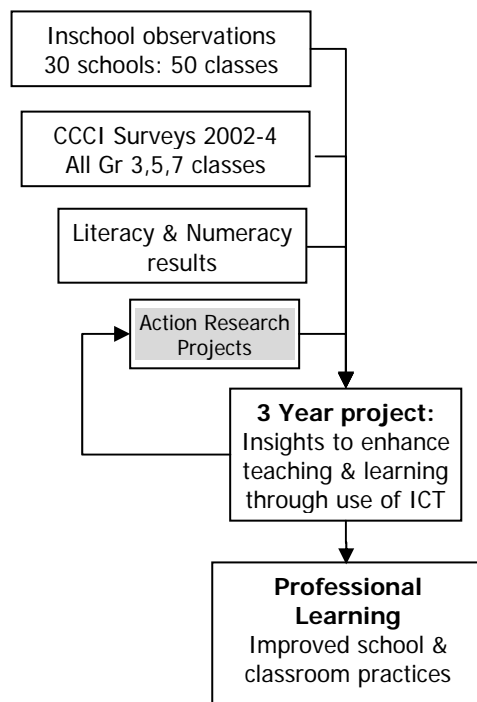


The Research



In-School Projects

P1. Professional Learning Pilots

These school based projects are based on an **action research** approach and focus on

- Enhancing the contribution of ICT to class programs within the schools
- Testing the Three Levels of Consideration hypothesis and
- Investigating the Four Key Success Factors:

While analysing and responding to...

- Mapping ICT use across the school
- Incorporating ICT into Grade 7 program
- Staff perceptions & issues re ICT
- Learning: using ICT within the ELs framework
- Value adding to professional learning through ICT
- Professional learning & accreditation in a team context

P2. Learning Objects Project

This project involves four Year 5 classes and four Year 9 classes in Tasmania and Victoria. The teachers and students are accessing online learning objects that relate to topics in Science. Tasmanian classes have been supplied with additional computers and Internet packs so that every student has access to the objects from home. The focus questions for this project are:

- What makes a good learning object (what are the characteristics which make each of the supplied objects work or not work well)?
- How are teachers able to capitalise on the opportunity to interact with another class using the same object?
- What are the implications for teaching when all students have access to the online learning objects outside school?

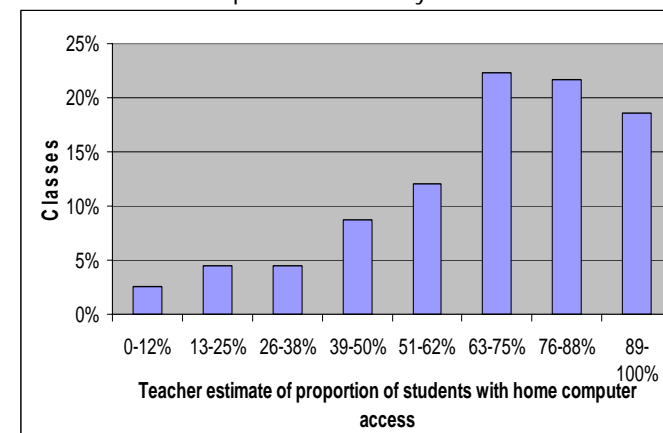
CCCI Survey

This survey is sent to all teachers of Grade 3, 5 and 7 students in Department of Education and Catholic schools of Tasmania each year. The results are matched against standardised literacy and numeracy test results.

Brief summary of some survey results to Oct 2003:

Teacher Responses	2001	2002	2003
Proportion of teachers who have < 10 hrs/year computer training		60%	69%
Teacher estimates of the % of students with home computers*	53%	61%	64%
Teacher estimates of student with home internet access	35%	45%	47%
School computers available for at least half the day (Grades 3 & 5)		90%	98%
Students have sufficient software	48%	62%	73%
Computers are reliable	48%	70%	55%

* Students with computers at home by classes:



In-school Observations

- 2 days per class; 2 classes per school

Sample finding: *There are four common learning structures according to the number of computers and student ICT competence & independence.*

# PCs	Learning Structure	ICT Competence	Student Independence
1-3	Withdrawal from class	Low-Medium	Medium
4 or more	Rotation of tasks in groups, eg, webquests	Low - Medium	Low- Medium
	Rotation of team tasks, eg, group projects	Medium to High	Medium - High
3 or more	Collaborative class projects - dynamic groupings	Medium to high	High

Teacher's opinions concerning ICT (2003)

Students can access, research, present and publish information (75%)	ICT needs better resourcing (44% of teachers)
Students benefit through personalised learning and widened learning opportunities (71%)	ICT will facilitate better communication between home and school (25%)
ICT use is expected to increase (66% of teachers)	Students show increased motivation (25% of teachers)

Emerging Theoretical Framework

1. Technology

- Is used in **activities** (actions on objects)
- Application requires **knowledge** and **insight**
- Changes the **boundaries** on what activities are possible
- May **extend or curtail** what is possible including
 - Actions (and choices)
 - Products
 - Experiences
- May **reduce or increase** the need for action, knowledge, resources and effort.

2. Success Factors

The in-school observations and survey responses indicate a set of four success factors that combine to help ensure the successful use of ICT.

- **Shared purposes & rationale** - ICT is used to achieve important outcomes that will be supported. Thus there are cultural aspects underpinned by 'membership' of a professional learning network. This network may be the school staff and/or a loosely managed professional group
- **Matching technology** is available for use in a timely manner - the teacher can rely on being able to use the technology within the teaching and learning window of opportunity concerned.
- **Working knowledge** - the ability to select and operate the technology for the intended purposes and to promptly troubleshoot the situations that arise
- **Cost effectiveness** - the value gained in terms of knowledge, experiences and products is worth the time, effort, cost of devices and consumables ... involved in the using ICT

Emerging Theoretical Framework (cont.)

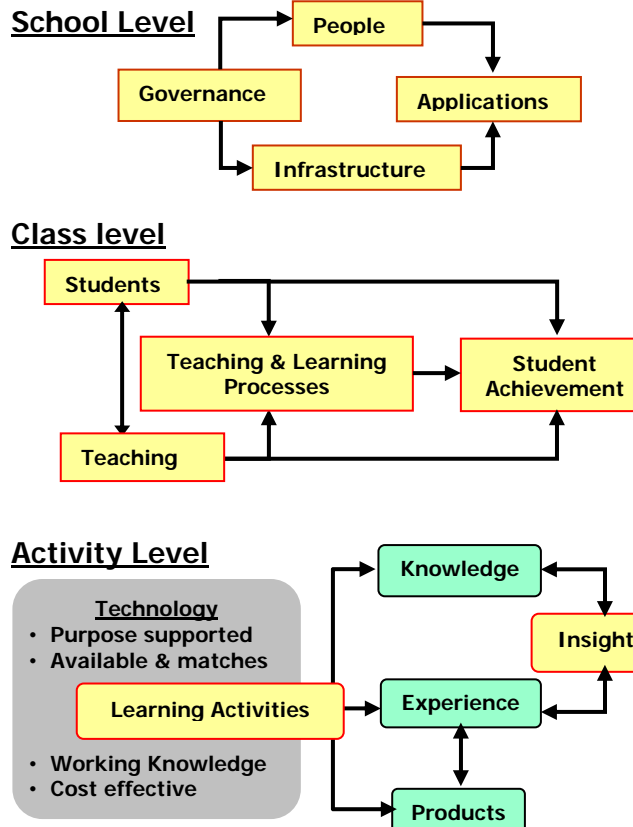
3. Alignment: Three Levels of Consideration

In order to align teaching, learning and the use of technology it is also necessary to achieve align purposes, policies & practices at each of three levels:

Reporting

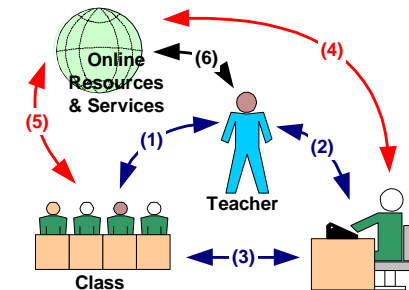
Level	Purposes	Policies	Practices
School			
Class			
Activity			
Other times & places....			Outcomes

Supporting ← → *Enabling*



UNIVERSITY OF TASMANIA

Children, Online Learning and Authentic Teaching Skills in Primary Education



Australian Research Council
LINKAGE Project PL0210823

In partnership with
Catholic Education Office
Department of Education
Telstra

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