Schools all around the country are embarking on new and innovative teaching and learning approaches in response to major shifts in the use of technologies and the way students are learning. This publication is one of a series that aims to showcase how schools are adapting to keep up with the pace of change throughout the world. This issue looks at Pegasus Bay School in Christchurch.

**Inspiration for change**

Seven years ago, the Ministry identified that Waikuku School, a small country school, would experience significant roll growth due to the development of Pegasus Town. The roll was expected to grow from approximately 90 students to up to 600 students. A new principal was appointed to lead the school through this major redevelopment and change management process. The principal was given an opportunity to develop a vision for the new school, introducing modern teaching and learning practices that would be supported by a new purpose built facility.

The journey

Visioning for the new school started approximately 7 years ago with the community, pupils and the developers of Pegasus Town. The principal employed education consultants to work with the school and visited a number of new modern teaching and learning environments in New Zealand and Australia to gather information and learn from the experience of other schools.

Following extensive research on modern teaching and learning practices, the principal started to make his ‘new school notes’ for the board of trustees, staff and anyone else who was interested. This ended up being a 50 page booklet! Some of the key ideas were from the Prakash Nair philosophy (spaces and furniture, etc). Two main ideas came to the fore as thinking developed. Firstly, the teaching spaces should not be able to revert to a single cell approach as the school was really committed to an open learning environment. Secondly, the school should be built for children – the whole environment needed to have a sense of fun and enhance engagement.

At Waikuku, they began ‘prototyping’ a more open and collaborative teaching style two years before the move into the new school building and this period was invaluable. This included trialling different technology, furniture and teaching arrangements.

“The teachers were amazing during this prototyping phase. We had a single cell physical environment, but what we achieved was more than I had hoped for. Having staff in the collaborative mindset is a key component in making the most of whatever set-up you have. We had three classrooms approximately, 80 metres apart, working as a really innovative collaborative syndicate.” – Roger Hornblow, Principal.

**And now...**

The decision to go with the new style teaching and learning environment means that the school now has no ‘standard’ classrooms, but instead offers six learning communities, each being equivalent in size to two-and-a-half classrooms. These communities feature a range of moveable furniture, with the teams of teachers working together. Students can move between the learning spaces, various student offices, school offices and ‘withdrawal rooms’, known as the ‘cave space’ or the ‘fish tank.’ These rooms give the children a quiet space where they can study and discuss ideas in smaller groups.

There are three teachers and teacher aides for each group of approximately 75 students. It is a collaborative environment that makes the best use of the different teachers’ skills and passions. Teachers coming to a school like Pegasus Bay are not just getting...
a new class – they are getting a whole new learning community with colleagues they will work alongside all day, every day. It is collaborative practice and free professional development for everyone involved.

Another innovative concept introduced at Pegasus Bay is the place-based curriculum. The school is located in a stunning and culturally significant part of New Zealand. With the historic Kaiapoi Pa one kilometre away, as well as many significant natural features nearby, the local environment becomes an integral aspect of the students’ learning. As the children move through each learning community they learn and experience making a difference in the local environment (eg growing salmon to replenish the Ashley River). Principal Roger Hornblow says, "People say we need to leave a better planet for our children. At Pegasus Bay we say we need to leave better, more informed children for our planet. We combine place-based learning with the attitudes and kaitiaki (guardianship) of the Pegasus Bay area using the local environment for their learning in a an authentic way.”

"Looking back over the last two terms at Pegasus Bay, it has been a steep learning curve for teachers, parents and pupils. The excitement of the new school is great but also creates new issues and pressures. The professionalism and passion of our teachers is amazing, as is their openness to share with our large number of visitors (about 600 so far). We know that we have moved from the outhouse to the penthouse and there are big expectations on us. We are up for the challenge.”

ROGER HORNBLOW, PRINCIPAL

The new teaching and learning environments are pushing boundaries – pupils, teachers and parents alike. The school continues to involve and educate parents by helping them understand how flexible teaching spaces work. The principal says that 90% of parents are fans of the new style teaching environment, 10% of the jury is still out.

In addition, we had the opportunity to push the boundaries of educational design and make real advancements to a sustainable approach through piloting the first net zero energy school in New Zealand. The school was designed to produce as much energy as it uses, with any spare energy going back into the grid. Design features include: solar panels for hot water; photovoltaic panels that produce the school’s electricity; lights that automatically turn down in case of sufficient natural light; temperature sensors that ensure that only areas that need to are being heated; low maintenance closed-loop drain-back hot water systems that are designed to last thirty years and serve utility/toilet clusters and kitchens; thicker insulation; edge of floor insulation; better glazing; good airtightness to stop energy leaks; and natural ventilation strategies.

Whilst it will be some time before the Ministry can assess the results of this pilot and duplicate aspects of the design, students have the advantage of a new understanding of sustainability and eco-efficiency from attending Pegasus Bay School. A touch-screen TV in the school foyer enables students and staff to check how much power is being produced and how much the school is using.

**Lessons:**

- Flexibility in the learning areas is key. Students and teachers need to be able to adapt the environment to best suit the learning.

- Teacher job descriptions and appraisal processes need to be redesigned to suit the collaborative team culture centred around a learning community. These expectations need to be explicit so current teachers and aspiring applicants know what is expected.

- The learning journey needs to be in a flexible learning environment. The planning, assessment and evaluation need to be clear to the teachers and the children in the learning community.

- “The wider environment we have here is STUNNING and we need to take place-based learning seriously along with 21st century themes and growing a whole tribe of eco-warriors….that’s the really exciting bit” – Roger Hornblow, Principal.

- When considering the vision for a new school, one of the key factors needs to be the professional development of the teaching staff. Pegasus Bay School was really deliberate about what needed to happen and still needs to be done. Working every day with other teachers means the practice is less isolated through working collaboratively and sharing ideas and reflecting together. Teachers are getting professional development every day. It’s incredibly powerful.

http://www.pegasusbay.school.nz
**For more information on modern learning environments visit**
www.mle.education.govt.nz