

# Transforming Pedagogy in the 21<sup>st</sup> Century

## BE THE REVOLUTION

**DREAM**



*Every  
child,  
every  
opportunity*

**INVEST**



**DESIGN**



**SHARE**

**“If we teach today’s students  
as we taught yesterday’s,  
we rob them of tomorrow”**

***John Dewey***  
***1859-1952***

# BE THE REVOLUTION

A HANDBOOK

Transforming Pedagogy in the 21<sup>st</sup> Century

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with  
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# ACKNOWLEDGEMENTS

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# BE THE REVOLUTION

## Transforming Pedagogy in the 21<sup>st</sup> Century

**BE THE REVOLUTION** provides the catalyst for schools in Southern Metropolitan Region to develop a Pedagogical Master Plan to complement the provision of modern facilities through the Federal Government's Building the Education Revolution stimulus package. The program has been designed to support schools, as they embrace 21<sup>st</sup> Century pedagogy and learning environments.

Southern Metropolitan Region is fully committed to promoting the adoption of progressive teaching and learning strategies to support improved student outcomes.

Utilising contemporary facilities to their full potential requires creative forward thinking, collaborative planning, research and professional sharing. **BE THE REVOLUTION** provides school leaders with the tools they require to effectively implement change.

Leaders will be provided with a toolkit of resources that will allow them to develop a pedagogical master plan for their own school setting. Resources provided to all schools will include:

- Practical steps required to initiate change
- Practical steps to embed current DEECD initiatives
- Examples of modern teaching and learning practice
- Evidence of high quality practice from research and case studies

Our model of pedagogical transformation was informed by:

1. Progressive education-based research
2. Contemporary change implementation models
3. Current DEECD initiatives
4. Consultation with Regional Network Leaders
5. Consultation with Principal Focus Group

I look forward to supporting schools as they develop high quality practice in the 21<sup>st</sup> Century.

**Peter Greenwell**

Regional Director

Southern Metropolitan Region

**BE THE REVOLUTION**

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BE THE REVOLUTION

# AIMS

1. Transform teaching and learning practices for 21st Century Library and Learning Neighbourhoods
2. Create a user friendly toolkit that can be used by schools to promote 21st Century teaching and learning strategies
3. Provide an easy to follow program which supports schools with the implementation of DEECD initiatives
4. Create world-leading practice with a focus upon innovation, ingenuity, reflection and continuous improvement

## DRIVING QUESTIONS

As schools prepare to move into new teaching and learning spaces that are provided as part of the Federal Government's *Building the Education Revolution* stimulus package and the State Government's *Victorian Schools Plan*, five critical questions have driven the push for pedagogical renewal in Southern Metropolitan Region. These questions allow each teacher to consider high quality practice in contemporary facilities and a modern world.

- How does pedagogy inform space?
- What is 21st century education?
- When do we start the process of change?
- Who is responsible for change?
- Where do we start?
- How do we provide the best opportunity for successful and sustained transformation?

# EVOLUTION VS. REVOLUTION

Where is your school on the educational continuum?

Is your school in need of gentle evolution or a dramatic revolution?

Irrespective of whether your school is in the midst of an evolution or a revolution, this resource seeks to provide resources that will help you develop a master plan for the transformation of your school's pedagogy and space.

## TRANSFORMING PEDAGOGY AND SPACE

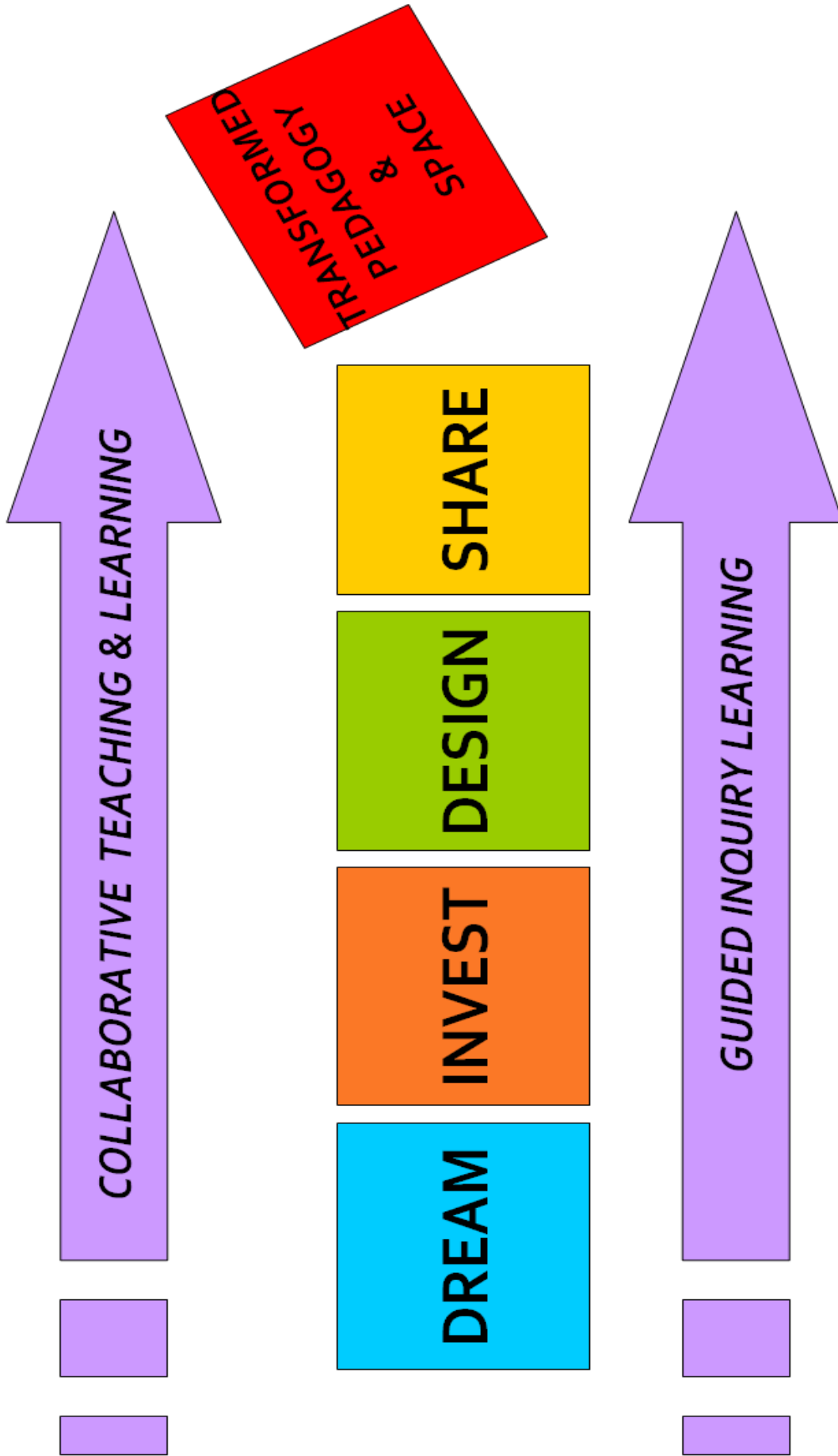
Through **BE THE REVOLUTION**, SMR is providing a range of professional learning activities that will support your schools as it creates its vision, builds teacher capacity and creates purposeful learning spaces.

The resource that we have developed is broken down into four elements that we believe are essential to the successful transformation of school practice. The elements - **Dream, Invest, Design and Share** - are not sequentially ordered but we believe that unless your school has spent time with each phase then your change will be unsustainable.

Woven through the resources is an emphasis on

- *The e<sup>5</sup> Instructional Model* – which is modelled through each of the four elements
- *Collaborative teaching and learning* – which will be essential in the 21st Century Library and Learning Centres that are being provided under BER
- *Guided inquiry learning* – which VELS highlights as being important to developing higher order thinking

Using contemporary facilities to their full potential requires creative forward thinking, collaborative planning, research and professional sharing. **BE THE REVOLUTION** provides school leaders with the tools they require to effectively think, plan, research and share.



# THE ELEMENTS

## Dream

The first element of transforming pedagogy and space is DREAM. This is about creating a shared vision for the future of your school.

What do we want our school experience to be like?

Imagine the possibilities!

It is an uninhibited, positive view of what could be.

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## Invest

The second element of transforming pedagogy and space is Invest.

It encourages schools to identify, explore, train with, trial and reflect upon leading pedagogical approaches, such as Collaborative Teaching and Learning and Guided Inquiry Learning

It involves action research, professional development and professional discussion.

This element has a focus upon building teaching and leadership capacity to support transformed teaching and learning.

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## Design

The third element, Design encourages schools to put in place the understandings developed throughout the Dream and Invest elements.

Programs, methodologies, frameworks and structure begin to take shape. The manner in which facilities are used both pedagogically and through use of space are apparent. The initial planning takes shape and lives.

The philosophies of the school are obvious for all to see throughout the workplace, and the aims and desires of the program move from words to action.

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## Share

The fourth element of pedagogical transformation is Share.

Sharing provides an opportunity for schools to celebrate the journey that they have undertaken and to share their experiences both within and outside of the local school community.

Sharing promotes further growth and enables the system to move forward towards world leading practice.

# WHY IS SUPPORTING CHANGE IMPORTANT?





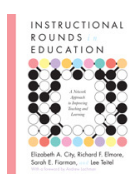
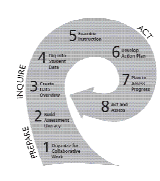
*John Kotter has conceived a change implementation model which implores leaders to create a sense of urgency as part of their first step in modernising an organisation. With the arrival of modern teaching and learning facilities in all primary schools in SMR by the beginning of 2011, we have a mandate to support all teachers to develop a modern practice within modern classrooms. However, Professor Michael Urut has identified that when leaders fail to support staff through school transformation, any changes will be short-lived.*

*"For teachers to change their classroom practice in any radical way involves both modifying their classroom persona and embarking on a learning task of enormous magnitude. Changing one's routines involves a great deal of unlearning before one can begin to reconstruct new routines; and the experience is like going back to being a novice again with all of the difficulties of coping and maintaining classroom order but little of the tolerance and sympathy which is normally accorded to beginners. Even the intuitive decision making is disrupted because one's navigation lights; those semi conscious cues that alert teachers to the need to change the pace or the activity, or to attend to certain pupils, are extinguished when the pattern of practice is modified.*

***The experience of disorientation and alienation is profound; and unless teachers are given considerable psychological and practical support over a long period, they will revert to their old familiar practice."***

**Michael Erut, 1992 – Quoted in *e5 instructional Model*, DEECD, 2009**

# THE CONNECTIONS

<b>e<sup>5</sup> INSTRUCTIONAL MODEL</b>	
	<ul style="list-style-type: none"> <li>✓ Engage</li> <li>✓ Explore</li> <li>✓ Explain</li> <li>✓ Elaborate</li> <li>✓ Evaluate</li> </ul>
<b>8 KEY VARIABLES DEFINING WHOLE SCHOOL TRANSFORMATION</b>	
	<ul style="list-style-type: none"> <li>✓ Vision for improved student learning</li> <li>✓ School leadership</li> <li>✓ Teacher knowledge, understanding, skills and practice</li> <li>✓ Curriculum leadership</li> <li>✓ Data collection and use</li> <li>✓ Professional learning</li> <li>✓ Sharing and transferring knowledge and good practice</li> <li>✓ Use and application of resources and ICT</li> </ul>
<b>THE DEVELOPMENTAL LEARNING FRAMEWORK FOR SCHOOL LEADERS</b>	
	<ul style="list-style-type: none"> <li>✓ Technical Leadership</li> <li>✓ Human Leadership</li> <li>✓ Cultural Leadership</li> <li>✓ Educational Leadership</li> <li>✓ Symbolic Leadership</li> </ul>
<b>THE EFFECTIVE SCHOOLS MODEL</b>	
	<ul style="list-style-type: none"> <li>✓ Professional Leadership</li> <li>✓ Focus On Teaching And Learning</li> <li>✓ Purposeful Teaching</li> <li>✓ Shared Vision And Goals</li> <li>✓ High Expectations For All Learners</li> <li>✓ Accountability</li> <li>✓ Learning Communities</li> <li>✓ Stimulating And Secure Learning Environment</li> </ul>
<b>INSTRUCTIONAL ROUNDS EDUCATION*</b>	
	<ul style="list-style-type: none"> <li>✓ Increases in student learning occur only as a consequence of improvements in the level of content, teachers' knowledge and skill, and student engagement</li> <li>✓ If you change any single element of the instructional core, you have to change the other two</li> <li>✓ If you can't see it in the core, it's not there</li> <li>✓ Task predicts performance</li> <li>✓ The real accountability system is in the tasks that students are asked to do</li> <li>✓ We learn to do the work by <i>doing the work</i></li> <li>✓ Description before analysis, analysis before prediction, prediction before evaluation</li> </ul>
<b>THE EVOLUTION BEGINS HERE</b>	
	<ul style="list-style-type: none"> <li>✓ Organise for collaborative work</li> <li>✓ Build assessment literacy</li> <li>✓ Create data overview</li> <li>✓ Dig into student data</li> <li>✓ Examine instruction</li> <li>✓ Develop action plan</li> <li>✓ Plan to assess progress</li> <li>✓ Act and assess</li> </ul>

\*City E.A., Elmore R.F., Fiarman S.E., and L. Teitel (2008) *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning*, Harvard Education Press, Massachusetts.




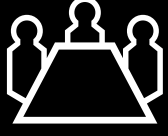


# HOW TO

This material is designed to be a toolkit of resources that we hope will be useful to use with your staff and broader community. Whilst we have planned them to be used sequentially, you can choose to use them in a way that will bring about the desired results in your school.

All the resources and activities can be edited; this means you can use what is appropriate to your context. However, all schools should constantly cycle through the *plan-implement-evaluate* cycle as part of their strategic plan.

**BE THE REVOLUTION** gives you the opportunity to reassess your current priorities in light of the facilities provided under the *Building the Education Revolution* stimulus package or *Victorian Schools Plan*.

This handbook provides professional learning activities within a common template. Shown below, it provides a complete outline of a range of activities and discussion ideas that are ready to use with your staff.

E5 DOMAIN	ELEMENT	
TITLE: PROFESSIONAL LEARNING ACTIVITY		
	<ul style="list-style-type: none"> <li>What's the main idea?</li> </ul>	 <ul style="list-style-type: none"> <li>How long will it take?</li> </ul>
	<ul style="list-style-type: none"> <li>Equipment needed for activity</li> </ul>	 <ul style="list-style-type: none"> <li>Groups sizes</li> </ul>
	<p><b>Information about the activity.</b></p> <ul style="list-style-type: none"> <li>Activity suggestions</li> <li>Questions</li> </ul>	
	<ul style="list-style-type: none"> <li>Online Resources</li> <li>Further Readings</li> </ul>	

# BE THE REVOLUTION

# DREAM

“Twenty years from now you will be more disappointed by the things that you didn’t do than by the ones that you did do.

So throw off the bowlines.

Sail away from the safe harbor.

Catch the trade winds in your sails.

Explore. Dream. Discover.”





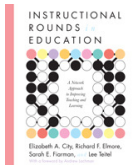

*Mark Twain*



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<i>How does DREAM connect with broader DEECD initiatives?</i>	
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<i>This activity summarises the schools current strengths whilst also acknowledging areas that require improvement.</i>	
<a href="#">Are your students more literate than your staff?</a>	20
<i>Have changes in modern information and communication technology modified the definition of literacy?</i>	
<a href="#">Education Horizon 2021</a>	22
<i>A child born today will complete primary school around 2021. What will that school look like, sound like and feel like in another decade?</i>	
<a href="#">The Ideal Student</a>	24
<i>What students do is as important to their learning as what they know! What behaviours do you want your students to demonstrate?</i>	
<a href="#">The Ideal Teacher</a>	26
<i>What behaviours do your teachers need to display to support student development?</i>	
<a href="#">Work, Rest, Play</a>	28
<i>Explore the changes that have occurred in the architecture of businesses, homes and schools during the past 50 years.</i>	
<a href="#">Catch Phrase</a>	29
<i>Does your school have a vision that is remembered by staff, students and parents?</i>	
<a href="#">Road Map to Success</a>	31
<i>If you don't know where you are, and you don't know where you are going, how will you know when you get there?</i>	
<a href="#">Developing Essential Actions</a>	33
<i>What pedagogies will every teacher use to begin the educational transformation of your school?</i>	

<b>e5 INSTRUCTIONAL MODEL</b>	
	<p>Engage</p> <ul style="list-style-type: none"> <li>✓ Develops shared norms</li> <li>✓ Establishes learning goals</li> </ul>
<b>8 KEY VARIABLES DEFINING WHOLE SCHOOL TRANSFORMATION</b>	
	<p>Vision for improved student learning</p> <ul style="list-style-type: none"> <li>✓ Strategic planning</li> <li>✓ Goals for student learning</li> <li>✓ Expectations of teacher knowledge, understandings, skills and practice</li> </ul> <p>School leadership</p> <ul style="list-style-type: none"> <li>✓ Focuses on curriculum, pedagogy and improved student outcomes</li> </ul>
<b>THE DEVELOPMENTAL LEARNING FRAMEWORK FOR SCHOOL LEADERS</b>	
	<p>Technical Leadership</p> <ul style="list-style-type: none"> <li>✓ Thinks and plans strategically</li> </ul> <p>Cultural Leadership</p> <ul style="list-style-type: none"> <li>✓ Shapes the future</li> <li>✓ Develops a unique school culture</li> </ul> <p>Educational Leadership</p> <ul style="list-style-type: none"> <li>✓ Shapes pedagogy</li> <li>✓ Focuses on achievement</li> </ul>
<b>THE EFFECTIVE SCHOOLS MODEL</b>	
	<p>Shared Vision And Goals</p> <ul style="list-style-type: none"> <li>✓ To what extent is there a shared vision about the desired student learning outcomes in our school?</li> <li>✓ How clearly communicated are the school's goals relating to student learning?</li> </ul> <p>Purposeful Teaching</p> <ul style="list-style-type: none"> <li>✓ Are there shared views about effective teaching and learning among the teachers and leadership group?</li> </ul>
<b>INSTRUCTIONAL ROUNDS IN EDUCATION</b>	
	<ul style="list-style-type: none"> <li>✓ Increases in student learning occur only as a consequence of improvements in the level of content, teachers' knowledge and skill, and student engagement</li> <li>✓ Description before analysis, analysis before prediction, prediction before evaluation</li> </ul>
<b>THE EVOLUTION BEGINS HERE</b>	
	<ul style="list-style-type: none"> <li>✓ Organise for collaborative work</li> <li>✓ Build assessment literacy</li> </ul>

1. ARE WE TEACHING IN THE 21<sup>ST</sup> CENTURY?



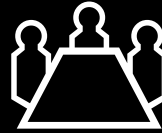
Where are we now?



20-30 minutes



- 21st Century Pedagogy Questionnaire
- A3-size questionnaire
- sticky dots or post-it notes
- pens – red and blue



Individual



This activity summarises the school's current strengths whilst also acknowledging areas that require improvement.

**Prior**

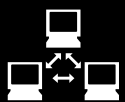
- Photocopy the 21st Century Pedagogy Questionnaire onto A4 paper so that each staff member has their own copy.
- Photocopy the 21st Century Pedagogy Questionnaire onto A3 paper. Each question should be on its own piece of paper. Distribute these around the room.

**Activities**

1. Ask your staff to complete the 21<sup>st</sup> Century Pedagogy Questionnaire by circling their own practice on the continuum.
2. Using a different colour pen, ask your staff to complete the 21<sup>st</sup> Century Pedagogy Questionnaire by circling the school's average practice on the continuum.
3. It will be easier to collate the staff data if you can ask your teachers to transfer their own rankings onto the A3 size sheets, which you could place around the room. This will help you create meaning of the data by identifying common strengths as well as frequently identified problems of practice.
4. Ask staff to indicate how they rated themselves by placing a red sticky dot on each of the A3 sheets
5. Ask staff to indicate how they rated the school by placing a blue sticky dot on each of the A3 sheets

**So what**

- Where are you now? As individual teachers? As a school?
- What are the obvious strengths in teacher practice?
- What are the commonly identified problems of practice?
- How we you move forward from here?



**School Revitalisation the IDEAS Way** - *Innovative Designs for Enhancing Achievements in Schools (IDEAS) is a comprehensive approach to school revitalisation.*

[http://eprints.usq.edu.au/3292/2/Andrews\\_Conway\\_Dawson\\_etal\\_IDEAS\\_Monograph.pdf](http://eprints.usq.edu.au/3292/2/Andrews_Conway_Dawson_etal_IDEAS_Monograph.pdf)

# 21<sup>st</sup> Century Pedagogy Questionnaire

*Based upon the following statements, where are you on your 21st century pedagogy journey?*

1. My teaching allows students to use higher order thinking skills such as creativity and synthesis.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

2. I work collaboratively with other teachers during planning meetings.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

3. I work collaboratively with other teachers in the classroom.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

4. I use a portfolio of work to make summative judgements of student learning.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

5. I use a range of tools to assess student knowledge prior to beginning learning.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

6. I arrange my room in various configurations for a range of purposes.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

7. My students are able use ICT in the classroom when they need it.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

8. I use ICT in the classroom to improve student outcomes.

Resisting      Preparing      Researching      Trialling      Implementing      Transforming

---

## 2. ARE YOUR STUDENTS MORE LITERATE THAN YOUR STAFF?



▪ Are you literate?



▪ 15-20 minutes

▪ Data projector or IWB  
 ▪ Computer with internet connection



▪ Whole group  
 ▪ Small group

Greek philosopher Heraclitus is credited with the quote "Change is the only constant". This sentiment was captured in the video "Shift Happens" which is alternatively known as "Did you know?" Now into its third version (circa 2008), this short clip highlights the exponential rate of change that we are experiencing.

### **Prior**

- Watch the video *Shift Happens v3.0* <http://www.youtube.com/watch?v=jpEnFwiqdx8> to ensure that you can access the clip prior to the session. Many schools block access to YouTube!
- If not, then try <http://smrinp.globalteacher.org.au/2009/08/10/199/>
- You may find it useful to download the video onto your computer by entering the URL into [www.youtubesnips.com](http://www.youtubesnips.com)

### **Activities**

1. Watch the video *Shift Happens v3.0* with your staff. <http://www.youtube.com/watch?v=jpEnFwiqdx8>
2. Discussion questions
  - Is this video about the present or the future?
  - (Note: This is a trick question! Because the video was created in 2008 most of the information is now out of date. Subsequently the bulk of this information is about the past. You may or may not want to share this twist with your staff)
  - What was the key message from this video?
  - What implications does it have for learning?
3. Stephen Heppel asked students what skills a teacher requires to be literate in the modern world. This is what they said:
  - upload a video to YouTube
  - edit a Wikipedia article
  - choose a safe online payment site
  - subscribe and un-subscribe to a podcast
  - turn on and off predictive text on a mobile phone
  - manage a group on Flickr (and spell Flickr!)
  - look after a community in Facebook

***So what?***

- Are you literate?
- Which element of your classroom practice could you change tomorrow to develop the literacy of your students' and your own literacy?



**Shift Happens v3.0** – *A video exploring the rapid rate of change in the modern era.*

<http://www.youtube.com/watch?v=jpEnFwiqdx8>

**Learning in an Online World** – *Describes the environment, articulates the national policy framework and identifies significant actions required.*

[http://www.mceetya.edu.au/verve/resources/pedagogy\\_strategy\\_file.pdf](http://www.mceetya.edu.au/verve/resources/pedagogy_strategy_file.pdf)

### 3. EDUCATION HORIZON 2021



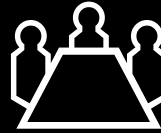
▪ How will education change within this generation?



▪ 45 minutes- 1 hour



▪ A3 or butchers paper  
▪ Textas or pens



▪ Groups of 4



**Education Horizon 2021** - A child born today will complete primary school around 2021. What will that school look like, sound like and feel like from the perspectives of children, parents, teachers and the community?

**Prior**

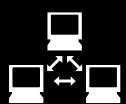
- Collect butchers paper or A3 sheets (enlarge the placemat template if you are using A3 paper)
- Collect pens or textas
- Arrange tables for small groups

**Activities**

1. Divide your staff into groups of four.
2. Allocate one piece of A3 or butcher’s paper to each group.
3. Ask each group to draw the placemat diagram on the paper (see next page).
4. Each small team needs to describe what a typical day would involve for children, parents, teachers and the community in relation to 21<sup>st</sup> century schooling.
5. The outer spaces are for each of the key stakeholders (children, parents, teachers and the community). Staff should write their thoughts about education in 2021 for these groups in these spaces.
6. The circle in the middle of the paper is to note down (by the nominated scribe) the common points.
7. Each group then reports the themes that have been identified to the whole group.
8. You may like to discuss and debate the key issues
9. Display findings in a prominent location to prompt further discussion

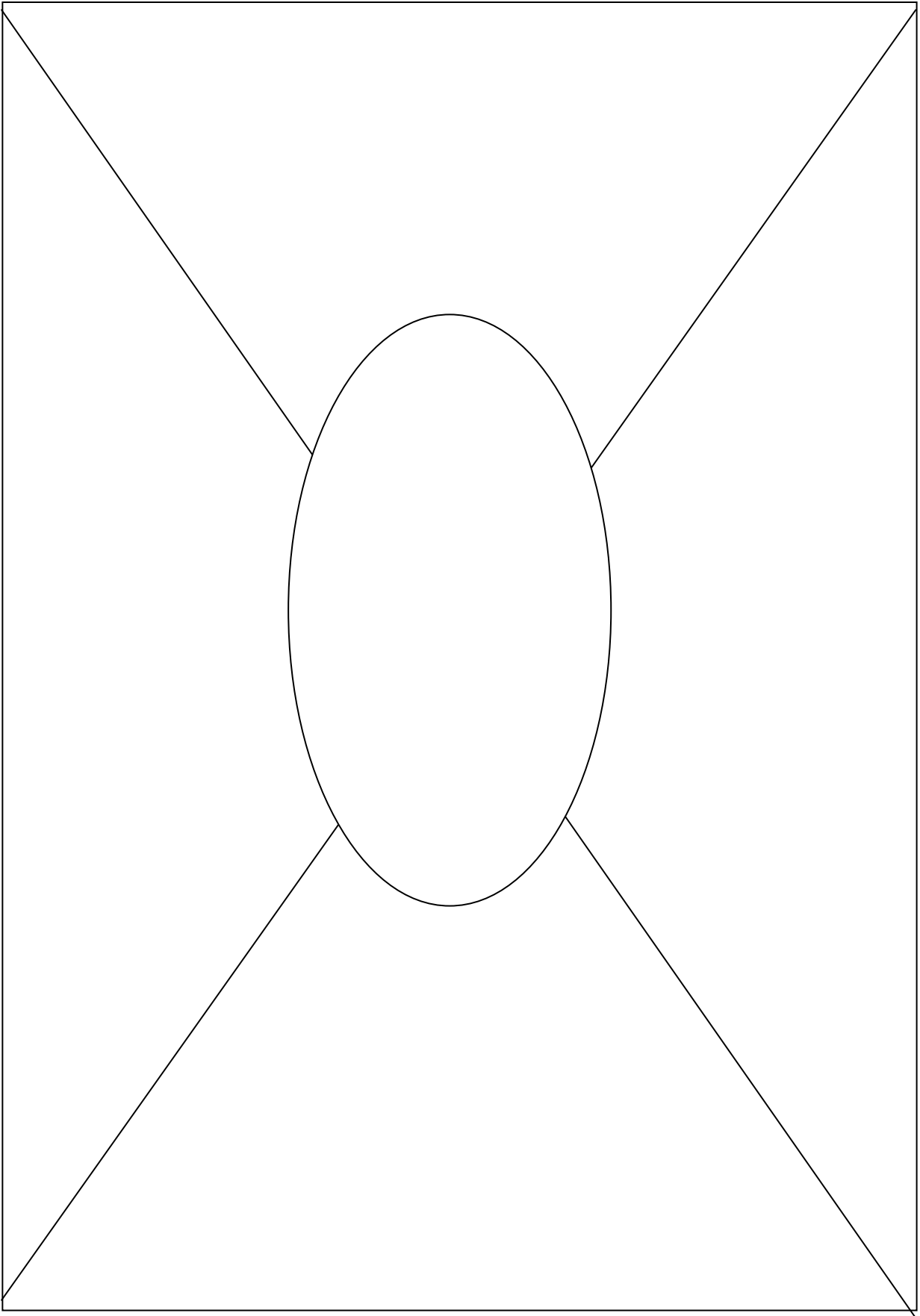
**So what?**

- How will education change within this generation?
- How does your school need to change today?







**2009 Horizon Report** - *Charts the landscape of emerging technologies for teaching, learning and creative expression.*


<http://www.nmc.org/pdf/2009-Horizon-Report-K12.pdf>



**BE THE REVOLUTION**

**4A. THE IDEAL STUDENT**

	<ul style="list-style-type: none"> <li>What behaviours do you value?</li> </ul>		<ul style="list-style-type: none"> <li>20-30 minutes</li> </ul>
	<ul style="list-style-type: none"> <li>Butchers paper or A3 copy of body silhouette</li> </ul>		<ul style="list-style-type: none"> <li>Groups of 4</li> </ul>



***This professional learning activity is the first in a series of two.***

**What students do is as important to their learning as what they know! What behaviours do you want your students to demonstrate?**

***Prior***

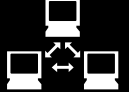
- During this activity staff will be drawing the ideal student.
- Decide beforehand whether you want them to start from scratch (if so use the butchers paper) or whether they will use the silhouette that is provided (if so, enlarge it to A3 size)
- Arrange tables so that they are suitable for groups of four

***Activity***

- Ask staff to consider the attributes that they want students to be able to demonstrate by the end of their time with you?
- Divide into groups and draw the ideal student.
- Surrounding the student should be the desired behaviours that will prepare them to successfully engage with the 21st century.

***So what?***

- What values have been most commonly reported?
- What impact does this have on how the school teaches behaviour?
- Repeat this exercise, this time surrounding the silhouette with teacher behaviours that will prepare students for the 21st century.



**VELS – Interpersonal Development Domain**  
<http://vels.vcaa.vic.edu.au/downloads/progressionpts/interpersonal.pdf>  
**VELS - Personal Learning Standards and Progression Points**  
<http://vels.vcaa.vic.edu.au/assessment/ppoint/personal/index.html>

**What attributes should students be able to demonstrate when they leave this school?**



## 4B. THE IDEAL TEACHER



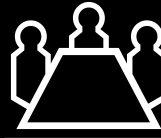
- How do you support positive student behaviour?



- 30- 45 mins



- T-chart
- Pens



- Pairs



What students do is as important to their learning as what they know!

*This professional learning activity is the second in a series of two.*

**Prior**

- Complete professional learning activity 4a.
- Print the T-Chart pro-forma (see over) and write the 5 most commonly desired behaviours in the 'Student Behaviour' column

**Activities**

- Ask staff to complete the balance of the T-Chart, identifying the support structures that are needed to develop the desired Student behaviours
- For each Student behaviour, they should identify three important support structures
  - Teacher Behaviour - What type of teacher is required to make this happen?
  - Teaching Strategies - What pedagogies will support this student behaviour?
  - Learning Spaces - What learning spaces will be accommodate this student behaviour?

**So what?**

- How is your school currently supporting the development of positive student behaviours?
- How does the school engage parents and the broader community to support the development of children?
- What is the role of school leadership?
- What could be improved upon?









**ACOT2** – An exploration of the social and emotional factors that affect student engagement and motivation as well as student perceptions of relevancy of task.

<http://ali.apple.com/acot2/connections/>





## What support can teachers give to students?


<b>STUDENT BEHAVIOURS</b>	<b>Support Structures</b> <i>1. Teacher Behaviour</i> <i>2. Teaching Strategies</i> <i>3. Learning Spaces</i>
	1. 2. 3.
	1. 2. 3.
	1. 2. 3.
	1. 2. 3.
	1. 2. 3.

5. WORK, REST, PLAY

	<ul style="list-style-type: none"> <li>What changes have occurred in the buildings that we use for work, rest and play?</li> </ul>		<ul style="list-style-type: none"> <li>25-30minutes</li> </ul>
	<ul style="list-style-type: none"> <li>Data projector or IWB</li> <li><i>How we live, work and learn</i> PowerPoint</li> <li>Paper for drawing</li> <li>Pens or textas</li> </ul>		
	<p>The aim of this activity is to explore the changes that have occurred in architecture at Work, Home and School during the past 50 years.</p> <p><b>Prior</b></p> <ul style="list-style-type: none"> <li>Download <i>How we live, work and learn</i> PowerPoint onto your computer</li> <li>Familiarise yourself with the questions and activities that are contained within the task</li> <li>Set up Data projector or IWB and connect it to your computer</li> </ul> <p><b>Activity</b></p> <ul style="list-style-type: none"> <li>Use the Powerpoint <i>How we live, work and learn</i> to guide teachers through an exploration of changes that have occurred in homes, schools and workplaces in the past half century.</li> </ul> <p><b>Don't forget</b></p> <ul style="list-style-type: none"> <li>Use both the activates and the questions to prompt discussion and reflection</li> </ul> <p><b>So What?</b></p> <ul style="list-style-type: none"> <li>What is the trend emerging here?</li> <li>How have school buildings changed in 50 years?</li> <li>How has the way we teach changed in 50 years?</li> <li>How will teaching and student learning change within new spaces?</li> </ul> <p><b>How we live, work and learn</b> – <i>Questions and activities exploring the changes that have occurred in houses, the workplace and schools in the past half century.</i>  <a href="#">Dream - How we live, work and learn.ppt</a></p>		
			

**6. CATCH PHRASE**

	<ul style="list-style-type: none"> <li>▪ Create a "catch phrase" for your school</li> </ul>		<ul style="list-style-type: none"> <li>▪ Up to a whole term</li> </ul>
			<ul style="list-style-type: none"> <li>▪ Whole school</li> </ul>

 **At some point in the past decade, most schools have felt compelled to write a mission statement. The process for developing most mission statements was comprehensive and exhaustive. However, once written, most mission statements were rarely looked at and even less frequently remembered.**

**Prior**

- Use data to inform your strengths and weaknesses. This should include, but is not limited to, qualitative and quantitative data in the areas of:
  - Curriculum and pedagogy
  - Current teacher practice
  - Future dreams

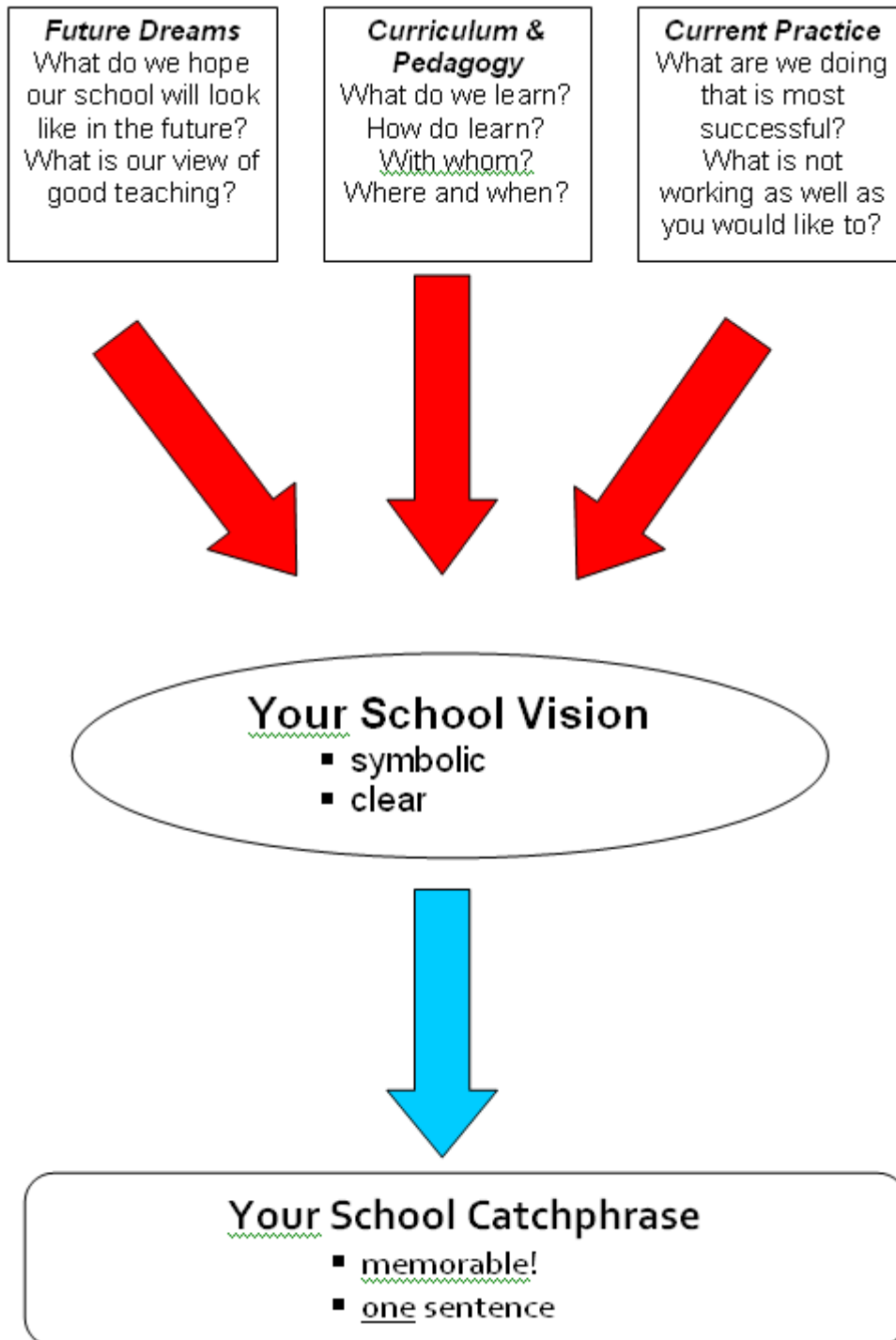
**Activity**

1. This task encourages your school to create a "catch phrase" that is a summary of your vision that can be remembered by:
  - Staff
  - Students
  - Parents
2. The catch phrase is your vision distilled into a memorable phrase.
3. Your vision should be collaboratively constructed, challenging, relevant, transformative in its intent, and understood by staff, parents, students and the broader community.
4. Your "catch phrase" should have the power to define what your school stands for and drive professional training, pedagogy and learning engagements.





**So what?**


- What is your schools catchphrase?
- Is it remembered by:
  - Staff
  - Students
  - Parents
- If there was nothing stopping you right now, how might you implement your vision/catchphrase?

*Continued on next page*



7. ROAD MAP TO SUCCESS

	<ul style="list-style-type: none"> <li>What is your current context and what are your planned changes to pedagogy and space?</li> </ul>		<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
	<ul style="list-style-type: none"> <li>Setting the scene template</li> </ul>		<ul style="list-style-type: none"> <li>Whole school</li> </ul>

 Modern GPS-based navigation software can provide instantaneous route details for any trip on the globe due to its ability to simultaneously identify current and future locations. No such technology exists to assist with school transformation but knowing where you are now and knowing where you want to go is essential if your journey is to be successful.

**Prior**

- Develop and understanding of:
  - ✓ **Context of your school** – what does your current facilities, demography, curriculum and data tell you about your school?
  - ✓ **Educational Philosophy of your school** – what are the key beliefs that drive your educational vision?
  - ✓ **Proposed Pedagogical Shift** – which new practices do you want to implement?
  - ✓ **Key Planning and Design Themes** – how will your spaces, resources and personnel be used to implement your schools educational philosophy?

**Activity**

- Complete the *Setting the scene* template in collaborative teams.
- Teams may consist of staff, students and/or parents.

**Don't Forget**

- You should be able to summarise this information with ease. If you can't summarise it within two pages, you don't have a clear enough picture of your current context.

**So what?**

- Where are you now?
- Where are you going?
- How can you use this document to help your school move forward?
- Project forward to when you are teaching in your new facilities: What will you be doing? How will you know you have 'got there'? What will be the benefits? What will it have cost? What will you be feeling?

*Continued on next page*

## *Setting the Scene Template*

<b>Theme 1</b> Context of your School	<b>Theme 2</b> Educational Philosophy	<b>Theme 3</b> Proposed Pedagogical Shift	<b>Theme 4</b> Key Planning & Design Features

**8. DEVELOPING ESSENTIAL ACTIONS**



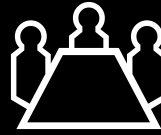
- What pedagogies will every teacher use to begin the educational transformation of your school?



- 60 minutes



- Paper
- Pens



- Whole school



The aim of this task is to develop a small number of essential agreements which will ensure that all teachers are engaging in pedagogies that will begin the educational transformation of your school.

**Prior**

- Develop a clear and unified understanding of your school’s current context and planned changes to pedagogy and space?

**Activities**

1. Re-articulate to all staff the school’s vision for transformed teaching and learning.
2. With this vision in mind, ask staff to individually write three action-based initiatives that will help initiate transformation. These are called “Essential Actions”.
3. Ask each teacher to share their Essential Actions with two other staff. Together these three teachers must condense their ideas into three collective Essential Actions that are agreed to by all participants.
4. Ask each group to share their Essential Actions with two other groups. Together these three groups must condense their ideas into three collective Essential Actions that are agreed to by all participants.
5. Repeat this process until there are three Essential Actions that are agreed to by the group.

**Don’t Forget**

- Your essential Actions must be:
  - ✓ Few in number – no more than three
  - ✓ Concisely written – no more than a sentence
  - ✓ Refer to how something is done - action-based
  - ✓ Are agreed to by all participants
  - ✓ Are binding on all participants

**BE THE REVOLUTION**

BE THE REVOLUTION

INVEST

*"It is what teachers think, what teachers do, and what teachers are, at the level of the classroom that ultimately shapes the kind of learning that young people get."*

*Andy Hargreaves & Michael Fullan*



# INDEX

## INVEST

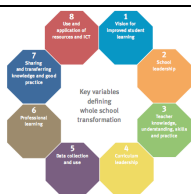
<a href="#">The Connections</a>	37
<i>How does INVEST connect with broader DEECD initiatives?</i>	
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<i>What do you already know about Collaborative Teaching and Learning, Guided Inquiry Learning and the e<sup>5</sup> Instructional Model?</i>	
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<i>Can you describe Collaborative Teaching and Learning, Guided Inquiry Learning and the e<sup>5</sup> Instructional Model in just three dot points?</i>	
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<i>What are your school's current strengths and weaknesses with regards to 21<sup>st</sup> Century Teaching and Learning practices?</i>	
<a href="#">Professional Learning Teams</a>	46
<i>In small professional learning teams identify and use research to create definitions for contemporary pedagogical approaches and organisational designs.</i>	
<a href="#">Action Research Teams</a>	47
<i>Develop an in-school trial of the pedagogies and models identified during the previous activity.</i>	

## 5 INSTRUCTIONAL MODEL



- Explore
  - ✓ Prompts enquiry
  - ✓ Structures enquiry
- Explain
  - ✓ Presents new content
  - ✓ Develops language and literacy
  - ✓ Strengthens connections

## 8 KEY VARIABLES DEFINING WHOLE SCHOOL TRANSFORMATION



- School leadership
  - ✓ Supports staff development and recognition
  - ✓ Has leaders actively participating in the change process and professional learning.
- Teacher knowledge, understanding, skills and practice
  - ✓ Knowledge of how students learn
  - ✓ An explicit focus on, and understanding of student centred learning
  - ✓ A focus on pedagogical improvement and skill development
  - ✓ Practice which is integrated with curriculum
  - ✓ Planning, teaching, coaching and reflecting in teams
- Data collection and use
  - ✓ The collection and use of data by school leaders, and teachers informs teacher development
  - ✓ Tracks, monitors and measures the acquisition of new skills, knowledge and attributes of teachers.
- Professional learning
  - ✓ A focus on improving teacher effectiveness
  - ✓ Teams planning, teaching and reflecting together
  - ✓ Effective teams as the most critical structure of transformation
  - ✓ The opportunity for feedback from multiple sources to inform professional growth
  - ✓ Teacher improvement plans that have a continuous improvement focus
  - ✓ A focus on improved learning outcomes and new teaching strategies practised in the learning environment.

## THE DEVELOPMENTAL LEARNING FRAMEWORK FOR SCHOOL LEADERS



- Technical Leadership
  - ✓ Aligns resources with desired outcomes
- Human Leadership
  - ✓ Develops individual and collective capacity
- Cultural Leadership
  - ✓ Sustains partnerships and networks
- Symbolic Leadership
  - ✓ Creates and shares knowledge

## THE EFFECTIVE SCHOOLS MODEL



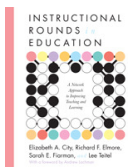
- Focus On Teaching And Learning
  - ✓ How effective are our professional learning activities that aim to improve student learning?
- Purposeful Teaching
  - ✓ To what extent are the teaching strategies used in our school influenced by contemporary pedagogical understanding and practice?

*Continued on next page*

### Learning Communities

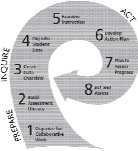
- ✓ How effectively does our school utilise the diverse expertise and knowledge of the teaching staff to assist student learning?
- ✓ To what extent is collaborative learning fostered among the staff?
- ✓ To what extent has the school encouraged staff or leadership groups to engage in professional interchange, collaboration or networking with other schools, or in other professional development activities in relation to student learning?
- ✓ How effectively has the school collaborated with other schools, other education institutions, industry, business, or the wider community in building and delivering programs to assist or support student learning?
- ✓ How has the professional development activities undertaken by staff contributed to student learning outcomes? What other factors affect the link between professional development activities and student learning outcomes?

### INSTRUCTIONAL ROUNDS IN EDUCATION



- ✓ We learn to do the work by *doing the work*

### THE EVOLUTION BEGINS HERE



- ✓ Create data overview
- ✓ Dig into student data
- ✓ Examine instruction
- ✓ Develop action plan

## 1. BURNING QUESTIONS



- Establish prior understandings



- 30 -45 mins

- 9 X A3 paper with heading (see list in bold below)
- A4 paper with headings
- Post-it-notes
- Pens
- Wall space
- Blutac



- Whole staff
- Groups of teachers

The aim of this activity is to establish prior understanding of Collaborative Teaching and Learning, Guided Inquiry Learning and the e<sup>5</sup> Instructional Model

### Prior

- A3 paper with headings (listed below) placed on walls around the room
- A4 paper with heading (listed below). One for table for each group
- Sticky notes and pens for each group
- Organise tables into groups of 6

### Activities

- Ask staff to consider the below  
 'What are your questions pertaining to:
  - e<sup>5</sup> Instructional Model**  
 - Engage, Explore, Explain, Elaborate, Evaluate
  - Collaborative Teaching**
  - Collaborative Learning**
  - Collaborative Planning**
  - Team Teaching**
  - Inquiry Learning**
  - Guided Based Inquiry**
  - Interdisciplinary Curriculum**
  - Transdisciplinary Curriculum'**
- Encourage staff in groups to write their own burning questions on post-it -notes to the suggested list
- Post notes on relevant A3 sheets
- Staff conduct a walking tour of room to read everyone's burning questions.
- Nominate a person for each of the nine main headings to summarise

### Don't forget

- Record staff response (record the journey)

Continued on next page



### ***So what?***

- How can we use this information to target Professional Development to enhance staff understanding?

**What is co-teaching?** – Chapter 1 of the book *A Guide to Co-teaching*

[http://www.corwinpress.com/upm-data/6847\\_villa\\_ch\\_1.pdf](http://www.corwinpress.com/upm-data/6847_villa_ch_1.pdf)

**Collaborative Teacher Planning And Change In The Elementary School Classroom**  
– A paper exploring personal and research-based insights into collaborative teaching and learning

<http://oldweb.madison.k12.wi.us/sod/car/abstracts/22.pdf>

**E5 instructional model** – A poster outlining the key Domain and Capabilities of the e5 Instructional Model

[http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/e5/E5\\_A1PosterTable4.pdf](http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/e5/E5_A1PosterTable4.pdf)

**What Does a "Good" Teaching Team Look Like in a Middle School Classroom?** – Practical discussion of the strengths and weaknesses of collaborative teaching strategies.

<http://www.g8.griffith.edu.au/dspace/bitstream/10072/2538/1/29483.pdf>






**Team Teaching - Playing Doubles Tennis** – How to apply teaching skills from a single classroom to a collaborative approach.

[http://www.nasaga.org/webx/resources/resources/team\\_teaching.pdf](http://www.nasaga.org/webx/resources/resources/team_teaching.pdf)

**Teaching & Learning Initiative - Six Approaches to Co-Teaching** – An easy to understand guide to team teaching strategies.

<http://www.ctserc.org/initiatives/teachandlearn/coteach.shtml>

**2. HUMAN GRAPHING**

  	 	<ul style="list-style-type: none"> <li>What practices are currently occurring in our school?</li> </ul>	<ul style="list-style-type: none"> <li>10-15 mins</li> </ul>
		<ul style="list-style-type: none"> <li>Survey sheet (see over)</li> </ul>	<ul style="list-style-type: none"> <li>Whole staff</li> </ul>
<p>The aim of this activity is to gather information (base line data) in relation to Collaborative Teaching and Learning and Inquiry Based Learning in the school.</p> <p><b>Prior</b></p> <ul style="list-style-type: none"> <li>Copy of survey for all teachers</li> </ul> <p><b>Activity</b></p> <ol style="list-style-type: none"> <li>Ask teachers to complete the 10 minute survey at the beginning or end of staff meeting</li> </ol> <p><b>Don't Forget</b></p> <ul style="list-style-type: none"> <li>To graph and share response to survey</li> </ul> <p><b>So What ?</b></p> <ul style="list-style-type: none"> <li>How can this information be used to inform Professional Development</li> <li>Which schools have 'Great Practice' in Collaborative Teaching and Learning and Inquiry Learning?</li> </ul>			

**Rate your experience with the following teaching practices:**

Colour the box which best rate your teaching experience

**e<sup>5</sup> INSTRUCTIONAL MODEL**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

**COLLABORATIVE TEACHING**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

**GUIDED INQUIRY LEARNING**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

### 3. WHAT ARE WE DOING?



- Which of Prakash Nair's 18 Learning Modalities are occurring in your school?



- 10-15 mins



- Survey



- Whole staff



The aim of this activity is to gather further information (base line data) in relation to Collaborative Teaching and Learning and Inquiry Based Learning in the school.

**Prior**

- Copy of survey for all teachers

**Activity**

- Ask teachers to complete the 15 minute survey at the beginning or end of staff meeting

**Don't Forget**

- To graph and share responses to survey

**So What?**

- How can this information be used to inform Professional Development
- More information can be found on the web links below



**The Great Learning Street Debate** – *What impact do learning modalities have on how we use our corridors and communal space?*

<http://www.designshare.com/index.php/articles/great-learning-street-debate>

**Designing Schools for 21st Century Learners** – *From the Mobile Learning Institute's video series 'A 21<sup>st</sup> Century Education'*

<http://www.mobilelearninginstitute.org/21stcenturyeducation/films/film-randall-fielding.html>

**30 Strategies for Education Innovation** - *Pedagogical, organisational and non-academic systems for engaging students.*






<http://www.fieldingnair.com/Publications/EdInnovationNair5.pdf>

**Rate your experience with the following teaching practices:**

Colour the box which best rate your teaching experience

INDEPENDENT STUDY	Never use	Use occasionally	Use sometimes	Use frequently
PEER TUTORING	Never use	Use occasionally	Use sometimes	Use frequently
TEAM COLLABORATIVE WORK IN SMALL/ MID SIZED GROUPS	Never use	Use occasionally	Use sometimes	Use frequently
ONE ON ONE LEARNING WITH THE TEACHER	Never use	Use occasionally	Use sometimes	Use frequently
LECTURE FORMAT WITH TEACHER AT THE CENTRE STAGE	Never use	Use occasionally	Use sometimes	Use frequently
PROJECT BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
TECHNOLOGY BASED LEARNING WITH MOBILE COMPUTERS	Never use	Use occasionally	Use sometimes	Use frequently
DISTANCE EDUCATION	Never use	Use occasionally	Use sometimes	Use frequently
RESEARCH VIA INTERNET WITH WIRELESS NETWORKING	Never use	Use occasionally	Use sometimes	Use frequently
STUDENT PRESENTATION	Never use	Use occasionally	Use sometimes	Use frequently
PERFORMANCE BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
SEMINAR STYLE INSTRUCTION	Never use	Use occasionally	Use sometimes	Use frequently
HANDS ON PROJECTS	Never use	Use occasionally	Use sometimes	Use frequently
NATURALIST LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
SOCIAL/ EMOTIONAL/SPIRITUAL LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
ART BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
STORY TELLING	Never use	Use occasionally	Use sometimes	Use frequently
TEAM TEACHING	Never use	Use occasionally	Use sometimes	Use frequently

4. I THINK IT MEANS....

		<ul style="list-style-type: none"> <li>What is our current understanding about e<sup>5</sup> Instructional Model, Collaborative Teaching and Learning and Inquiry Learning</li> </ul>	<ul style="list-style-type: none"> <li>10-15 mins</li> </ul>
		<ul style="list-style-type: none"> <li>Survey</li> </ul>	<ul style="list-style-type: none"> <li>Whole school</li> </ul>
	<p>The aim of this activity is to gather further information (base line data) in relation to Collaborative Teaching and Learning, Inquiry Based Learning in the school and the e<sup>5</sup> Instructional Model.</p> <p><b>Prior</b></p> <ul style="list-style-type: none"> <li>Copy of survey for all teachers</li> </ul> <p><b>Activity</b></p> <ol style="list-style-type: none"> <li>Ask teachers to complete the 15 minute survey at the beginning or end of staff meeting</li> </ol> <p><b>Don't Forget</b></p> <ul style="list-style-type: none"> <li>To collate and share response to survey</li> </ul> <p><b>So What?</b></p> <ul style="list-style-type: none"> <li>How can this information be used to inform Professional Development</li> </ul>		

<b>Name:</b>	
<b>Date:</b>	
<b>Data collection - What do we know?</b>	
<b>Can you describe these teaching practices in just three dot points?</b>	
	Comment
<b>e<sup>5</sup> Instructional Model,</b>	<ol style="list-style-type: none"> <li></li> <li></li> <li></li> </ol>
<b>Collaborative Teaching and Learning</b>	<ol style="list-style-type: none"> <li></li> <li></li> <li></li> </ol>
<b>Guided Inquiry Learning</b>	<ol style="list-style-type: none"> <li></li> <li></li> <li></li> </ol>

5. STRENGTHS & WEAKNESSES



▪ Analysis – what are our strengths & weaknesses?



▪ 30-45 mins



▪ 4 or 8 A3 paper with a question  
 ▪ Pens



▪ Whole school



The aim of this activity is to begin to identify school's current strengths and weaknesses with regards to 21<sup>st</sup> Century Teaching and Learning practices.

**Prior**

1. Organise tables into 4 or 8 groups
2. Copy of question (A3) for each tables

**Activity**

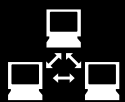
1. Each group has a question (see below)
  - a. What are the limitations this school faces in shifting towards 21st century teaching and learning?
  - b. How can this school support teachers to deliver a 21<sup>st</sup> Century curriculum?
  - c. What do we do well to promote and implement great practice?
  - d. What do we need to improve?
2. Each group discusses and responds to the questions for 5 mins. A nominated scribe should record the conversation.
3. Groups rotate question sheets and add to responses made by previous groups.
4. Rotation continues until all groups have had opportunity to respond to all questions
5. Groups summarises and shares with staff.

**Don't Forget**

- Display and/or collect responses

**So What?**

- Are there any trends or patterns in strengths and weaknesses?
- How are strengths acknowledged/ celebrated?
- How are weaknesses supported?



**Possibilities for 21st Century Education – An exploration of the skills and attributes required of students who are graduating in the 21<sup>st</sup> Century.**

[http://www.21stcenturyschools.com/What\\_is\\_21st\\_Century\\_Education.htm](http://www.21stcenturyschools.com/What_is_21st_Century_Education.htm)

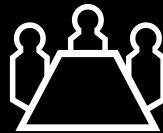
## 6. PROFESSIONAL LEARNING TEAMS



- What is Collaborative Teaching & Learning and Guided Inquiry Learning and Student Centred Learning



- Introduction 15 mins
- Research 2 to 3 weeks



- Small teams

The aim of this activity is to explore Collaborative teaching and Learning and Guided Inquiry learning through Professional Learning Teams

**Prior**

- Determine how teams will be set up ie. year level, interest etc
- Establish Professional Learning Teams

**Activities**

- In small professional learning teams identify and use research to create definitions for the following pedagogical approaches/ organisational designs:
  - Collaborative Teaching and Learning
  - Guided Inquiry Learning
  - Student Centred Learning
- Encourage teachers to
  - Seek definitions**
  - Create a list of what is it and what it is not**
  - Find out what are the local and international models/ frameworks which will best enable these approaches to flourish?**
  - Develop a resource of relevant websites and readings to share with staff and community**
  - Report research findings as part of an in school professional development session**

**Don't forget**

- Provide opportunity for team members to identify roles and responsibilities
- Set beginning and end date
- Establish a date/time for sharing findings

**So What?**

- Information researched by teams will inform the next process

"Concept to Classroom" - Workshop on Inquiry based learning - This online workshop provides a thorough explanation, exploration, demonstration and classroom implementation process for inquiry learning.

<http://www.thirteen.org/edonline/concept2class/index.html>.



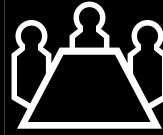
7. ACTION RESEARCH TEAMS



What do Collaborative Teaching & Learning and Guided Inquiry Learning and Student Centred Learning look like in our school?



- Introduction 15 mins
- 2-3 weeks



- Small teams



The aim of this activity build on understandings establish in Activity 6 of Collaborative Teaching and Learning and Guided Inquiry Learning and Student Centred Learning and to targeted professional development building teacher and leadership capacity

*Prior*

- Groups have been established in prior activity
- Focus of groups have been established in prior activity

*Activity*

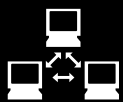
1. Trial identified pedagogies and models from previous Activity 6
2. Record what works well and what needs improvements
3. Make recommendations for whole school approach
4. Create a rubric of great practice
5. Video practice.
6. Develop peer feedback mentoring/ coaching

**Don't forget**

- Provide opportunity for team members to identify roles an responsibilities
- Set beginning and end date
- Establish a date/time for sharing findings
- See suggested proforma

**So what?**

- Encourage teams to make recommendations for transformation of pedagogy in the school



**Professional Learning in Effective Schools - The Seven Principles of Highly Effective Professional Learning**

<http://www.eduweb.vic.gov.au/edulibrary/public/staffdev/teacher/induction/ProfLearningInEffectiveSchools.pdf>

**Transformation and Development Framework Matrix – Assess your school's progress against the 8 Variables of School Transformation.**

<http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/lpd/Transformmatrix.Pdf>

**Collaborative Teaching - Practical Tips for Facilitating Student Learning in a collaborative environments.**

<http://www.slideshare.net/tina.meyer1/a-guide-to-co-teaching>

**Guided Inquiry Learning – A guided Inquiry Approach: the school library and VELS**

[http://www.slav.schools.net.au/downloads/o6publications/transinf.pps#256,1,](http://www.slav.schools.net.au/downloads/o6publications/transinf.pps#256,1)

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# BE THE REVOLUTION

## Action Research Project School Based Planner

**Title:**

**Team Members:**

**Principal Approval:**

When	Why	What	Where	Who	How
<b>NOTES</b>					

BE THE REVOLUTION

# DESIGN

*"Design is not just what it looks like and feels like.  
Design is how it works."*

Steve Jobs  
Apple CEO



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## DESIGN

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# THE CONNECTIONS

## e5 INSTRUCTIONAL MODEL



Elaborate

- ✓ Cultivate higher order thinking

## 8 KEY VARIABLES DEFINING WHOLE SCHOOL TRANSFORMATION



School leadership

- ✓ Clearly aligns roles and responsibilities with the vision and the strategic directions of the school

Curriculum leadership

- ✓ Breadth and depth of learning programs and pathways
- ✓ Flexible delivery and structure that involves integration
- ✓ Whole school curriculum planning that is student centred, innovative, sequential and documented

Sharing and transferring knowledge and good practice

- ✓ Spaces / resources that are used for parent and community interaction at different times of the day

Use and application of resources and ICT

- ✓ Timetabling and school organisation arrangements which support teacher teams working and learning together
- ✓ Routine and creative use by students

## THE DEVELOPMENTAL LEARNING FRAMEWORK FOR SCHOOL LEADERS



Technical Leadership

- ✓ Aligns resources with desired outcomes

Symbolic Leadership

- ✓ Aligns actions with shared values

## THE EFFECTIVE SCHOOLS MODEL



Focus On Teaching And Learning

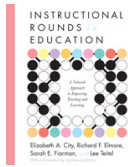
- ✓ How well does our school manage the workload of staff, in particular the balance between time focused on teaching and learning and time spent on administrative tasks?

Stimulating And Secure Learning Environment

- ✓ Are there particular aspects of our school's environment that are not conducive to student learning? How have we responded to the challenges presented?
- ✓ How effective are the strategies employed for creating a positive learning environment in the school?
- ✓ How effective are the classroom behaviour and management processes in the school? How effective are the strategies for dealing with disruptive behaviours? To what extent does the student misbehaviour affect the outcomes of student learning?

*Continued on next page*

## INSTRUCTIONAL ROUNDS IN EDUCATION



- ✓ If you change any single element of the instructional core, you have to change the other two
- ✓ The real accountability system is in the tasks that students are asked to do
- ✓ Description before analysis, analysis before prediction, prediction before evaluation

## THE EVOLUTION BEGINS HERE



- ✓ Organise for collaborative work
- ✓ Create data overview
- ✓ Examine instruction
- ✓ Act and assess

**1: CURRICULUM DESIGN**  
**- ESTABLISHING CURRICULAR PRIORITIES**



What is important in 21<sup>st</sup> Century Teaching and Learning?



45 minutes- 1 hour

Could know/ Should know/ Must know template  
 Pens  
 Post-it-notes  
 White board or IWB



Whole Staff  
 Small teams of teachers; groups based on teaching similar developmental stages: Maximum of 6

The aim of this activity is to explore the ESSENTIAL elements of a modern pedagogy.

**Prior**

- A3 Copies of the design template for all groups.
- Copies of MUST KNOW, SHOULD KNOW, COULD KNOW Circles.
- Set up white board or IWB.
- Organise tables into groups.
- Collect resources.

**Activities**

1. Brainstorm for 5 minutes “What are the essential “MUST KNOW” skills/ attributes that a child should leave your class.
2. In small groups discuss the list of MUST KNOW skills and attributes. Move some of these items into SHOULD KNOW and COULD KNOW, keeping only the most important in the MUST KNOW Circle.
3. How does the design of the learning environment assist with the delivery/ facilitation of MUST KNOW skills and attributes?

**Don't Forget**

- Share in a creative manner

**So What?**

- What is important in 21<sup>st</sup> Century Teaching and Learning for your School?
- What could be achieved if your school focussed on the “must know” elements of your curriculum?

ACOT2 – What is a relevant and applied curriculum in the 21<sup>st</sup> century?

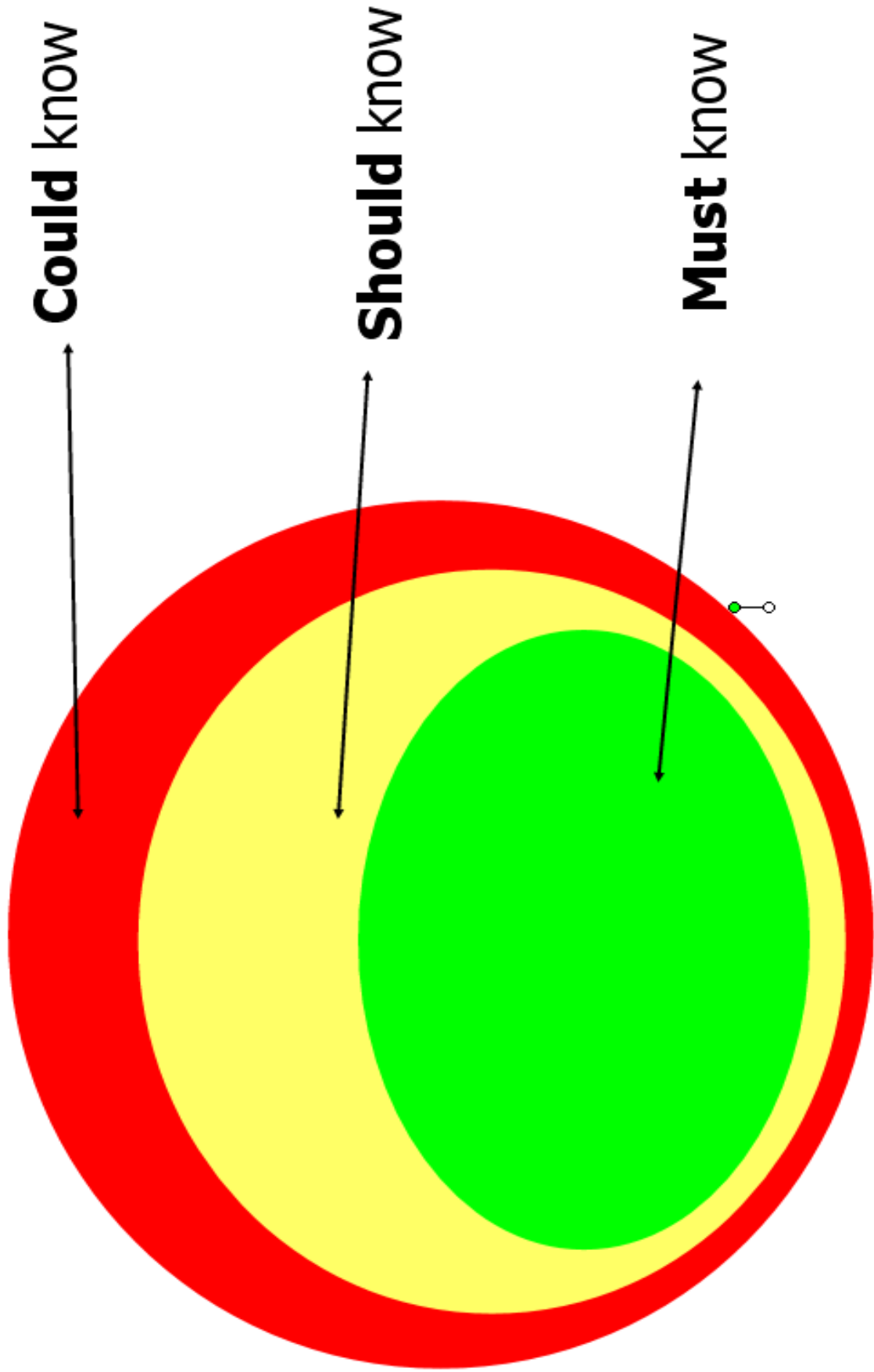
<http://ali.apple.com/acot2/curriculum/>

**Pedagogy and Space** - This publication explores the leading practices that have been adopted by schools and teachers in their quest to improve student learning outcomes





<http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/lpd/pedagogy.pdf>


*Continued on next page*

*What knowledge is important in the 21<sup>st</sup> Century?*



**2: SCHOOL WALK THROUGH**

	<ul style="list-style-type: none"> <li>▪ School walk through,             <ul style="list-style-type: none"> <li>▪ Will curriculum priorities be observable?</li> <li>▪ Will the Schools Values and Vision be evident?</li> <li>▪ Will the teaching and learning processes reflect skills required for 21<sup>st</sup> Century learners?</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>▪ 1-2 hours</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Paper</li> <li>▪ Pencils</li> </ul>		<ul style="list-style-type: none"> <li>▪ Whole Staff</li> <li>▪ Small teams: Maximum 6 per team</li> </ul>



**How does the design of your curriculum and learning environment assist the schools values and vision and enhance the 21<sup>st</sup> Century learning skills for each individual student?**

*Prior*

- Organise time for teams to walk through the school while classes are active.
- Set up white board or IWB.
- Organise tables into groups.
- Collect resources.

*Activities*

1. Facilitate a discussion around 1 of the following elements(20 minutes)
  - What are the School Values and Vision?
  - What are the Curriculum Priorities?
  - What skills do 21st century learners require?
    - *Autonomous learners*
    - *Life long learners*
    - *Literate and numerate*
    - *Deeply proficient in areas of interest*
    - *Collaborative learners*
    - *Problem solvers*
    - *Confident with high levels of self esteem*
    - *Self aware*
    - *Emotionally intelligent*
    - *Socially adept*
    - *Globally aware*
    - *OTHER!!!*
2. Discuss the role and responsibilities of conducting a Class walk through.
3. In small teams walk through the School during class time.
4. Imagine you are a new teacher in your School, what would you see?

*Continued on next page*

5. Would your Schools Values and Vision, Pedagogical priorities, 21<sup>st</sup> Century skills and attributes be evident?
6. Discuss how you could best arrange your current classroom space and pedagogical practice to enhance 21<sup>st</sup> Century learning and showcase your School Values and Vision.

***Don't Forget***

- Observe, don't judge (I saw, I heard etc.)
- To encourage sharing between groups.

***So What?***

- Are your curriculum priorities observable?
- Are the Schools Values and Vision evident?
- Are the teaching and learning processes those required for 21<sup>st</sup> Century learners?

## 3: PURPOSEFUL SPACE- PROFESSIONAL READINGS



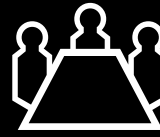
- How do we connect student centred learning, leading teacher practice and innovative learning spaces?



- 45- 1 hours



- White Board markers
- Paper
- Pencils



- Whole Staff
- Small teams: Maximum 6 per team



This activity encourages staff to explore the design aspects of collaborative and inquiry learning and teaching through professional reading.

**Prior**

- Establish groups and distribute copies of reading to different group
- Organise tables into groups.
- Collect resources.

**Activities**

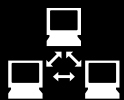
- Facilitate a Jigsaw activity.
- Allow 15-20 minute discussion of staff who have read the same article. Each team member is to establish main points of article.
- Create new groups consisting of staff who have read different documents. Allow expert to report main findings in 5 minutes each.

**Don't Forget**

- Share collected findings in creative manner.

**So What?**

- Have you established a whole staff understanding of the connections between Collaborative and Inquiry learning and teaching and purposeful space?

**Challenging Traditional Assumptions and Rethinking Learning Spaces**

<http://net.educause.edu/ir/library/pdf/PUB7102b.pdf>

**21st Century Learning Environments** - *An overview of research and expert opinion on 21st Century learning environments*

[http://www.21stcenturyskills.org/documents/le\\_white\\_paper-1.pdf](http://www.21stcenturyskills.org/documents/le_white_paper-1.pdf)

**Classrooms of the Future: Thinking Out of the Box** – *What changes will we see in the future*

<http://schoolstudio.engr.wisc.edu/futureclassrooms.html>





**Don't just rebuild schools – reinvent them** – *An article by Prakash Nair; a futurist, planner, and architect with an architectural firm specializing in school design.*

[http://www.fieldingnair.com/Press/Education\\_Week\\_Dont\\_Just\\_Rebuild\\_Schools\\_Reinvent\\_Them.pdf](http://www.fieldingnair.com/Press/Education_Week_Dont_Just_Rebuild_Schools_Reinvent_Them.pdf)

**Designing Learning Spaces for 21st Century Learners**

[http://center.uoregon.edu/ISTE/uploads/NECC2009/KEY\\_43175395/Brook\\_DesigningLearningSpacesforContemporaryLearning16.6.09.pdf](http://center.uoregon.edu/ISTE/uploads/NECC2009/KEY_43175395/Brook_DesigningLearningSpacesforContemporaryLearning16.6.09.pdf)

**4: IMAGINING ICT – WHAT ARE OUR PRIORITIES?**

	<ul style="list-style-type: none"> <li>What are our priorities?</li> </ul>		<ul style="list-style-type: none"> <li>30-45 minutes</li> </ul>
	<ul style="list-style-type: none"> <li>A3 Paper</li> <li>Textas</li> <li>ICT Item/ Cost table</li> </ul>		<ul style="list-style-type: none"> <li>Small groups: maximum 6 per group</li> </ul>



The aim of this activity is to investigate the following scenario “You have been charged with purchasing the ICT equipment for your classroom. Your Principal has given you a budget of \$2000 for each class. What will your buy?”

**Prior**

- Make multiple copies of the ICT/ Cost table for groups
- Organise tables into groups
- Collect resources

**Activities**

1. Determine what you will buy (from the DEECD panel)
2. You may buy as many different items as you like, so long as you stay within the allocated budget.
3. Explore the spatial implications of each choice, draw design options.
4. Things to consider include storage, security, networking, charging, portability, sharing etc.

**Don't Forget**

- Ask staff to justify their choices from an educational perspective!

**So What?**

- What are your ICT priorities?

ACOT2 – *What role does Ubiquitous Technology have in classrooms*  
<http://ali.apple.com/acot2/access/>  
 Develop a vision for Technology - *Vision for embedding technology across the school.*  
[http://schools.becta.org.uk/index.php?section=lv&catcode=ss\\_lv\\_vis\\_o2](http://schools.becta.org.uk/index.php?section=lv&catcode=ss_lv_vis_o2)  
 21st Century Education Remix - *A video highlighting the new tools available to educators and learners in the 21<sup>st</sup> century.*  
<http://www.youtube.com/watch?v=JkJHXmHi8jo>

## ICT Item/ Cost

<b>Item</b>	<b>Type</b>	<b>Cost</b>
Lenovo Desktop	Entry level	\$764
Lenovo Desktop	Standard	\$840
Intel Netbook	Netbook	\$588
Lenovo Notebook	Entry level	\$686
Lenovo Notebook	Standard	\$1022
iMac	Apple Desktop	\$1899*
Macbook	Apple Notebook	\$1569*
iPod Touch	Media player	\$329*
iPod Nano	Media player	\$399*
iRiver	Media player	\$100*
* non-panel item		

5: SKIN DEEP – WHAT WILL OUR BUILDINGS LOOK LIKE?



How will the new space look?



45 minutes- 1 hour

- A3 or butchers paper
- Design Template
- Textas
- Coloured pencils
- White board/ IWB
- White board markers



- Whole Staff
- Small teams: Maximum of 6, each team lead by appropriate pre appointed leader.

The aim of this activity is to get your staff thinking about the learning environment and how to design this space for purposeful collaborative teaching and inquiry-based learning.

**Prior**

- Choose and brief team leaders.
- A3 Copies of the design template for all groups
- Set up white board or IWB
- Organise tables into groups
- Collect resources

**Activities**

- 1: Have the Big question; "How will the new space look?" up on board.
- 2: Ask staff to consider the following questions in teams;
  - Furniture – hard and soft, location, shape, number
  - Texture – carpets, tiles, wet areas
  - Colours – architect colour palette
  - Display areas – where, how many, how big
  - Storage – what should go where
  - Purposeful spaces – what learning styles will be accommodated within the building?
  - Any other factor deemed important to your setting.
- 3: Get teams to design this space on A3 copies of the template.
- 4: Leaders of each table to collect the information.

**Don't forget**

- Team Leaders to Share designs with whole staff.

**So What?**

- What will your new space look like?



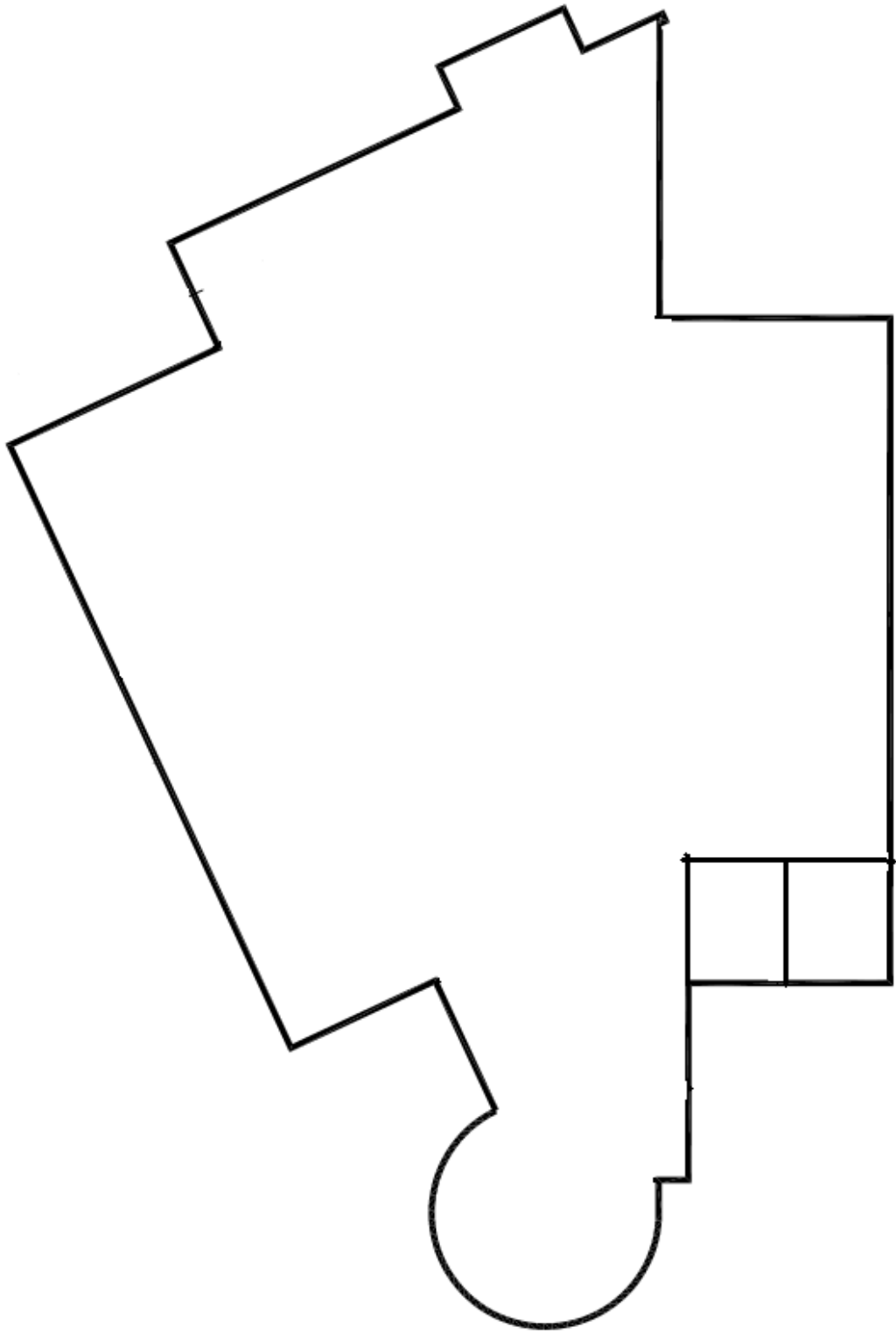
**Building Better Outcomes** – *This digest reviews a range of research studies which examine the possible causal linkages between building design and student outcomes.*

<http://www.dest.gov.au/NR/rdonlyres/69728B50-143A-4C9A-BD91-3703FC7A80DC/4507/building.pdf>

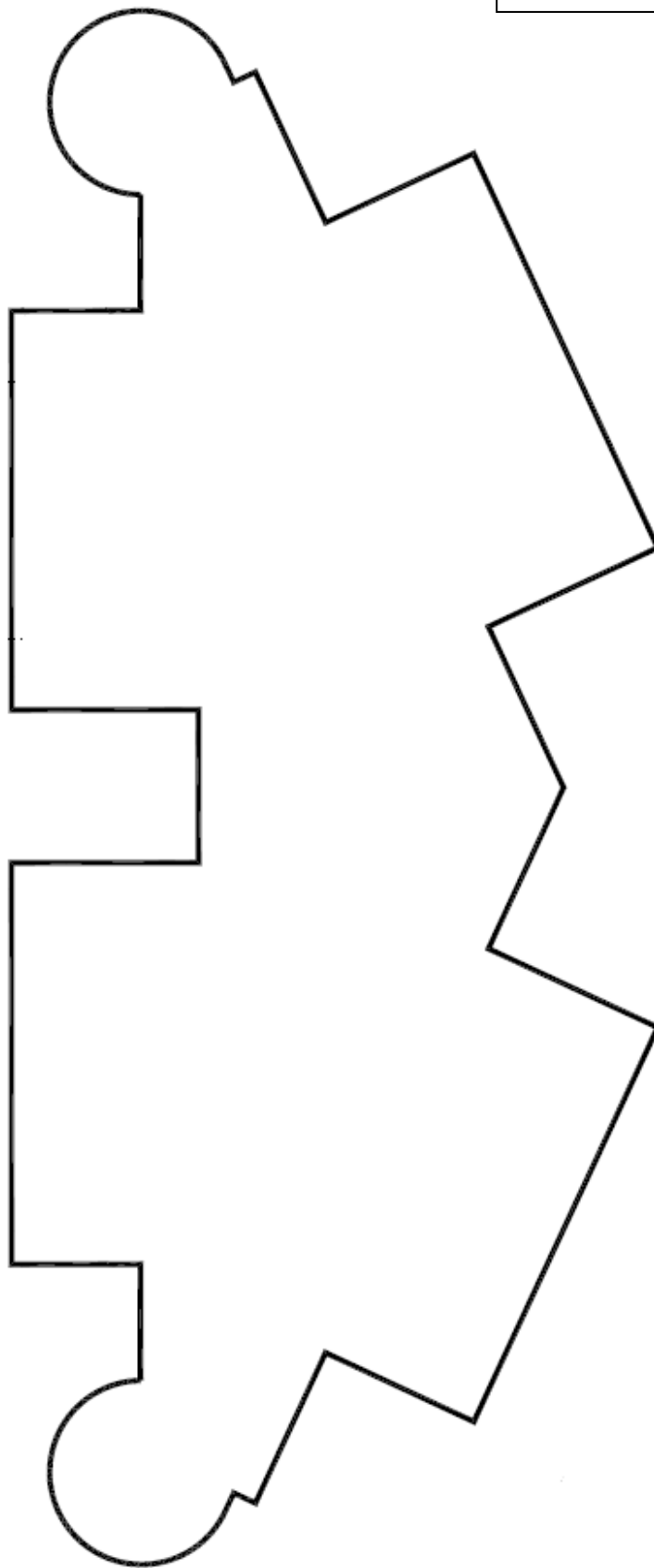
**Mayo Clinic Obesity Researchers Test "Classroom of the Future"** – *What would a classroom look like if it was designed to fight obesity?*

<http://www.mayoclinic.org/news2006-rst/3278.html>

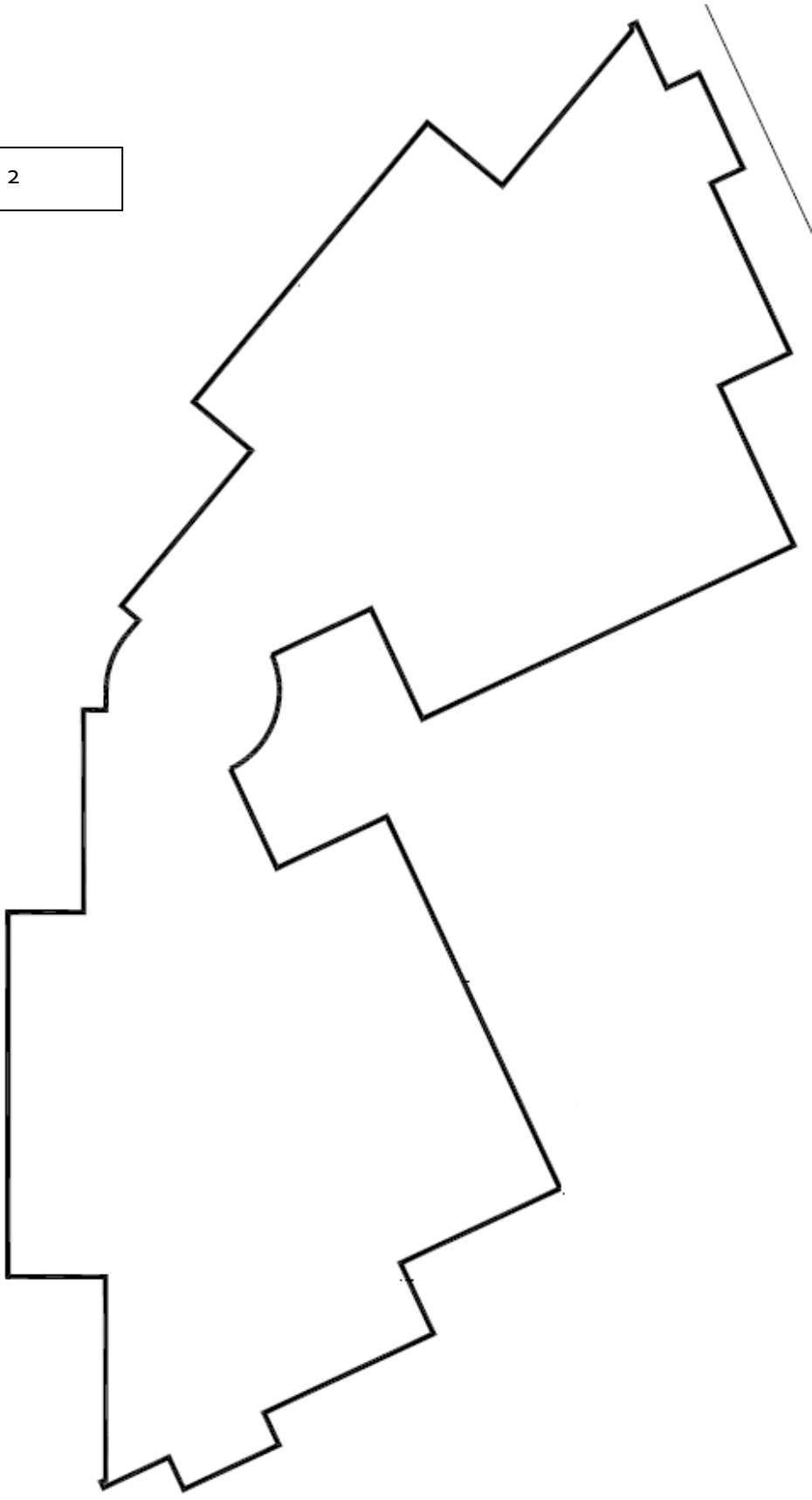
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Band 1 – Option 1



Band 2&3 – Option 2



FACILITATOR NOTE: Learning Activities 6a, 6b and 6c are alternative options; have the same purpose. Depending on your staff they provide a different aspect to start the conversation on how to personalise the design template to suit your unique learning environment.

## ELABORATE

## DESIGN

### 6A: PURPOSE BUILT - CAN WE PERSONALISE A TEMPLATE?



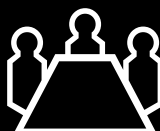
- How can we personalise the template design to suit our learning Community?



- 45 minutes -1 hour



- White Board/ IWB
- White Board markers
- Blank Templates A3 size
- Butchers Paper
- Pencils
- Textas



- Whole Staff
- Small teams: Maximum of 6



The aim of this activity is to challenge staff into thinking about the meld of learning and teaching with 21<sup>st</sup> Century learning space. What do they need in this space to cater for all the possible teaching and learning that occurs in your school?

#### Prior

- A3 Copies of the design template for all groups
- Set up white board or IWB
- Organise tables into groups
- Collect resources

#### Activities

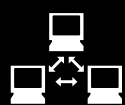
- Take 3 mins to brainstorm all teaching and learning activities initiated by teachers in your school each week.
- Group all the activities into similar teaching and learning styles.
- Using the template; design areas within the new building that support each of the teaching and learning activities listed.
- Is there an appropriate space to suit each of the learning styles you listed?

#### Don't Forget

- Creatively share amongst groups.
- Collect all designs to put on display in staffroom.

#### So What?

- Have you personalised the template design to suit your learning Community?



**Senses of Place** – This article explores the multiple aspects of Scotland's future schools including playground design, furnishings and community engagement.

<http://www.scotland.gov.uk/Resource/Doc/920/0049729.pdf>

**Building Excellence** – Theory and practice of modern school design within the Scottish context.

<http://www.scotland.gov.uk/Resource/Doc/207034/0054999.pdf>

## 6B: PURPOSE BUILT - CAN WE PERSONALISE A TEMPLATE?



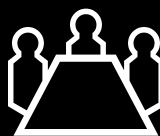
- Is there an appropriate space to suit each of the learning styles listed below?



- 45 minutes to 1 hour



- White Board /IWB
- White Board markers
- Blank Templates A3 size
- Butchers Paper
- Pencils
- Textas



- Whole Staff
- Small Teams: Maximum of 6



The aim of this activity is to challenge staff into thinking about the meld of learning and teaching with 21<sup>st</sup> Century learning space. What do they need in this space to cater for all the possible teaching and learning that occurs in your school?

### **Prior**

- A3 Copies of the design template for all groups
- Set up white board or IWB
- Organise tables into groups
- Collect resources

### **Activities**

1. Take 3 mins to look at all the teaching and learning activities listed and add any you think are missing.
  - Independent study
  - Team Collaborative work in small/ mid sized groups
  - Lecture format with teacher at the centre stage
  - Project based learning
  - Technology based learning
  - Distance education
  - Team teaching
  - Research via internet with wireless networking
  - Student presentation
  - Performance based learning
  - Naturalist learning
  - Art based learning
  - Story telling
  - OTHER

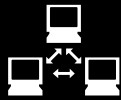
2. Group all the activities into similar teaching and learning styles.
3. Using the template; design areas within the new building that support each of the teaching and learning activities listed.
4. Is there an appropriate space to suit each of the learning styles you listed?

***Don't Forget***

- Creatively share amongst groups.
- Collect all designs to put on display in staffroom.

***So What?***

- Have you personalised the template design to suit your learning Community?



**33 Principles of School Design** - *U.S. Department of Education explores K-12 school facility planning, financing, design, construction, operations and maintenance*

<http://schoolstudio.engr.wisc.edu:80/33principles.html>

6C: PURPOSE BUILT - CAN WE PERSONALISE A TEMPLATE?



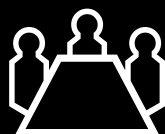
- Is there an appropriate space to suit each of the learning styles listed below?



- 45 minutes to 1 hour



- White Board/ IWB
- White Board markers
- Blank Templates A3 size
- *Linking pedagogical activities to spatial settings*
- Butchers Paper
- Pencils
- Textas



- Whole Staff
- Small teams: Maximum of 6



The aim of this activity is to challenge staff into thinking about the meld of learning and teaching with 21<sup>st</sup> Century learning space. What do they need in this space to cater for all the possible teaching and learning that occurs in your school?

**Prior**

- A3 Copies of the design template for all groups
- Print at "*Linking pedagogical activities to spatial settings*" on page 19 of *Victorian Schools Design*  
<http://www.eduweb.vic.gov.au/edulibrary/public/propman/facility/vsd-introduction.pdf>
- Organise tables into groups
- Collect resources

**Activities**

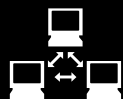
1. Take 3 mins to look at "*Linking pedagogical activities to spatial settings*" on page 19 of *Victorian Schools Design*
2. It lists five pedagogical activities. Can you think of more?
3. Using the template; design areas within the new building that support each of the teaching and learning activities listed.
4. Is there an appropriate space to suit each of the learning styles you listed?

**Don't Forget**

- Creatively share amongst groups.
- Collect all designs to put on display in staffroom.

**So What?**

- Have you personalised the template design to suit your learning Community?



**Senses of Place** – This article explores the multiple aspects of Scotland's future schools including playground design, furnishings and community engagement.  
<http://www.scotland.gov.uk/Resource/Doc/920/0049729.pdf>

## 7: A DAY IN THE LIFE – HOW DOES THIS THING WORK?



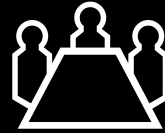
- How will the new space operate each day?



- 1 hour- ongoing



- A3 Paper
- Design Template
- Coloured pencils
- Textas



- Whole Staff
- Small teams: Maximum 6 per team



The aim of this activity is to pull all your ideas together; to evaluate all the components and design aspects of 21<sup>st</sup> Century learning space.

**Prior**

- A3 Copies of the design template for all groups
- Set up white board or IWB
- Organise tables into groups
- Collect resources

**Activities**

- The operation of contemporary facilities is vital, and as such, a clearly defined set of operational agreements need to be collaboratively established and understood.
- Teams should brainstorm a set of common understandings in conjunction with school leadership which govern the day to day operation of learning spaces.
- Areas to consider include in evaluation;
  - Purposeful Teaching and Learning Spaces to cater for ALL teaching and learning opportunities.
  - Teacher interaction
  - Lesson structure /Planning
  - Code of Behaviour
  - Transdisciplinary teaching
  - Roles and responsibilities/Leadership
  - Mentoring
  - Timetables
  - Entering and exiting
  - Form assembly
  - Staff work areas
  - Storage
  - ICT

**Don't Forget**

- Put these recommendations into a formal document for teacher use when the new space is used by a range of teachers.

**So What?**

- Have you successfully evaluated the processes and organisation in how your new space will operate each day?

**BE THE REVOLUTION**

BE THE REVOLUTION

# SHARE

*"Whenever I found out anything remarkable, I have thought it my duty to put down my discovery on paper, so that all ingenious people might be informed thereof."*

*Antonie Van Leeuwenhoek  
Dutch Biologist  
1632 - 1723*



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# THE CONNECTIONS

## e5 INSTRUCTIONAL MODEL



Evaluate

- ✓ Assesses performance against standards

## 8 KEY VARIABLES DEFINING WHOLE SCHOOL TRANSFORMATION



Data collection and use

- ✓ Tracks, monitors and measures qualitative and quantitative student outcomes
- ✓ Tracks, monitors and measures the acquisition of new skills, knowledge and attributes of teachers

Sharing and transferring knowledge and good practice

- ✓ A clear plan describing the way in which the skills of teachers are transferred and will become sustainable
- ✓ A community of leading practice that extends across school boundaries with a focus on student learning needs.

## THE DEVELOPMENTAL LEARNING FRAMEWORK FOR SCHOOL LEADERS



Technical Leadership

- ✓ Holds self and others accountable

Cultural Leadership

- ✓ Sustains partnerships and networks

Symbolic Leadership

- ✓ Creates and shares knowledge

## THE EFFECTIVE SCHOOLS MODEL



Focus On Teaching And Learning

- ✓ Identify one or two strategies that were implemented in the school to bring about improvement in the teaching-learning relationship. Analyse how effective the strategies have been. What worked well? What hindered successful or full implementation? Should the strategies be persevered with?

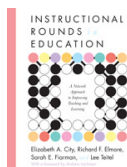
Accountability

- ✓ How does the school celebrate successes relating to student learning outcomes, at either a student or whole-school level?

Learning Communities

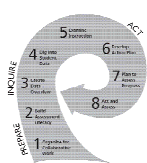
- ✓ How has the professional development activities undertaken by staff contributed to student learning outcomes?

## INSTRUCTIONAL ROUNDS






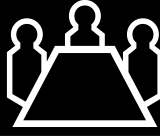

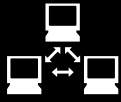
- ✓ Description before analysis, analysis before prediction, prediction before evaluation

## THE EVOLUTION BEGINS HERE






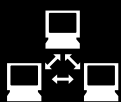


- ✓ Act and assess







1. BOAST

	<ul style="list-style-type: none"> <li>Promote your school by sharing activities you have developed to transform your pedagogy and space.</li> </ul>		<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
	<ul style="list-style-type: none"> <li>Computer</li> </ul>		<ul style="list-style-type: none"> <li></li> </ul>
	<p><b>As a result of this activity, you will have the opportunity to promote your school by sharing the outstanding professional learning activities your staff have developed as they seek to transform their pedagogy and space.</b></p> <p><i>Prior</i></p> <ul style="list-style-type: none"> <li>Collate the professional learning activities your staff have created.</li> </ul> <p><i>Activity</i></p> <ul style="list-style-type: none"> <li>Forward your professional learning activities to SMR's Regeneration Team <a href="mailto:petersen.aaron.a@edumail.vic.gov.au">petersen.aaron.a@edumail.vic.gov.au</a> <a href="mailto:kemp.lynne.m.@edumail.vic.gov.au">kemp.lynne.m.@edumail.vic.gov.au</a></li> </ul> <p><i>Don't forget</i></p> <ul style="list-style-type: none"> <li>Check the website for regular updates of Be the Revolution which will include your ideas.</li> </ul>		
			

2. COLLEGIATE REFLECTION

	<ul style="list-style-type: none"> <li>▪ Opportunity for staff reflect</li> </ul>		<ul style="list-style-type: none"> <li>▪ 30-40 minutes</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Paper and pens</li> </ul>		<ul style="list-style-type: none"> <li>▪ Individual</li> <li>▪ Small team</li> <li>▪ Whole Staff</li> </ul>
	<p>The aim of this activity is to develop a series of rich questions that can be asked of staff at the end of the initial phase of transformation to reflect on the process and where to now</p> <p><b>Prior</b></p> <ul style="list-style-type: none"> <li>▪ List questions on paper, whiteboard or PowerPoint.</li> </ul> <p><b>Activities</b></p> <ol style="list-style-type: none"> <li>1. In small groups develop a series of questions to assist with reflection. Examples of questions could include;             <ol style="list-style-type: none"> <li>a. What were the successful changes which occurred?</li> <li>b. What did we do to ensure success?</li> <li>c. How can we and others use our experiences to continue to improve?</li> <li>d. Where do we go from here?</li> <li>e. What strengths will we be drawing on to achieve our future goals?</li> </ol> </li> <li>2. As individuals/ teams or as a whole staff respond to these questions and share the information with whole community, by collating the responses and posting the results on Website or Wiki</li> <li>3. Decide on the direction forward and prioritise these actions. Develop a clear plan to continue moving forward with the transformation of Pedagogy and Space</li> <li>4. How can you engage with the <i>Be The Revolution</i> process in a cyclic manner?</li> </ol> <p><b>Don't forget</b></p> <ul style="list-style-type: none"> <li>▪ To record staff responses</li> </ul>		
			

**3. BLOG YOUR JOURNEY**

	<ul style="list-style-type: none"> <li>▪ Create a blog to record the transformation of pedagogy and space</li> </ul>		<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Computer</li> </ul>		<ul style="list-style-type: none"> <li>▪ Individual</li> <li>▪ Small team</li> <li>▪ Whole Staff</li> </ul>
	<p><b>Start a Blog to record the ongoing reflections of your schools transformation : this can act as a resource for teachers, parents and students</b></p> <p><i>Activities</i></p> <ol style="list-style-type: none"> <li>1. Record the advances in teaching and learning, through the use of blog. A possible site for this is Global teacher, address below.</li> <li>2. You could also update your community on the progress of your building.</li> </ol>		
	<p><b>Global Teacher</b> - A blog creator which exists to promote curriculum excellence through the use of Web 2.0 technology. This is a project supported by DEECD. You can join and <a href="#">create Teacher</a> and <a href="#">Classroom blogs</a> within minutes.  <a href="http://globalteacher.org.au/">http://globalteacher.org.au/</a></p>		

4. MAKE A MOVIE



- Create a video or vodcast which highlights the journey undertaken throughout the school transformation.



- Ongoing



- Download audacity
- Video
- Computer



- Individual
- Small team
- Whole Staff



The aim of this activity is to share your journey as you have Dreamt, Invested and Designed through creating a video, podcast or vodcast to highlight the journey.

**Activities**





1. Organise an individual or team to take video highlights of your journey through transformation of pedagogy and space.
2. Of special interest are pedagogical adaptations towards 21st century learning. For example:
  - a. How is team teaching working at.....?
  - b. How is inquiry learning working at .....
3. Capture teaching practice, as well as interviews with teachers, staff and parents.
4. The final product should be shared with staff, the school community and other teaching professionals.




**Audacity** - A free, easy-to-use and audio editor and recorder for Windows, Mac OS X, GNU/Linux.

<http://audacity.sourceforge.net/download/>

**5. PEDAGOGICAL INDUCTION PROCESS**

	<ul style="list-style-type: none"> <li>▪ Induction process and handbook.</li> </ul>		<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
	<ul style="list-style-type: none"> <li>▪</li> </ul>		<ul style="list-style-type: none"> <li>▪ Individual</li> <li>▪ Small team</li> <li>▪ Whole Staff</li> </ul>

 The aim of this activity is to create a complete pedagogical Induction program for all new and returning members of Staff as well as CRT's. The Induction processes and procedures must include information about linking your Schools valued pedagogical practice and purposeful space.

**Activities**

1. Create an Induction process and handbook or pamphlet to include information about linking your school's valued pedagogical practice and purposeful space.
2. Some of the areas that you may consider for pedagogical induction;
  - Planning Processes
  - Teacher interaction
  - How the purposeful Spaces can be used.
  - Lesson structure
  - Code of Behaviour
  - Transdisciplinary teaching
  - Roles and responsibilities
  - Leadership
  - Mentoring
  - Timetables
  - Entering and exiting
  - Form assembly
  - Staff work areas
  - Storage
  - ICT
3. Remember it is important to make a simple version for CRT's to your school.
4. Placement of this information on the schools web page is very valuable to enable easy access and ability to share with the whole community.
5. The pedagogical induction process will need to be a detailed orientation into the processes of learning and teaching in your setting and will need to be run as an integral part of the overall Induction. On conclusion of the Induction process your inductees should expect to:

*Continued on next page*






- *have a clear understanding of what you are and are not expected to do*
- *know who to approach for information and guidance*
- *know your ideas are listened to and you are valued and acknowledged*
- *use feedback and reflection to help develop confidence and a belief in what you are doing*
- *be able to demonstrate and share your passion for teaching and learning both in and out of the classroom*
- *be able to demonstrate your commitment to maximising the learning opportunities of your students*
- *ably act in the best interests of the students*
- *be encouraged to continue to develop and learn*
- *feel supported and a part of this school community*



The Expected Outcomes of Induction: DEECD – The department’s guidelines to quality a induction process

<http://www.education.vic.gov.au/proflearning/teacher/inductguide.htm>

**6. HOW FAR HAVE WE TRAVELLED?**

	<ul style="list-style-type: none"> <li>Has our thinking and understanding changed?</li> </ul>		<ul style="list-style-type: none"> <li>Has our thinking and understanding changed?</li> </ul>
	<ul style="list-style-type: none"> <li>Invest Survey</li> </ul>		<ul style="list-style-type: none"> <li>Invest Survey</li> </ul>
	<p>The aim of this activity is to reflect on prior understandings and to acknowledge shifts in pedagogy and understandings.</p> <p><b>Prior</b></p> <ul style="list-style-type: none"> <li>Select either (or both) of the surveys conducted during the INVEST phase</li> <li>Photocopy enough copies for all staff</li> <li>Have the data from when this survey was first conducted</li> </ul> <p><b>Activity</b></p> <ol style="list-style-type: none"> <li>Re-conduct one or two of the surveys completed during INVEST</li> <li>Identify similarities and differences</li> <li>Are there any surprises? If so why?</li> </ol> <p><b>So What?</b></p> <ul style="list-style-type: none"> <li>Use to inform further targeted whole school Professional Development</li> </ul>		

**Rate your experience with the following teaching practices:**

Colour the box which best rate your teaching experience

**e<sup>5</sup> INSTRUCTIONAL MODEL**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

**COLLABORATIVE TEACHING**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

**GUIDED INQUIRY LEARNING**

Never used it	Used it occasionally	Use it sometimes	Use it frequently
Comments			

**Rate your experience with the following teaching practices:**

Colour the box which best rate your teaching experience

INDEPENDENT STUDY	Never use	Use occasionally	Use sometimes	Use frequently
PEER TUTORING	Never use	Use occasionally	Use sometimes	Use frequently
TEAM COLLABORATIVE WORK IN SMALL/ MID SIZED GROUPS	Never use	Use occasionally	Use sometimes	Use frequently
ONE ON ONE LEARNING WITH THE TEACHER	Never use	Use occasionally	Use sometimes	Use frequently
LECTURE FORMAT WITH TEACHER AT THE CENTRE STAGE	Never use	Use occasionally	Use sometimes	Use frequently
PROJECT BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
TECHNOLOGY BASED LEARNING WITH MOBILE COMPUTERS	Never use	Use occasionally	Use sometimes	Use frequently
DISTANCE EDUCATION	Never use	Use occasionally	Use sometimes	Use frequently
RESEARCH VIA INTERNET WITH WIRELESS NETWORKING	Never use	Use occasionally	Use sometimes	Use frequently
STUDENT PRESENTATION	Never use	Use occasionally	Use sometimes	Use frequently
PERFORMANCE BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
SEMINAR STYLE INSTRUCTION	Never use	Use occasionally	Use sometimes	Use frequently
HANDS ON PROJECTS	Never use	Use occasionally	Use sometimes	Use frequently
NATURALIST LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
SOCIAL/ EMOTIONAL/SPIRITUAL LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
ART BASED LEARNING	Never use	Use occasionally	Use sometimes	Use frequently
STORY TELLING	Never use	Use occasionally	Use sometimes	Use frequently
TEAM TEACHING	Never use	Use occasionally	Use sometimes	Use frequently

## EVIDENCE FROM RESEARCH

### *Modern Classrooms*

As schools prepare to move into new teaching and learning spaces that are provided as part of the Federal Government's *Building the Education Revolution* stimulus package and the State Government's *Victorian Schools Plan* it is important to know which elements of the building design are important for their functional role and which will contribute to the improvement of student wellbeing and academic achievement. Provided here is a summary of research that explored the impact of school design on student and teacher performance.

**Heppell, S. Chapman, C. Millwood, R. Constable, M. Furness, J (2004)** *Building Learning Futures...* available at [http://rubble.heppell.net/places/media/final\\_report.pdf](http://rubble.heppell.net/places/media/final_report.pdf)

This British research report contains details drawn from many eclectic sources and tries to paint a picture of future school design. It does so by examining current practices, emerging trends and possible future realities. The authors make a number of broad and pragmatic recommendations whilst also depicting numerous scenarios of how education could be delivered in the 21<sup>st</sup> Century. The report argues that "the world that schools are being designed for is changing" and subsequently of the schools that we are designing.

**New Zealand Ministry of Education (2004)** *Best Practice in School Design* A report Prepared by AC Nielson published at

<http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/SchoolOperations/PropertyManagement/StateSchools/PerformingClassrooms/Research/BestPracticeInClassroomDesign.aspx>

A two stage quantitative and semi-qualitative project confirmed the impact of school design on students outcomes - namely that the teaching space environment can enhance or detract from students' learning ability. Teachers and principals agreed that whilst classroom design is not the main contributing factor in enhancing learning outcomes, a poorly designed learning environment will detract from learning.

**Higgins, S., Hall, E., Wall, K., Woolner, P., McCaughey, C (2005)** *The Impact of School Environments: A literature review* <http://www.ncl.ac.uk/cflat/news/DCReport.pdf>

This review concludes that the weight of current evidence suggests that design features can have a significant influence on students' behaviour and attitudes. Poor temperature control, lighting, air quality and acoustics are consistently identified as having detrimental effects on concentration, mood, well-being, attendance and, ultimately, attainment. Whilst deficits in performance in schools with poor environments is particularly evident, improvements in student performance are less visible when classroom quality improves from 'adequate' to 'outstanding'.

**Schneider, Mark (2003)** *Linking School Facility Conditions to Teacher Satisfaction and Success*, National Clearinghouse for Educational Facilities, Washington, DC

<http://www.edfacilities.org/pubs/teachersurvey.pdf>

this survey of teachers in Chicago and Washington confirmed that school facilities have a direct affect on teaching and learning. The strongest message was that poor school conditions make it difficult for teachers to deliver a quality education. Other notable impacts were the effect of poor facilities on teachers' health and professional attrition.

**Pricewaterhouse Coopers (2003)** *Building better performance: an empirical assessment of the learning and other impacts of schools capital investment* available for download from <http://www.dcsf.gov.uk/research/data/uploadfiles/RR407.pdf>

This report presents qualitative and quantitative findings which provide further evidence in support of the view that improvements in the physical fabric of school buildings can help to enhance pupil performance. This research identified a statistically significant association between capital investment and pupil performance. However, data shows that capital investment is just one factor that impacts on the quality of the overall learning environment.

### Summary

**Improving infrastructure in schools with poor facilities is universally associated with an improvement in student academic achievement and wellbeing. Whilst facilities are not the only (nor the most important) element associated with improved student results, they are an important part of the broader education puzzle. Design elements which have the strongest correlation to improved outcomes are:**

- Room temperature;
- Lighting;
- Air quality; and
- Acoustics

## ARTICLES THAT DEFINE, EXPLORE AND EXPLAIN

### *Learning Environments*

21<sup>ST</sup> Century Learning Spaces  
*education.au*

<http://www.educationau.edu.au/jahia/Jahia/home/pid/777#goto-4312>

This page contains a sample of resources useful for policy makers, principals, and teachers interested in designing learning spaces for the 21st Century -- that is technology rich spaces that promote individual and collaborative learning.

### **Pedagogy and Architecture**

*Architecture Australia*

<http://www.archmedia.com.au/aa/aaissue.php?issueid=200709&article=13&typeon=3>

Kenn Fisher introduces emerging international trends in school planning and design, and the range of structures being explored across Australia.

### **Ne(X)t Gen Learning Environments**

*The Scottish Government*

<http://www.scotland.gov.uk/Publications/2007/12/14115428/6>

an exploration of theories of learning and their implications of spatial design within schools.

## EVIDENCE FROM RESEARCH

### *Guided Inquiry Learning*

This summary of research literature examines evidence supporting the effectiveness of guided inquiry learning. Whilst collating this evidence, the following assumptions about the nature of guided inquiry learning have been made:

- Guided inquiry learning is a strategy that forms part of a teacher's instructional repertoire
- Guided inquiry learning begins with an open-ended question;
- Students negotiate aspects of what they will learn and how they will demonstrate their learning. There must be an element of choice.
- Each inquiry is orchestrated to develop specific skills, conceptual understandings and learning outcomes.
- Students will have the opportunity to apply their learning.

**Lewis, S. E. and J. E. Lewis.** (2005) *Departing from Lectures: An Evaluation of a Peer-Led Guided Inquiry Alternative*. Journal of Chemical Education 82(1) 135-139.

Two groups of American college students undertook a science subject – the “control” group were given a fifty-minute lecture three times each week, whereas the “guided inquiry learning” group substituted the third lecture for a lab-based group inquiry. For the four exams given during the term, the gap in average performance grew as the semester proceeded, with the difference on the fourth exam being greater than 10%. The following trends were also observed amongst students that participated in inquiry learning:

- Student attrition was lower;
- Student mastery of content was generally greater; and
- Students generally had more positive attitudes about the course and the instructors.

<http://chemistry.usf.edu/faculty/data/lewis/JCEDepartingfromLectures.pdf>

**Mergendoller, J. R., Maxwell, N. L., & Bellisimo, Y.** (2006). *The effectiveness of problem-based instruction: A comparative study of instructional method and student characteristics*. Interdisciplinary Journal of Problem-based Learning. 1, 49–69.

This study compared the effectiveness of Problem Based Learning (PBL) and traditional instructional approaches in developing high school students' macroeconomics knowledge. Over all, PBL was found to be a more effective instructional approach for teaching macroeconomics than traditional lecture/discussion.

<http://www.bie.org/files/IJPBL%20PBE%20PaperFINAL-single%20spaced.pdf>

**Anderson, R.D.** *Reforming Science Teaching: What Research Says About Inquiry* Journal of Science Teacher Education 13(1), 1-12, 2002

This review finds a consistent pattern within the research that indicates the effectiveness of inquiry learning. These gains are strongest in the areas of science understanding and application of knowledge. However, those teachers who focus on the rote learning of facts and acquisition of subject-specific vocabulary will find no significant variation in student outcomes.

<http://www.ideas.wisconsin.edu/seoc/profDevPaper.pdf>

**Von Secker, C.** (2002). *Effects of Inquiry-Based Teacher Practices on Science Excellence and Equity*. Journal of Educational Research, 95(3), 151-160

The purpose of this study was to evaluate the effects of inquiry-based instructional practices on academic excellence and equity. The results provide empirical evidence to support theoretical claims that greater emphasis on inquiry-based teaching is associated with higher science achievement overall. However, inquiry-based teaching is associated with exacerbated achievement gaps amongst some groups of students.

<http://hopper.unco.edu/faculty/personal/hauk/med678/VonSecker2004JER.pdf>

**Flick, L.B.** *Complex Instruction in Complex Classrooms: A Synthesis of Research on Inquiry Teaching Methods and Explicit Teaching Strategies*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching (San Francisco, CA, April 22-25, 1995)

This paper found that:

- Inquiry should be more structured when the content is new or difficult and when the learners are slow or young.
- Familiarity with facts, basic principles and key procedures are important precursors to critical thinking. This suggests a 'blended model' that combines a range of teaching strategies that include both inquiry learning and explicit instruction are required.

[http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content\\_storage\\_01/0000019b/80/13/fb/12.pdf](http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/13/fb/12.pdf)

**Kuhn, D., Black, J., Keselman, A., & Kaplan, D. (2000).** *The development of cognitive skills to support inquiry learning*. *Cognition and Instruction*, 18, 495–523.

This paper reinforces the understanding that students are not born with the requisite skills needed to engage in inquiry-learning. Subsequently, the design of any inquiry curriculum must consist of a sequence of well-delineated activities that provide students with the cognitive skills needed to engage deeply with the content. Evidence from this paper shows that in the absence of an explicit sequence of this nature, inquiry learning risks becoming a hollow practice—one embraced without clear evidence of the outcomes that it is likely to foster.

<http://faculty.tc.columbia.edu/upload/jbb21/KuhnBlackDevelopment.pdf>

**Prince, M. J., Felder North R.M. (2007);** *Inductive teaching and learning methods: definitions, comparisons, and research bases*: *Journal of Engineering Education*: Volume 95, Issue 2, Pages 123-138

This paper reviews research on the effectiveness of inquiry learning, problem-based learning, project-based learning, case-based teaching, discovery learning, and just-in-time teaching. Numerous published meta-analyses conclude that inquiry learning produced significant positive gains for academic achievement, student perceptions, process skills and analytic abilities.

<http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/InductiveTeaching.pdf>

**Also see:** The Many Faces of Inductive Teaching and Learning *Journal of College Science Teaching*, Vol. 36, No. 5, March/April 2007.

**Spronken-Smith, R.A. (2006)** *Problem-based learning: challenging but empowering*. *Proceedings of the 31st Improving University Teaching Conference*, 3-6 July 2006, Dunedin, New Zealand.

This paper explores student experiences in Problem-based learning (PBL). The research purported that PBL was found to empower learners by encouraging them to take a deep approach to learning and to become more confident and self-directed in their learning. Data on the student experiences were gathered from course evaluations, a focus group, interviews with students and access to reflective critiques. Students welcomed the PBL approach and the opportunity to take more responsibility for their learning, they were genuinely enthused and interested in study.

<http://hedc.otago.ac.nz/hedc/home/contacts/Academic-Staff-Development/Associate-Professor-Rachel-Spronken-Smith/mainParagraphs/o/document/Spronkensmith%20IIA5.pdf>

### **Summary**

Research has shown that the changes in student outcomes associated with inquiry learning have been consistently positive. However, the need for *all* teachers to develop a *diverse* instructional repertoire remains an essential element of quality teaching and learning. Most importantly, classroom conditions that facilitate multimodal methods of inquiry and accommodate differences in individual learning styles and backgrounds are most likely to pay dividends in terms of academic achievement and equity.

## ARTICLES THAT DEFINE, EXPLORE AND EXPLAIN *Inquiry Learning*

Is your school excited by the potential of guided inquiry learning...but you feel like you don't know where to start?

Are you frustrated that the only sources of information on quality inquiry learning require you to hand over exorbitant sums of money?

Tired of attending expensive professional development that leaves you no closer to understanding how to implement guided inquiry learning?

### **Concept to Classroom - Workshop on Inquiry based learning.**

*Thirteen – ed online*

This online workshop on inquiry-based learning was developed in collaboration with experts Joe Exline and Arthur L. Costa. The "Concept to Classroom" site provides a thorough explanation, exploration, demonstration and classroom implementation process for inquiry learning.

<http://www.thirteen.org/edonline/concept2class/inquiry/index.html>

### **Learning to Learn**

*Cramlington High School UK*

This School has based all their pedagogical philosophy behind the fact that students in the 21<sup>st</sup> Century must know how they learn. It is a guided Inquiry into Personalised learning and is based on explicit teaching of skills for learning in a flexible, hands-on manner. The success of this program is due to complete transformation of pedagogy and linking to a flexible physical learning space and rich in student choice and ICT.

<http://www.cchsonline.co.uk/default.htm>

[http://www.campaign-for-learning.org.uk/cfl/assets/documents/Research/l2/makingitreal\\_cr.pdf](http://www.campaign-for-learning.org.uk/cfl/assets/documents/Research/l2/makingitreal_cr.pdf)

<http://www.teachingexpertise.com/articles/learning-to-learn-a-competency-based-curriculum-2511>

### **Teaching and Learning in a Community of Thinking**

*Yoram Harpaz*

This article develops a theory and practice for teaching and learning in a *Community of Thinking*. The practice is based on three stages: fertile question, research and a concluding performance. These stages are supported by a continual process of initiation by which students form the common knowledge basis necessary for creating questions and conducting research (Inquiry based learning process).

[http://www.learningtolearn.sa.edu.au/Colleagues/files/links/Teaching\\_and\\_Learning\\_in\\_a.doc](http://www.learningtolearn.sa.edu.au/Colleagues/files/links/Teaching_and_Learning_in_a.doc)

### **A Guided Inquiry approach**

*School Library Association of Victoria*

Two powerpoints that highlight the main aspects of Guided Inquiry and how they link to Victorian Essential Learning Standards (VELS).

[www.slav.schools.net.au/downloads/o6publications/guidedinq.pps](http://www.slav.schools.net.au/downloads/o6publications/guidedinq.pps)

[www.slav.schools.net.au/downloads/o6publications/transinf.pps](http://www.slav.schools.net.au/downloads/o6publications/transinf.pps)

**BE THE REVOLUTION** provides support to schools, as they embrace 21<sup>st</sup> Century spaces and pedagogy. This Resource has been prepared by **Southern Metropolitan Region's Regeneration Coaches** who can be contacted for further information or support.

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For updates of this hand book, please visit the **BE THE REVOLUTION** website:

<http://www.smr.vic.edu.au/betherevolution/>

# BE THE REVOLUTION

*"We need to be the change we wish to see in the world"*

*Mahatma Gandhi*