged and motivated can follow their passions and interests to the full extent of their abilities. Many learning activities involve entrepreneurship and community service. ERO spoke to many students who were confident, competent, mature and articulate."

Positive relationships between adults and students are a feature of the school. Students learn in an emotionally safe and supportive environment. They work with each other in 'tuakana-teina' (older and younger) relationships where older students engage with and work alongside younger students in natural and supportive ways".

"Students are proud of their school and the learning culture they are part of. They show a strong sense of belonging. Students recognize that diversity is an acknowledged and significant aspect of school culture".

"Many students show a good level of personal initiative. Students appreciate the opportunity to learn in such a flexible, positive and accepting environment".

The physical learning environment in both schools is essentially open plan with spaces available for groups to meet. There are no traditional classrooms and every space is either open, has glass walls or can be easily sub-divided by moveable walls to accommodate smaller or larger groups. There is no staff room and every space has a requirement that it can be used in at least three ways.

Both schools are linked to high speed data networks and pride themselves on the way they use new ICT technologies and digital resources. Over the last three years both schools have participated in a national training and development process as part of a cluster to develop their use of new ICT technologies.

In their most recent reports the Education Review Office noted:

"Students have opportunities to learn and gain qualifications through a variety of pathways. They can learn in class, in the community and through learner directed experiences. Many students achieve well, with some gaining NCEA qualifications ahead of their usual year level or passing university papers".

"Students take responsibility for their learning and are active in the design of their own individual learning programmes. They make decisions about what they want to learn and how they want to learn it. During the review many students spoke enthusiastically about the opportunities they have to follow their interests. They felt they were able to learn in ways that suited them and helped them achieve their potential".

"Staff, students and parents have a shared commitment to the school's beliefs and values. They work well together with strong relationships being central to what happens at the school. Learning advisers (teachers) know students and their families well. They have regular communication with parents about their child's progress. Students are supportive of each other and work well in small and large groups."

"Students and learning advisers make good use of a variety of learning spaces so students can learn in different ways. They have a number of common meeting areas as well as specific spaces for each home base (class). Students also make good use of the local facilities such as parks, the city library and art galleries as a part of their learning environment. Senior students are guided to take increased responsibility for their own safety by gaining a 'trust licence' when learning outside the school. Parents are expected to participate in training workshops before they supervise students learning in the community. The board and staff have good systems to ensure students' safety."

"Other positive features of the school programme include:

- the range of effective teaching strategies;
- the level of parental involvement; and
- the extent of reporting to parents."

History of ILE

Who initiated it? For what reasons was it started and with what purpose? Have these changed since?

Discovery 1 began in October 2001 as a fully state funded "special character" designated school with a key focus on discovery learning. All learning is based around individual learning programmes. The school operates as a learning community with specifically designed learning spaces to be both child and adult friendly. There are very few walls, and students work in open plan spaces. No child has their own desk. Children choose the best place for them to work, either, on the floor, at a table, on a couch or standing at a bench. There are three floors to the school and on the top and bottom floor we house 3 homebases (class groups). The age range is from 6 years old to 13 years old on these floors. The middle floor houses the roof playground and garden, a large shared space and the 5 and 6 year old students.

The school is designed so that each space can be used in flexible ways. The children learn through the goals they set in conjunction with their parents and Learning Advisor (teacher). These goals are based around the passions, interest and needs of the child and usually involve up to 10 goals per term. Children will always have goals around literacy, numeracy and physical activity, which are requirements established through the New Zealand Curriculum. The school also asks that students have goals that involve thinking, innovation and personal passions. Learning then takes place through children identifying experts that they can work with to realise their learning goals. Children are asked to access experts in the local community first to utilise the location, the Central Business District. Following this is the support of the parental community.

The learning community is very well supported by parents. During most days there are up to 50 parents working alongside students in the school. These parents are also considered learners and can take part in any learning opportunity within the school. Parents within the community can also offer learning opportunities that reflect their passions as well, so you may see a small group of parents working alongside students teaching them sewing, or you may see a group of parents working alongside a student learning a new ICT skill.

Like any school Discovery 1 is evolving but it is anchored firmly by its special character.

The special character is built around:

- students directing and managing their learning - learning around their passions and interests;
- asking students first what they need in order to learn;
- a community where families are an integral part of the learning process, sharing responsibility with staff and students;
- a learning community where everyone - families, businesses and community mentors are partners;
- learning where it occurs naturally within the community, without the restriction of curriculum, place, time, style or subject;
- students of all ages in a learning community without barriers, learning at their own level;
- a community where everyone is a learner and everyone is a teacher; and,
- a community of respect.

Unlimited Paenga Tawhiti School was established on 15 November 2002 as a fully state funded, co-educational secondary school with a 'special character' designation under Section 156 of the Education Act, 1989.

It opened its doors to 40, year 9 –10, students in 2003 and has grown rapidly to a school of 400, year 9 -14, students in 2010 (400 is the current maximum roll).

Like its primary counterpart, Unlimited Paenga Tawhiti fosters approaches to learning based on discovery and inquiry learning processes. A key element of the Discovery Learning Trust's thinking, which has been translated into the school's 'special character', is that students should direct their own learning so that their enthusiasm and love of learning is supported, developed and retained.

Unlimited Paenga Tawhiti's special character is summarised in the following 10 statements or tenets:

- students are central in directing their own learning;
- students follow individual interests and enthusiasms;
- curriculum and qualification needs are met through a student's chosen path not a prescribed route;
- learning experiences extend beyond boundaries of place, time, age, methods of learning and areas of study;
- the entire community is the learning environment;
- families are vital and active partners in the holistic learning for students;
- we encourage, nurture and celebrate creativity, innovation and entrepreneurship;
- the individuality of each student is valued;
- we are a high trust community, treating each other with mutual respect and kindness; and,
- everyone is a learner and everyone is a teacher.

To make these statements live the school has developed a number of unique practices - the Unlimited 'way':

- a focus on learning, the support of learning and of building learning capacity with support and guidance from Learning Advisors who actively work in a close and positive way with students;
- a personalised approach to learning through an Individual Education Plan negotiated and monitored along with parents/caregivers at least three times a year and facilitated through regular one on one sessions between students and Learning Advisors;
- flexibility and choice for learners through our distinct "look of learning" which ranges from independent and collaborative learning opportunities; student initiated learning experiences; through to Learning Advisor facilitated units and such opportunities as authentic, contextualized and holistic learning in intensive 'full time' programs with many learning experiences often led by students and/or parents;
- an open approach to students being able to explore learning without restrictions of age, a flexible approach to the time of the school day, and a commitment to using the entire city -and beyond- as our "classroom"; as well as,
- a commitment to always seeing and supporting students as capable learners always 'at potential', treating everyone as an individual and with respect.

Funding of the ILE

How is it funded?

Both schools are funded in the same way as every other state school in New Zealand. The school roll generates entitlement staffing and operational funding. The key difference, as previously mentioned is the way property funding works, however, neither school is disadvantaged by this difference.

Learning Outcomes

What are the learning outcomes achieved by the ILE, including academic, social, interpersonal and meta-cognitive outcomes? How is learning assessed?

At Unlimited Paenga Tawhiti reports on student progress are recorded at the end of each 5 week unit. Individual student reports may include comments in relation to assessment of academic, social, interpersonal and meta-cognitive outcomes, key competencies, qualification and certification achievement. Issues identified in reports become the basis of feedback and feed-forward in the IEP meetings.

Learning is assessed in a variety of ways including Learning Advisor feedback and feed-forward with respect to the achievement objectives of each unit, individual reflections and learning stories.

Students also participate in the New Zealand National Certificate of Educational Achievement (NCEA) - typically at Levels 1, 2 and 3. Further, some 20 students each year participate with success in studies at University at level 4 and 5.

The school also offers NCEA pathways through trade adding a partner in a new virtual Trades (Vocational Education) Academy.

Documentation describing or evaluating the ILE

Is there documentation on this learning environment? Is there a website? Films? Research reports or evaluations? Other forms of documentation? (please supply references or links)

In their 2009 reviews the Education Review Office noted:

“Students who are highly motivated achieve well. The school collects learning stories to illustrate how students learn and achieve”.

Recent 2009 Education Review Office reports on each school are available on the Education review Office website: www.ero.govt.nz

Both schools have comprehensive websites that are regularly updated:

- Discovery 1 - www.discovery1.school.nz
- Unlimited Paenga Tawhiti - www.unlimited.school.nz

Discovery 1 is mentioned in the following publications:

"Unlimited- The new learning revolution" Gordon Dryden and Janette Vos (The Learning Web Ltd.) pages 33 and 83

<http://www.mindspacesolutions.com/blog/?p=17>

http://www.imagineschooldesign.org/detail.html?&%20tx_ttnews%5Btt_news%5D=201&%20tx_ttnews%5BbackPid%5D=3&%20cHash=76e00c7c44

<http://newlearningonline.com/new-learning/chapter-2-life-in-schools/discovery-1-christchurch/>

Unlimited Paenga Tawhiti has been mentioned in the following recent publications:

"Unlimited- The new learning revolution" Gordon Dryden and Janette Vos (The Learning Web Ltd.) page 281

"New Zealand Unleashed" - Steven Garden (Random House 2007) pp 224-5

Oliver Samson wrote and published on a website the following article about Unlimited Paenga Tawhiti when he was in Year 9:

"My high school is an amazing creation, where the people at the school actually get some say in how they learn and what they need to learn to become amazing people in the future.

A lot of schools are now beginning to follow the example of Unlimited Paenga Tawhiti by having the teenager present at the parent-teacher conferences. These are called individual education meetings or (IEPs for short) so that the teen can help to plan their learning a little more than usual. At my school the teens plan their learning and the parents and teachers are just guides to help them make the right decision.

Another thing different about Unlimited is that we don't have any "teachers" at all, we call them Learning Advisors (LAs for short), because they are there to help us set the goals and if we need information, they will either give it to us or point us in the right direction, and that way we get as much learning as possible.

We also have something most high schools do not have: an entire city at our disposal! (In a good way) That's right! We have a trust agreement (but only if we complete the test and our parents think we are responsible enough) and with these we are able to access learning opportunities and mentors outside of school.

That is one of the big responsibilities, but the other (and the biggest) is that the teens have blocks free (like no classes) so that they can work on their own independent or collaborative learning projects. The ICL is known generally in the wider community as "inquiry learning". ICLs are really learner directed experiences (LDE), which implies that it is not only about making enquiries into stuff, but that the person that is doing this LDE chooses the subject/goal and then it is driven to make it a successful learning experience. The other thing different is that the important thing is not the end product but how they got there, i.e. the learning involved and the techniques that helped them learn.

This style of learning works, and lets teens take more initiative (I'm year 9 writing about how great my school is. If that's not initiative, then I don't know what is), therefore making them better prepared for the real world (because you don't get everything handed to you on a plate in the real world).

The result of this is that they can become responsible, initiative, respectful young people. I'm not going to go on anymore, but I could write all day about Unlimited and how it works".