# TEACH LESS, LEARN MORE CONFERENCE

# 'CREATING A SCHOOL FOR THE TWENTY FIRST CENTURY' ONE SCHOOL'S JOURNEY

# **PRESENTER**

Ray Trotter Principal Wooranna Park Primary School Melbourne, Australia.

Venue: EDB Learning Centre, Singapore

#### PRESENTATION OUTLINE.

Thank you for the invitation to speak at your conference. As the title of my presentation suggests I would like to describe for you my school's journey over the last ten years to promote autonomous, life long learners. I believe that Plutarch best summarized our tasks as educators when said, some 3000 years ago, "The mind is not a vessel to be filled, but a fire to be ignited". Where possible I will use photographs, sound and film to capture the character of my school.

Before telling you about my school's journey I would like to set the scene for my presentation with a short video titled 'What School Kids want'. The video asks both secondary and primary school students what they think about school. I believe the students' comments are extremely insightful. The primary school students interviewed were, at the time, attending Wooranna Park Primary School.

# The film presentation of 'What School kids Want' can be accessed on the school's website – www.woorannaparkps.vic.edu.au

Wooranna Park Primary School has a population of around 350 students from over 40 different ethnic backgrounds. Most of these students come from socially underprivileged homes. The school has a reputation for catering well with difficult children and as a consequence we seem to be getting more than our fair share of problem children. At the same time we have a number of children who travel from well outside the school's normal feeder zone. Indeed, my grandson attends the school and his cousin attended the school last year before she moved on to secondary school.

Please understand I'm not here to tell you what to do! I strongly believe that sameness is the enemy of excellence. Professor Andy Hargreaves puts it a little stronger when writes, "Standardized educational reform is as valuable for a vigorous knowledge economy and a strong civil society as locusts are for a cornfield." Whatever we have achieved at Wooranna Park is the result of our strengths and weaknesses. When listening to me I would also ask you to appreciate that the philosophy is often better than the application! Our journey has been far from smooth and at times we have had to reassess the direction we were traveling.

Normally when presenting I would spend a good portion of my time outlining:

- the changing nature of the world we live in;
- the inappropriateness of traditional schooling in the twenty first century;
- the belief structure that underpins what we do at Wooranna Park.

Your attendance here today at a conference titled 'Teach Less, Learn More' strongly suggests that you already accept and understand the significance of the first two points. However, I would like to briefly focus on the following statements by Robert Reich and Cyril Taylor.

The need for a technologically skilled work force in Britain is backed up by a look at our comparative labour costs. The Confederation of British Industry says that UK labour costs are very high compared to countries like China (if the UK index is 100, Chinese wage costs are only 2 and for the Poles it is only 12 and the Australian index is over 100). In order to justify these costs British companies will need to focus on high value added goods and services. Clearly in the UK skill has replaced brawn as a condition of employment and similar competitive challenges face Australia. Cyril Taylor, Chair of the British Technology Colleges Trust.

We all need to learn how to conceptualise problems and solutions, using at least four

basic skills: abstraction system thinking experimentation

collaboration.

For most children in the United States and around the world formal education entails just the opposite kind of learning. Rather than construct meanings for themselves, meanings are imposed upon them. What is to be learned is pre-packaged into lesson plans, lectures and textbooks. Reality has already been simplified: the obedient student has only to commit it to memory. An efficient educational process, it is assumed, imparts knowledge as an efficient factory installs parts on an assembly line.

Robert B. Reich, President Clinton's first Secretary of Labor.

For a country like Australia, (and I suspect Singapore also), to maintain our standard of living, we need to produce goods of a quality above those of countries with lower production costs. Or as Andy Hargreaves says, "In the knowledge economy, wealth and prosperity depend on people's capacity to out-invent and outwit their competitors, to tune in to the desires and demands of the consumer market, and to change jobs or develop new skills as economic fluctuations and downturns require." To do so requires an education system that produces creative, lateral thinkers. The factory, subject based model described by Reitch consistently fails to produce such qualities in the numbers required.

With regard to the school's philosophical beliefs, it wasn't until last year that my Assistant Principal produced a draft of the school's *raison d'etre*, our *reason for being*, as part of her doctorial studies. I believe this is one of the school's most important accomplishments. I can't stress more strongly, that unless we have clear understandings about **why** and **what** we want to create in your schools, it doesn't matter which direction we go; or as an old mentor of mine use to say to me "if you don't know where you want to go, it doesn't matter which road you take!"

The school's *raison d'etre* has six areas of focus:

- Principles of learning;
- Pedagogical practices;

- Assessment;
- Organizational structures;
- Physical environment; and
- Theory.

Each area is designed to clarify the implementation of one of the seven key Principles of Learning identified. For example:

Principles of	Pedagogical	Assessment	Organisational	Physical	Educational
Learning	Practice		Structures	Environment	Theorists
People construct and co-construct meaning. People bring to any learning situation, pre-existing understandings and theories, which are always partial. Learning is not linear. (Learning is like a tangle of spaghetti, always connected and interrelated.) Malaguzzi	Listen for pre- existing understandings and theories.  Differentiation in the program to cater for different abilities, interests, experiences, attitudes and temperaments  Scaffolding of learning in meaningful contexts,  Meta-cognitive skill development  Reflection on learning	Tracking of students understandings through a variety of techniques: checklists, anecdotal records, interviews, school developed profiles of learning and key understandings Reflection by children, parents and staff	<ul> <li>Target teaching to scaffold learning (group size 1-15)</li> <li>Workshops to promote opportunities for Learning         Agreement Time - group size 15-25</li> <li>Tracking of children by home teacher (average 24 children)</li> <li>Variety of grouping practices used: interest, need based, random selection, child selected</li> <li>Limited use of specialist programs outside of learning complexes (Japanese and Physical Education)</li> </ul>	Creation of functional areas within the space for specific purposes     Provision of diverse and rich settings to support a wide range of experienceseach setting to have an appropriate sense of place enclosure and to provide clues as to use.	Constructivist learning - Bruner Scaffolding - Bruner Zone of Proximal Development - Vygotsky Reciprocity between Spontaneous and Scientific Concepts - Vygotsky

It is important to understand that each of the *principles*, *beliefs* and *practices* outlined are not discrete, but interrelate with each other to form a multitude of nuances. I also need to stress the importance of '*Team Teaching*' within the organizational structure of Wooranna Park. A copy of the school's *raison d'etre* can be accessed on *www.woorannaparkps.vic.edu.au*.

# The Journey begins...

In January 1997, following a six month review of teaching practices in the senior grades, the school established the Autonomous Learning Unit (ALU) for Year 5 & 6 students. The work of Professor George Betts of North Colorado University provided the philosophical framework underpinning the Unit. All students were grouped into a single entity comprising approximately 120 students, under the supervision of a team of teachers and teacher aides. Two of Betts' sayings were adopted as school tenets:

"Change the system, not the child. Let's do things with children, not to them." Classroom walls were removed and boardroom tables, couches and other soft furnishings introduced. The teacher dominated classroom, with its 'lock / step' approach to curriculum and emphasis on factual knowledge was rejected in favour of:

- preparing students to accept responsibility for their own learning;
- helping them to think creatively;
- assisting them to view their strengths and weaknesses positively; and
- teaching them the skills they needed to access knowledge.

Students, for the most part, were required to work in mixed ability and multi-age groups. They established weekly goals in conferences with home group teachers, planned the next stages of their projects and negotiated work requirements. Teacher led workshops were scheduled throughout the week to focus on the language and numeracy skills needed by students to complete tasks undertaken in independent learning. Students were also made aware of their preferred learning styles and encouraged to present their learning using a variety of presentation forms. The concept of multiple intelligences was explored and children encouraged to use their strengths, while developing less proficient areas.

I'd like to show a video of the ALU prepared in 1999. It will, I hope, provide you with a point of reference from which you can better understand the changes that have occurred in the ALM since 1999. A point I will come back to later in the presentation.

# The film presentation of the Autonomous Learning Unit can be accessed on the school's website – www.woorannaparkps.vic.edu.au

The creation of the Year 5 & 6 ALU was the start of a journey that now encompasses the whole school and is still active today. However, it was soon apparent after its introduction that if Year 5 & 6 students were to be expected to accept more responsibility for their own learning, the foundation for such an expectation had to be prepared in the lower grades. Teachers in Years Prep – 4 classes needed to focus on developing more student choice in their curriculum, as well as placing a greater emphasis on developing skills in thinking and personal development.

In exploring how to better prepare students to become autonomous learners the school became interested in the Reggio Emilia Schools of Italy. Reggio Emilia is a small town in Northern Italy that has become famous world wide for the innovativeness of their preschools. Numerous schools throughout the world, including Wooranna Park (and Bialik College as Karin Morrison will tell you later in the conference) have tried to incorporate their beliefs about children and learning, into their own teaching and learning programs.

The vision statement for the Australian Reggio Emilia Information Exchange states:

We recognise children as social beings from birth, full of curiosity and imagination, and having the potential and desire to find connections and meaning in all they experience. We acknowledge their ability to reflect upon and contribute to their own learning through their many languages of expression and communication. We recognize that all children have the right to be heard, to be respected, and to feel a sense of belonging to their family, school and community. We see this as a foundation for becoming responsible citizens of the world.

Key principles underpinning Reggio Emilia Schools include:

- A powerful 'Image of the Child'
- Children have a 100 languages to express themselves

- The pedagogy of relationships is influenced by the pedagogy of listening
- Documentation is necessary to make learning visible.
- The physical environment is the third teacher
- Education should prepare students to live in a Democracy.

These same principles are woven into Wooranna Park's *raison d'etre* and underpin the school's teaching and learning programs.

It is essential, however, to understand that Reggio Emilia Schools are not a model for other schools around the world to copy. Indeed, it is impossible to duplicate the social, political and cultural conditions that gave birth to Reggio Emilia Schools. But we can learn from their beliefs and achievements.

As a consequence of being influenced by the thinking underpinning Reggio Emilia Schools, our Year Prep – 4 classes were subsequently organized to include the following:

- Teachers working collaboratively in learning complexes, (team teaching).
- Student work commitments planned using various forms of Learning Agreements.
- Workshops and target teaching sessions implemented according to student need, or to provoke new learning.
- Daily reflections on learning.
- Student collaborative projects.

Earlier in the presentation I showed you a film of the Autonomous Learning Unit in1999. Since this time the ALU has undergone a number of transformations. Physically the area is vastly different today as a result of the 'Designing from the Inside Out Research Project' and the development of specific purpose built areas for learning. I'll discuss this project with you later in the presentation. But so is the teaching and learning program. Changes to pedagogy introduced since 1999 include:

#### Student Leadership

Students are elected to lead the following school service groups - Environment; Performing Arts; Visual Arts; Education & Communication; Community & Welfare; Well Being & Physical Education. Previously the school appointed House Captains.

### **Authentic Learning**

Students are required to produce the school newsletter, organize fun days, build a much needed adventure playground, or write the script and compose the music for their Wakakirri performance. Previously the curriculum was focused on acquiring knowledge, frequently in areas outside the interests and experiences of students.

#### Providing an Audience for Students' Learning

Where possible students are provided with real audiences to present their learning to, e.g. Futures Forum at Deakin University and student led parent / teacher meetings. Previously audiences were restricted to the teacher or classmates and parents on occasions.

#### Research Projects

Inquiry learning, open ended research questions.

Previously projects addressed closed questions, i.e. Australian History, World Disasters.

Workshops (large group lessons)
Focused on trans-disciplinary topics.
Previously subject based.

Target teaching to address skill development in groups of 5 – 12.

Previously taught in workshops.

### **Learning Journals**

Now individualized, negotiated and computerized.

Previously students selected tasks from a series of <u>must do</u> activities.

At the heart of the teaching and learning programs at Wooranna Park today are the open ended, inquiry based research projects, developed in consultation with students. I would like to focus on three of these research projects.

- The Animal Investigation Project by Year Prep.
- The Puppet Project by Year 3.
- Designing from the Inside Out Project by Year 5 & 6

# The Animal Investigation Project by Year Prep.

As part of exploring the concept of 'Relationships', Prep students became fascinated with how animals interact in the environment, with each other and humans. Numerous experiences followed: a trip to an animal farm; visits by pets to the Prep Complex; an excursion to Werribee Zoo; discussions about different points of view; watching films and researching different animal habitats. The importance of teachers listening to children was highlighted when several students theorised that animals in the wild were dependant on humans for food. A decision was made to display the children's theories on a felt mural, with movable animals, so children could continue to explore their theories of animals in their different habitats. The process involved children making the felt and parents helping with the sewing of the animals. The children's theories were very complex and included fantasy aspects. Note the Hippopotamus walking through the city – most likely a response to the film 'Madagascar'.

<u>A photograph of the Year Prep felt mural on 'Animal Relationships' can be accessed</u> <u>on the school's website - www.woorannaparkps.vic.edu.au</u>

# Puppet Research Project by Year 3.

This project has been captured on film, so I'll let the words and pictures of the teachers and students tell you about their project.

<u>Film presentation of the Year 3 Puppet Project can be accessed</u> <u>on the school's website - www.woorannaparkps.vic.edu.au</u>

# **Designing from the Inside Out Project.**

This project developed through the following steps:

- 1. Selection of a 'Big Idea' to focus on:
  - Teacher discussion on focus for the project. The topic 'Design' chosen.

At the time of selecting this topic as a project, the Year 5 / 6 Complex was the focus of a research project, 'Designing from the Inside Out', commissioned by the Victorian Minister for Education and Training and funded through the Victorian Schools Innovation Commission.

Mary Featherston, an interior designer, was employed to redesign the Year 5/6 Complex in order that the complex reflected the contemporary nature of the school's pedagogy.

- 2. Listening to students existing understandings and theories:
  - Open ended questioning with a variety of forms of response including: drawing, verbal, and written.

'How does design influence your life?'

- Teacher forum to analyse responses and inform planning
- 3. Immersion of students in the subject area:
  - Four immersion sessions: 'Design in invention', 'Fashion Design', 'Architectural Design', 'Design in Art.'
  - School Camp to Canberra / Melbourne excursion with a design focus for those not attending camp.

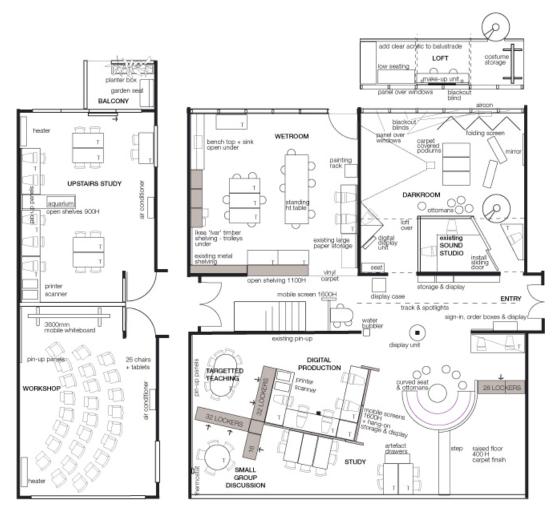
It was at this time in the project that teachers decided to link the work of the 'Designing from the Inside Out Project', with children's studies of Design. From this time on Mary Featherston, the interior designer, worked closely with students, acting as their mentor and researching their opinions on how the Complex should be developed.

- 4. Mentor / Development of Authentic Project:
  - Ongoing meetings of mentor and teachers
  - Workshop presentation by designer to introduce project to the children
- 5. Research:
  - Task: List all the experiences within the 5/6 unit.
  - Analysis of data collected with the designer.
  - 14 environments necessary: 13 project teams established; each teacher facilitates 4 teams through workshops and target teaching.
  - Designer provides each team with possible research questions.
  - Research by each team involves some students participating in excursions to art studios, offices, performing arts theatres.
- 6. Presentation of Documentation of Learning:
  - Children provide their responses through an oral and technological presentation, interview with the designer and collection of artefacts.
  - Interior Designer using research from children and discussions with teachers prepares a floor plan design, which is modified several times as a result of further discussions.
  - Parent exhibition evening: Project is outlined; children present their research and the interior designer presents the final design.

#### RESULTS OF THE RESEARCH PROJECT

#### 'DESIGNING FROM THE INSIDE OUT'.

3D modelling and photographs of the redesigned Year 5 & 6 Autonomous Learning Unit can be viewed on the school's website – <a href="www.woorannaparkps.vic.edu.au">www.woorannaparkps.vic.edu.au</a>



Floor plan of the redesigned Year 5 & 6 Complex.

One area of the school's approach to learning and teaching not discussed previously is the tracking and assessment of students. Several significant issues arose from the introduction of authentic tasks, as teachers became increasingly dissatisfied with traditional forms of assessment and reporting to parents:

- How do we assess and track a large number of students working on different tasks.
- How can we be sure that all students cover "the basics".
- How can we ensure that assessment informs teaching practice.
- What is the best way to report on student progress, as per government requirements.

In response to the above issues the following approaches to reporting and assessment were adopted as school policy:

- student self-assessment (including learning journals of student reflections);
- portfolios of work samples for tracking student learning;
- student led parent / teacher conferences;
- developmental profiles in literacy and mathematics;
- student profile of metacognition strengths and preferences;
- anecdotal notes documenting student projects, individual conferences and student-teacher group discussions.

The Learning Profiles in Mathematics and Literacy were developed to record student achievement based on a developmental continuum. For reading, indicators are arranged in four quadrants on the profile, reflecting the four roles of the literacy user: text code breaker, text user, text participant and text analyst (Freebody and Luke, In: Watson and Badenhop (eds) 1992). The reading profile is intended to make expected learning outcomes explicit to students, help students identify the areas of reading they need to focus on, enable students to make an assessment of their own learning, track individual students as they work on different projects, inform teaching and planning, and identify specific indicators of literacy development against the Curriculum Standards Framework (CSF) outcomes. More importantly, the Developmental Learning Profiles allow teachers to assess students against CSF standards, as per government requirements, while lessening the need for teachers to focus on 'subject based' curricula and traditional forms of assessment that rank students.

While some teachers find the use of the school's Developmental Learning Profiles very demanding and time consuming, all teachers recognise their value in facilitating student self evaluation and conveying student progress to parents. The school now believes that the Learning Profiles need to be simplified in order to focus on the "big ideas" of mathematics and literacy learning.

# The school's Developmental Learning Profiles can be viewed on the school's website – www.woorannaparkps.vic.edu.au

I would like to close this presentation by focusing on the school's approach to the development of I.C.T., and our plans for the future. The school's focus on media literacy and the use of computers for creative purposes has inspired our most talented students, but more importantly it has opened the door to success for our lower achievers, particularly lower achieving boys. The teenage subculture of dance videos, computer games and rap music has proven an excellent vehicle for expanding the literacy skills of these students. For some children the computer is their preferred learning modality, while music and dance is a large part of the cultural backgrounds of some students.

The school also has its own radio station, featuring students' learning and songs created by students using acid software. Small and large "blue screens" facilitate the use of special effects in video production and allowed students and teachers to produce a feature film in 2004. It is also hoped that students will make their own historical documentaries to supplement commercially produced DVD's and CD's used in the school's 'Time Machine'.

# Songs and an extract from the feature film created by students can be listened to / viewed on the school's website – www.woorannaparkps.vic.edu.au

In planning for the future the school believes that few, if any schools, certainly not in Victoria, Australia, have capitalized on recent advances in ICT to support much needed systemic change in schools. Wooranna Park, in conjunction with a number of other innovative schools, has approached the Victorian Department of Education with a proposal to use recent online service advances to provide a more engaging and contemporary education for students. The proposal involves the use of recently designed video conferencing software, in conjunction with the product 'Media Site', a media system designed for the management, viewing, online distribution and recording of rich media presentations. Interactive whiteboards, presently available at the school, will be used in conjunction with the video conferencing software to develop collaborative learning projects with schools in other parts of the world. The school also hopes to establish sister school relationships with other innovative schools around the world.

The project also involves the establishment of student and parent internet access to teaching and learning programs during out of school hours, via Student Digital Portfolios. Because of the serious social disadvantage of two of the schools involved in the project, families will be advised on the purchase and installation of computers and offered attractive terms and financing arrangements through local business houses to facilitate online communication with the school.

In closing, I would like to return to the title of our conference, 'Teach Less, Learn More'. While Wooranna Park strongly rejects the traditional one teacher dominated classroom it is equally important that teachers retain their traditional role as scaffolders of student learning. It is easy to forget this in our haste to "facilitate" children's learning.

Ray Trotter Principal Wooranna Park Primary School Melbourne, Australia.

1<sup>st</sup> March, 2006.