learning centres

lifetime learning in the community
Every community has existing educational assets - land, buildings, teachers and administrators. We need to define the vision for the nation’s education system and creatively plan to link the two together.

Lifelong education will be a key fact for everyone in the future. While there is no one way to teach or learn, there are many techniques to enable students to learn faster, better and smarter. An open-minded search for new ideas is essential to future education.

It is important to cater to all learning styles, using the world’s best technology and study methods. Teachers are facilitators for learning, education is about personal growth and life-skills as well as knowing how to learn and use resources to obtain information and knowledge.

The way we learn, and need to continue learning to keep up with a fast-paced changing world around us, will drive the way we plan and build schools in the future.

education and partnerships
The surrounding residents and businesses can have quite a positive influence on schools and universities.

Most schools operate as 9am to 3pm teaching centres for 200 days a year - these resources could be transformed to year-round resource centres for families in the community.
A community resource centre in the Hawkes Bay includes preschool, three language schools, primary school, adult classes, medical centre, fitness and sports centres, parenting-skill programmes and a community library with computer facilities.

The schools involve grandparents in their teaching programmes, and the centre has a public health nurse, physiotherapist and naturopath, as well as a minister.

It runs its own cafeteria where parents, teachers and students mix every day. The centre operates from 8.00am to 10.00pm and is respected and valued by the residents in the area.

resource centres as a business

All successful businesses in the world are based on building and retaining satisfied customers. Well manufactured products come with a guarantee. But this doesn’t always happen in schools...

A classroom should be relaxing, bright, calm and fun-filled. It needs to be equipped with interactive multi-media to access world-wide resources.

And the whole community needs to be involved - local businesses and manufacturers, professionals and specialists, extended families, parents - all these groups can support the teachers and students in many different ways.

These resource centres make everyone a teacher as well as a learner, so that learning can be life-long and fun-filled. Self-confidence and self-esteem are vital to learning, as are creative problem-solving and self-management.

technology + global networks

“With the internet people anywhere in the world will be able to take the best courses taught by the greatest teachers.” - Bill Gates, Microsoft.

Computers and networks link students at home with classrooms and teachers globally, as well as infinite resources and information 24/7.
The accelerated learning opportunities available through technology will impact on the ways we approach both education and business in future. More and more major companies are finding that their path to the future lies in high quality training for their staff.

The goal in both education and business is to teach students how to learn, not what to learn - to help everyone set and achieve personal as well as corporate goals.

brain food
Knowing the correct way to fuel the brain is an important step for learning ability. Eating fresh fruit in the morning, a vegetable salad at lunchtime as well as fish, nuts and seeds will maximise learning during the day. With this in mind, schools and learning centres are incorporating orchards and vegetable gardens to supply these vital foods.

In future, children and adults could breakfast together at the school cafeteria and learn about the importance of good nutrition for brain function.

Preparing and serving lunches in schools, using the vegetables and fruit from their gardens, is gaining popularity overseas and locally. This way all students learn about food hygiene and preparation as well as nourishment and improved health.

colours for children + young adults
Young babies are constantly adjusting to their surroundings and often feel more settled with pastel or soft earthy colours around them as these colours have a gentle vibrational energy. Bright colours and bold patterns in a day care centre may over stimulate a baby.

Toddlers and young children have a positive association with colours they link to good experiences e.g. the wall colour of their nursery where they were lovingly cared for and felt secure. Or maybe the colour of their favourite toy or cuddly blanket.

Equally a colour associated with childhood trauma can make individuals feel uncomfortable for many years afterwards.
From kindergarten through to primary school children often favour brighter reds, blues and orange. Parents and teachers should look at the colours they have used in their artworks, discuss their colours choices with them and try to get a sense of the colours they enjoy.

From intermediate through to college age-groups, children become much more conscious of fashion and what they believe their peers will admire when it comes to colour. Black and denim usually reign for clothing, but they are usually confined to grey and dark blue, red or green in uniforms.

Careful use of colour can support medical treatments if a child has a physical or behavioural problem.

Hyperactive children may be calmed by wearing blue, green or yellow, especially in the paler shades. While a listless or inactive child could be energised by wearing red or orange clothing.

Children with asthma should avoid black and red, their muscles would be more relaxed if they were surrounded by blue and white. And earthy tones of brown and green in natural fabrics would help a skin rash.

Colourful learning spaces help to draw out younger children and encourage them to interact and experiment.

Yellow is known to stimulate thoughts and foster attentiveness, the colour for learning and memory retention. Students sometimes use yellow paper to write notes on, or yellow highlighter pens to draw attention to an important fact or paragraph.

In Feng Shui yellow represents spiritual and intellectual activity while harnessing understanding. Orange is connected to communal activities and group achievements.
However this does not mean that every classroom or resource centre should be painted bright yellow! A pale neutral or oxidised shade of yellow could be helpful for students and their learning.

This library in Christchurch has chairs placed along the window and sea view, so visitors can enjoy the outlook and read with good natural light.

learning in comfort
As well as colours to help us learn, we need to think of other aspects that support education. Students need oxygen, water and nutrients at regular intervals to support the brain. This means fresh, clean air to breathe, a water-bottle at hand, and breaks from study for snacks. On top of this, the temperature of the room should be maintained at around 18 to 20°C for their comfort.

Lighting is another critical factor, both to maximise vision and minimise any eye-strain. Natural light is desirable.

Some students prefer to study in a quiet and restful place, while others like music or noise in the background. However sound control is something to be considered for any classroom.

Every classroom or study area should have a living plant to enhance the condition of the air inhaled.

Chairs, workstations, desks - all these should be ergonomically designed for comfort and support while students are attending lectures or working.

designing spaces - integrated study
In order to design successful learning and resource centres, architects and designers need to understand the ways that teaching and learning are changing and developing.
Libraries and multi-media centres will be redefined as the impact of the computer evolves. Science laboratories using computers for simulation are replacing the traditional chemistry and physics labs.

Mathematics, business and computing will be more closely connected, while the arts will be closely related to the wider community. Languages are integrated with geography, history, art, music, drama and cooking.

A new kind of multipurpose space will be developed to combine after-hours space and activities for students of all age-groups. These will include dining facilities, theatres, gym, pool, galleries, etc.

Classrooms as we know them will be supplemented or replaced by small, medium and large learning spaces. Individual study spaces will be the home base for each student. These spaces will cater for interactive and individual or self-directed learning.

**light + reflection**

Not all schools of the future will be new constructions, many existing facilities will be upgraded to accommodate the changing needs of teachers and students.

Eyestrain can be a major distraction for both students and teachers - glare, conflicting levels of brightness, prolonged use of computers, poor visibility. These cause increased blinking, muscular tension and dilation of the pupil which affect concentration and performance. The design of Alfriston College illustrates the extensive use of windows for natural lighting and a pleasant outlook onto landscaped areas.

**cool colours - natural materials**

Light reflectance is controlled by the use of materials, surfaces and colours specified within the spaces. Flooring in darker colours and/or texture, such as carpet or timber, ‘grounds’ the room.
Wall colours should be selected to reduce overall glare and relieve eye fatigue e.g. when a student looks up from a computer. Ceilings are usually white or light coloured to reflect light down into the room.

Cool colours encourage concentration by lowering the heart and respiration rates. Cool colours promote a student’s need to turn their attention inward rather than outward. Concentration will improve when a colour recedes, and in general schools should use naturally finished materials or be painted in colours that have light reflectance values between 50% and 65%.

exterior styles + colours
Buildings should reflect the culture of their environment but as construction materials change so do the styles of buildings designed in New Zealand. The character of the Auckland University here nestles well into its site.

Above are examples of more recent and colourful buildings. The orange panel on the Brighton Library in Christchurch, the lime feature panels on Botany School in Auckland, and the blue exterior of the Wellington Zoo Amphitheatre.

references
NZ Institute of Architects - Resene Architecture Awards
Planning & Designing Schools - William Brubaker
The Learning Revolution - Gordon Dryden & Jeannette Vos

compiled by
• Colourwaves - Jill Carroll