



UNIVERSITY OF TASMANIA

Professional Learning REDEFINED!

A report on the Professional Learning Action Research projects
undertaken as part of

Children, Online Learning and Authentic Teaching*

September - November 2003

Ivan Webb (Ivan.Webb@utas.edu.au)

Project Website: <http://www.educ.utas.edu.au/users/ilwebb/Research/index.htm>

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1. Executive Summary

1.1 Background

Children, Online Learning and Authentic Teaching is a major investigation into the use of ICT in Tasmanian schools.

The University of Tasmania is undertaking this ARC LINKAGE project (LP0210823), in partnership with the following industry partners

- Department of Education, Tasmania
- Catholic Education Office, Tasmania
- Telstra, Australia

The intended outcomes of the investigation include products related to professional learning.

1.2 Cases studies

In Term 3 2003 four Tasmanian primary (K-6) schools engaged in action research projects focusing on the provision of professional learning for staff members. Each of the projects had unique characteristics reflecting significant cultural and historical factors at play.

In each project a team of three or four leading staff members (including the Principal) engaged in developing and implementing an action plan with the following steps:

- 1) Assess the current situation (general) - initial workshop and follow-up reflection
- 2) Choose a professional learning focus for action
- 3) Gather information about the present situation (focus)
- 4) Implement initiatives
- 5) Study results
- 6) Act in response to findings

A summary of each case study is provided in Section 7.

1.2 Findings

| Professional Learning | Traditional | Second Generation |
|-----------------------|------------------------------|--|
| Content | ICT Knowledge & skills | Practices: tools, artefacts, action & experiences |
| Educational Focus | General: eg, software | Specific: ICT device + use + action → practice |
| Initiation | Offer of training | Negotiated, co-planned, situated |
| Intended outcomes | New ICT knowledge & skills | New or improved classroom practices |
| Participants | Individuals | Learning group (collaboration) |
| Learning context | Institutional (push) | Community of practice (pull) |
| Participant roles | Largely formal & fixed roles | Situational & dynamic (within working relationships) |
| | Novice & expert | Learner, co-learner, tutor, mentor, facilitator, supervisor... |
| Timelines | Episodic | Ongoing & revisited |
| Learning cycle | Incomplete (event) | Complete, short and integrated into classroom/school practices |

| Professional Learning | Traditional | Second Generation |
|--|----------------------------------|--|
| Cost effectiveness | Low (waste, rework...) | High (practices, JIT, sustainable...) |
| Sustainability | Variable (often low) | High (embedded in culture, aligned with school purposes & vision...) |
| Information base | Variable (limited) | Explicit: participants and context |
| Transfer of learning into practices* | Intended, optional, hoped for... | Built into professional learning with direct or indirect support |
| Requirements of the institution (school) | Minimal | Sound governance, clear concept of ICT, endorsed purposes in using ICT ... |

Each project is still ongoing at this time (December 2003). However, the experiences of the participants and the findings of the projects are such that the projects have redefined professional learning in several important ways. This redefinition is supported by the in-school observations made in the larger research project. While the information in the following table is somewhat over simplified it represents a broad-brush summary of the findings:

1.3 The Professional Learning Cycle

The above elements were consistently brought together in the action learning projects as a series of steps in what is emerging as a cycle of learning. While no participating school completed the cycle there is a strong intention in each case to do so.

At each step, the roles, responsibilities and tasks change according to the intentions, opportunities and capacities of the group. Management of the cycle is shared and collaboration allows for customisation to meet the needs of particular learners. Management is more a matter of leadership and facilitation rather than direction.

The results include greater knowledge of, and access to, available knowledge resources. In many ways the process is one of knowledge management rather than simply training and skill development.

The following model is an attempt to summarise the professional learning cycle:

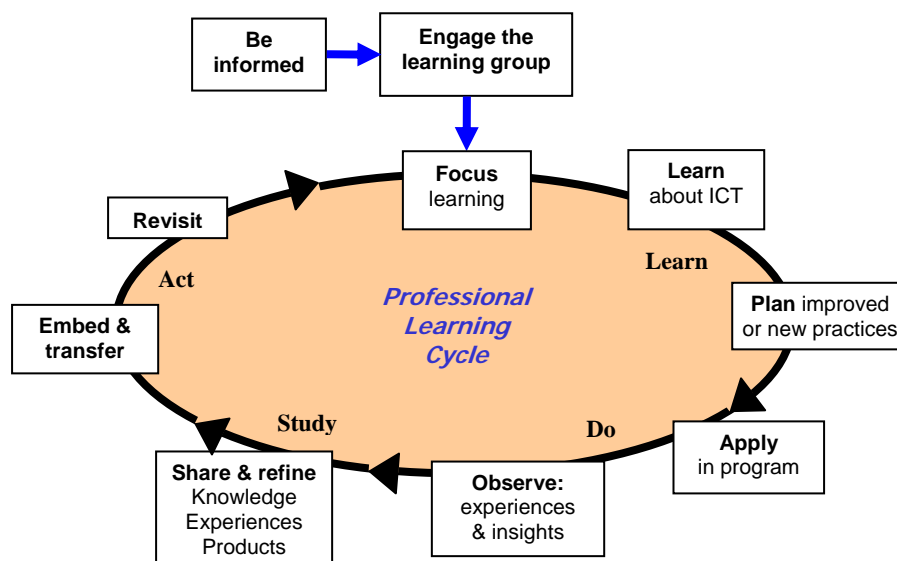


Figure 1 The Professional Learning Cycle

The action research projects that enabled the uncovering of the above cycle also demonstrated the principles on which it is based. An alternative view is provided in Section 3, A 'Pedagogy for Professional Learning. In this section the aim is to draw parallels between professional learning and other planned teaching.

2. Basic principles for planning professional learning

The following principles for Professional Learning (PL) were derived from action research undertaken in Term 3 – 2003 by

- **Lauderdale Primary School**
- **New Norfolk Primary School**
- **Fairview Primary School**
- **Evandale Primary School**

The principles are also consistent with the in-school observations made as part of Children, Online learning and Authentic Teaching Skills, University of Tasmania

2.1 *Principles*

P.1 Professional learning results in new and improved professional practices

This emerged strongly from all action research projects

P.2 ICT may provide the practitioner with

- **New ways to do old things easier and better**
- **Ways to do new things**

This is the rationale for learning about ICT. However, knowledge of ICT is not enough -professional learning is about situating the use of ICT professional practices.

P.3 Professional learning will include learning to manage better.

The use of ICT requires the management of resources and ICT can assist with management of resources and practices

- Making arrangements and getting organised
- Using the technology:
 - Applying technology in the class, office...
 - Achieve purposes using known processes

P.4 Purposes and processes should be meaningful.

A key aspect of making arrangements will be about ensuring that the **purposes and processes** used in the professional learning activities

- Have meaning for the participants
- Are (likely to be) endorsed, supported and encouraged by the school

P.5 Being informed is essential.

From information gathered from staff in the project schools needs, interests, experience and capabilities (in relation to ICT) are not distributed in any consistent way, hence those making the arrangements for professional learning should be

- Informed about who knows, or wants to know, what?

P.6 Build the outcomes in the school culture through collaboration

The arrangements help to ensure that outcomes of the professional learning are built into the school culture through collaboration. This will mean

- Working & learning with meaningful groups to develop communities of practice
- Extending the collaboration to teaching, technical & other staff
- (Beginning with staff induction?)

P.7 Starting with situated samples and credible experiences

These provide meaning not promises and help to bring out shared purpose and experiences

P.8 Keep timelines short and the focus specific (KISS)

The action research findings indicate that shorter time lines 'work better'. Staff reported their appreciation of the shorter timeframe used in some of the projects: they found it easier to manage for one or more of the following reasons

- Effort is more sustainable over the shorter period!!
- There are more people doing similar things (overlap of activities) leading to
 - Greater consciousness of what is happening
 - Informal sharing of experience
 - More incidental learning
 - More assistance with trouble shooting
 - Greater intensity & less distraction/disruption -> more attention
 - More attention -> more awareness and more familiarity
 - Greater confidence and comfort
- Sharing the load was easier: tutoring = learning again and more!!

P.9 Take ICT into the classroom with modelling and support

- Share & review the experiences within the learning group
- Share the experience and results beyond the learning group
- Knowledge of ICT is not enough

P.10 Apply, learn, share and take it forward

Learning continues beyond the trialling of a new practice in the classroom (or office...). There will be different things to learn each time ICT is used. As demonstrated in the projects, sharing within the learning group and into the wider staff and community enhances the progress of learning.

2.2 Summary: basic principles for the design & delivery of professional learning

- Keep timelines short and the focus specific
- Introduce the possibilities of ICT through
 - Meaningful products,
 - Examples of successful use
 - Sharing credible experiences
- Build collaboration with the learning group throughout the process
- Promote co-learning (learning 'buddies')
- Arrange tutors for learners for how to use & manage specific ICT
- Involve learners in planning & preparing for use in class of ICT
- Arrange in-class support to maximize the chances of success
- Apply and learn: the professional uses of ICT in class with success
 - New ways to do old things better
 - New ways to do new things
- Share & learn & take it forward (and revisit later)

3. A 'pedagogy' for professional learning

From the action research case studies and from other inschool observations it is possible to 'extract' a general process for professional learning.

3.1 A process model for professional learning

The following steps help to inform the leadership and management of professional learning activities. The steps are derived, at least in part, from each of the various case studies undertaken in the project.

The model is consistent with the core pedagogical process model adopted for the purpose of undertaking the larger research project, *Children, Online Learning and Authentic Teaching Skills*.

As for any teacher the leader of professional learning has two core tasks, viz, scaffolding and mediating the (professional) learning.

1. Build **collaboration** between leaders and learners
2. Be **informed** – learners' hopes, experience & prior knowledge...
3. Choose a specific **focus** – involve the professional learners
4. Design a short and specific **learning task** -> new practices
5. Make collaborative **arrangements** – scaffolding
6. **Undertake** as a situated co-learning task -> learn and apply (in class)
7. Provide tutors, in-class to support and mediate **progress**
8. Check on learning – **share and review** (& share more widely)
9. **Transfer the learning** into new and/or improved practices in new or different situations
10. Revisit and refresh from time to time as required

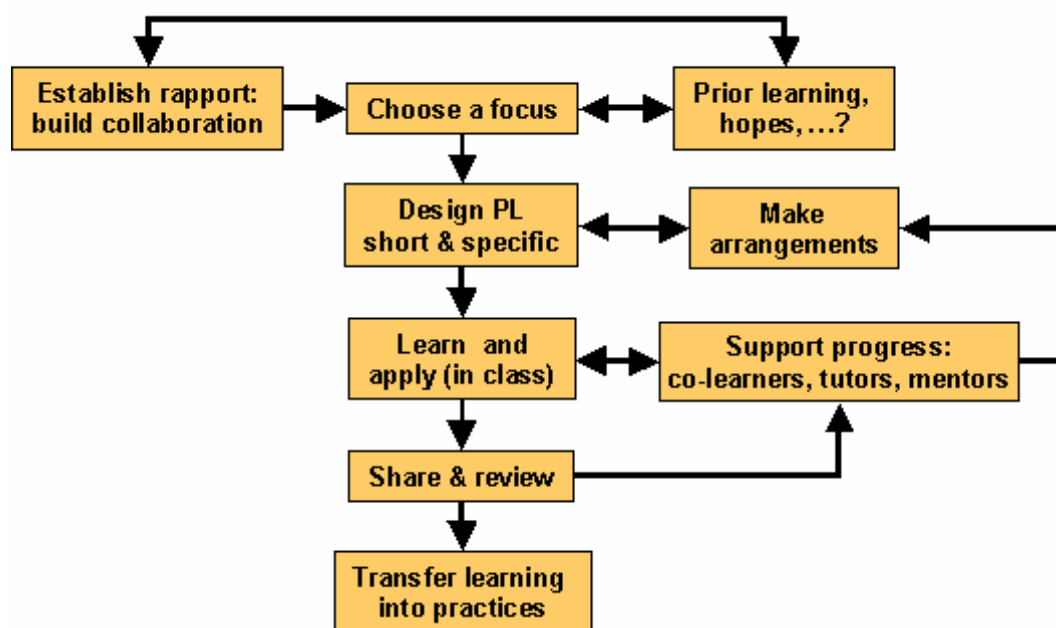


Figure 2 'Pedagogy' for professional learning

An alternative view in terms of a professional learning cycle is provided above (1.3)

3.2 Ongoing Challenges

Clearly the action research case studies have revealed some powerful insights into the principles and processes of professional learning. However the studies also reveal some ongoing challenges that are consistent with observations made in the inschool observations as part of the larger research project. These reported challenges include...

- Building collaboration across staff groups

- Accommodating staff changes: start with induction
- Providing the rationale for change: modelling ways and means
- Selecting and arranging the most appropriate technology
- When and how to upgrade (development is disruptive!!)
- Creating opportunities for learning, belonging & leadership
- Arranging for the inclusion of all staff in professional learning, i.e., providing equity of opportunity, eg, for part-time teaching staff
- Arranging release from fixed duties, eg, part-time hourly specialist staff (special needs aides)
- Building a 'community of practice'
- Performance management vs. professional learning
- Individual performance management (eg, IPLPs) vs. collaborative professional learning
- Accounting for individual professional learning in situated collaborative learning
- And there are others yet to be added to this list.

4. On being informed

Professional learning is a serious business with potentially significant costs and benefits. Thus it is worthy of informed decision making. The schools in the 2003 Pilot Studies established the following parameters for being informed:

4.1 *People and Information*

Information and relationships

Gathering information requires the trust and confidence of the providers of the information, hence...

Establish rapport and build collaboration

Gather information – knowledge management is crucial!!

- Who knows what?
- Who wants to know what?
- Who does what?
- Confidence, hopes, intentions, needs...
- Who can help others learn about...
- And consider social, cultural and historical factors

Timelines are important

In gathering (Evandale Primary) aim to now enough to plan the next step with the long term in mind:

- Where have we come from (history, culture)?
- Where are we now - what is the present situation (current strengths, weaknesses, needs, opportunities, interests...)
- How did we get here (more history and culture)?
- In what direction would we best proceed (an ideal but feasible future)?
- How will we get there (strategies)?
- Our next steps (what to do next)?

Gathering information

Warning! - Surveys can be risky (best done in a workshop?) - (New Norfolk)

- The purposes & processing of survey information need to be known
- Survey questions can imply (unexamined) expectations
- Getting the wording right can be a challenge!!

Share the information

Inform the learners about the realities and the possibilities

- Seek understanding and meaning from those who provide information (they may be the only ones who 'really know')

- Show the potential & range of ICT use by sharing situated samples, credible experiences...
- Explain in the current context: start from here & now including needs, opportunities, resources, commitments...
- Build credibility and be honest about ICT: expose the limitations as well as potentials

4.2 Comfort with ICT

In gathering information from staff some of the project schools acquired information relating to the impact of teachers' 'comfort with ICT' and its impact of the focus of their attention in their professional learning and practice.

Significant discomfort might get a person's attention but it also reduces the level at which their thinking can occur. The challenge of dealing with new possibilities should provide enough 'discomfort'.

- Be informed about people's level of discomfort with ICT (generally and specifically)
- Build comfort through familiarity and success. Initially familiarity and success will depend on being reliably informed and supported.
- This in turn leads to confidence about possibilities and acceptance of the limitations (comfort)

In order to consider the available technology the learner will need to

- Understand the concepts that are built into the ICT
- Have some ideas of the knowledge and skills required– 'there is always more to learn'
- Be informed about possibilities and limitations
- Relate possibilities to actual needs and purposes: WII-FM

Comfort, ICT and professional focus

As demonstrated in the case studies

- Comfort with ICT enables the focus to be on pedagogy
- Lack of comfort causes the focus to be on ICT

4.3 Acting on the information

It can be important to demonstrate that information will be used to help make the life and work of people easier and better. Share the information widely, especially with those who provided it.

[**Recommendation** - Go for '**easier first**'!! That is, make the tasks (process steps) easier. This releases resources (time & energy) directly. Also rework & stress will reduce because people want to do a great job and it will be easier to do so. The resources released can then be used to achieve other improvements. - IW]

Use the information to share the load

Build collaboration on the basis of the available information, eg, arrange co-learners, tutors and mentors as a learning group. In professional learning

- Everyone has something to learn
- Everyone has something to teach & share

4.4 Learning Groups

And working in learning groups has many benefits since it

- Builds knowledge of available resources
- Enhances available PL resources
- Provides leadership opportunities

What knowledge and skills?

A challenge for the designers and developers of professional learning groups. It all depends!!

- Who knows, or wants to know, what

- And on the next step(s) in learning

Professional Learning

The notion of professional practice as a prime source of learning and expertise is as appropriate to teaching as to any other profession. Learning must be on going in order to improve current practices, and to acquire new practices that will enable new things to be achieved. It is inappropriate to perceive professional learning as episodic and based on workshops...

On the other hand specific well informed professional learning initiatives might make major contributions to the practices of professionals. Having planned and implemented a professional learning initiative that has resulted in a new practice being used in the classroom, the next step in the process is to...

Share & review the results

Initially this would be best undertaken by the learning group and would include

- Evaluation (suitability of the practice, its ease of use, professional learning)
- Range of applications: possibilities and limitations
- Resolution of issues: troubleshooting

Beyond the learning group

There is considerable value in taking the evaluation beyond the group, including the factor that such a step integrates professional learning into the life and work of the school. It also

- Builds knowledge of resources:
 - Who knows what ...
 - Who is using what ...
 - Who is doing what ...and how
- Builds links with other members of the (school) outside the learning group
- Allows acknowledgment which, more formally, places practices within the school

Revisit & refresh from time to time

Professional learning is ongoing for several reasons, including

- Some loss of specific knowledge is inevitable
- To belong to a member of a profession is to
 - Be a life long learner
 - Learn from the one's colleagues and
 - Contribute to the development of profession

4.5 Professional learning and roles

Professional learning contributes to the development of several professional roles that may be undertaken by participants. And the roles themselves are developmental - this year's co-learner is next year's tutor, that is, overtime...

- Learners become a more helpful co-learners (buddy)
- Co-learners become tutors, as in 'learning how to...'
- Tutors becomes mentors – 'what to do and why'

These roles are situational depending on the context and purposes involved, For more detail see 5.3 below - Roles in professional learning

5. Collaboration and professional learning

Collaboration builds professional learning into the culture by making planning, problem solving, improvement...better informed and better supported (consider the relevant proverbs).

5.1 Change

ICT introduces the issue of change by making it possible to

- Do old things easier and better and/or
- Do new things

5.2 Learning together

Learning together means sharing knowledge, experiences & products from one's professional activities

- A more 'natural' way to go...
- Consider ICT as a part of collaborative planning
- Work in pairs, teams and other natural groups
- Share within and beyond the learning group
- Build knowledge of who knows what (the key resource!!)

Learning together makes change easier & safer ... *'It is OK to have problems because...'*

- Experiences (good, bad...) are validated by others
- Problems can be solved by drawing on the knowledge and experience available
- Shared achievement leads to shared celebrations of success
- Everyone can be a contributor and a beneficiary (the hallmarks of belonging)

5.3 Roles in professional learning

The action research case studies have shown that there are a number of roles involved in the delivery of effective professional learning. Some of these roles are situational and informal such as in much of the tutoring situations. Other roles (such as the Principal and In School Mentor) are more formal since they are official and involve the explicit placement of the professional learning activities in the context of the institution (school).

Common roles and purposes

| Role | Focus | Provides the learner |
|---|-------------------------------|--|
| Learner (Ongoing) | Self | Personal professional motivation - relevant knowledge and experience |
| Co- Learners (shared) | Sharing learning & experience | Encouragement, understanding, shared perspectives, finding useful opportunities, little problems solved... |
| Tutors (Informal and workshops) | Doing | Operational knowledge of 'How to...' |
| Mentors (Ongoing) | Professional Knowledge | What practices to use and why: guidance, backup, trouble-shooting, access to support, resources... |
| Supervisors (As required) | Endorsement & clarification | Clarification of expectations & purposes, opportunities.... Appreciation & validation of efforts and of achievements |

These roles 'overlap' in a developmental way, especially in a collaborative learning context:

- Co-learners are also learners
- Tutors are also co-learners (with the person they are tutoring) and learners
- Mentors also provide tutoring (often as a demonstration) and are co-learners
- And so on...

5.4 Collaboration and culture

The use of ICT in teaching and learning (and other) practices changes

- What is done and/or
- The way things are done
- Who does what

If the changed practices are adopted as 'normal' practices the result will be some cultural shift. Cultural shifts to new forms of practice can only be achieved together

5.5 Collaboration and standards

Collaboration in professional learning is likely to lead to more sustained and consistent practices and thus supports the development and achievement of (professional) standards.

5.6 Collaboration and the key success factors

Collaboration in professional learning in relation to the use of ICT is based on clarifying **shared purposes**. These purposes are pursued through the planned incorporation of **available matching technology** into the practices chosen.

In the classroom (or similar) collaboration increases the **working knowledge** available to the practitioner to enable the operation of the technology and troubleshooting of problems that arise thus increasing the likelihood of the practices being successful.

Finally, in situations where the above are in place, there are likely to be

- Significant successes, i.e., purposes are achieved (value gained)
- Increased ease of using ICT (reduced effort)
- Better arrangements, operation and management including troubleshooting (reduced losses)
- Further in collaborative professional learning situations the achievement of success is not the end of endeavour. The knowledge, experiences and products that result can be made available to support colleagues in their endeavours. (Additional value)

Even when practices are not successful, collaboration with others increases the chances of gaining some insight into the cause, how to reduce the likelihood of repetition of the 'failure' and to improve practices all of which lead can lead to genuine **cost-effectiveness**. (See 6.0 below)

Collaboration and ICT

But what is the connection between collaboration and ICT? After all ICTs can be used in collaboration. **This leads to two questions:**

- What is the connection between the collaboration and the use of ICT?
- When (under what conditions)?

5.7 From inschool observations

On the basis of our inschool observations of 29 classrooms for two or more days each in 17 different schools we are quite certain that

- Where there is an interest in the use of ICT, a culture that includes high levels of collaboration is likely to be much more successful in the use of ICT.
- The use of ICT appears to have little impact on the level of collaboration per se,
- However the novelty of attempting to incorporate the use of ICT into teaching and learning practices may promote the development of higher levels of collaboration, especially where the technology is well managed and its application is clear, that is there is sound **governance**

6. Cost Effectiveness of Professional Learning

For teachers professional learning is an 'add-on' task that competes with the core task of teaching. For this reason the cost effectiveness of professional learning must be taken into consideration. As demonstrated below collaboration makes a major contribution to the cost effectiveness of professional learning

6.1 A Focus on practices

The acquisition of knowledge and skills is not an end in its own right because knowledge and skills are not effective in isolation. They are of value when they contribute to the **effectiveness of professional practices** - hence the emphasis on the link between professional learning and the introduction of new or improved practices.

6.2 Collaboration adds value

Professional learning that takes place in a highly collaborative culture has the capacity to significantly increase the value of the professional learning. The '**community of practice**' means that important knowledge and experience are **well situated** to support professional learning, that is, close to practices & learners.

The close link between action and learning means that, in a collaborative culture, learning and action are both supported by members of the culture. Thus learning that is matched to shared purposes is readily translated in to **new or improved** shared practices. In addition collaboration enhances the **rapid and extended deployment** of the improved or new practices (through action learning) into the life and work of the group. Thus the learning becomes part of the culture and is readily available to its members.

Sustainability

Most things are sustainable with enough power and/or resources. However this is not practical for most educational endeavours. Rather the way to achieve sustainability of new or improved practices is to ensure that they become part of the culture. This is useful definition of **implementation**: '*something has been implemented when it has become part of the culture*' - IW.

Part of the culture

Where collaborative professional learning is part of the culture value is added:

- Everyone can be a contributor and everyone can be a beneficiary.
- Individual members can initiate professional learning for themselves and for others.
- Knowledge of available resources is more widely shared.
- And there is ongoing value adding from the professional experiences (action learning) in the field.

In such situations collaboration is unlikely to be limited to professional learning. Rather collaboration also enhances school system development through

- Better informed governance
- More extensive and well focused and supported professional learning
- A better matching infrastructure
- Astute application of the new and improved practices, leading to...
- Improved core practices and supporting activities
- ...

6.3 Collaboration also decreases costs

Professional learning takes the time and effort of the learners, the providers and those responsible for managing and arrangements. It can also impact on others indirectly in a multitude of ways. There are several ways in which collaboration reduces waste in professional learning.

Learning into practice

Perhaps the most important contribution of collaboration is that it reduces likelihood of failure to complete the transfer of learning into practice. Thus there is

- Less waste
 - Professional learning that does not result in new or improved practices is waste
 - More in line with the needs of learner at all stages of the 'program' since learning process can be refined & refocused in real time
 - Of value to the provider who is likely to be less than an 'expert' and hence learns from the experience of being a co-learner, tutor, mentor
 - Less disruption since opportunities can be arranged as required between learner/helper
 - Less unnecessary provision - provision is in response to actual needs of actual learner and the capacity of other participants to contribute
- Less rework - the successful transfer of learning into real practice and experience internalises the learning, matures the concepts involved and reduces the need to re-learn
- Less management is required because collaboration includes more natural organization by arrangement between learner and helper, and even more self managed learning

6.4 Collaboration in Summary

Collaboration clearly makes professional learning

- More efficient and effective
- Sustainable
- Closer to JIT (time) delivery and improved (in process) follow up
- Closer to JIP (place) delivery
- And faster: fewer hold-ups in the learning process since the required knowledge, experience, products more readily available from co-learners, on-site tutors, mentors...

7. Case studies

7.1 Participating schools

Invitations to participate in the action research projects were widely distributed and the following schools participated in the first phase.

- **Lauderdale Primary School**
- **New Norfolk Primary School**
- **Fairview Primary School**
- **Evandale Primary School**

7.2 The process

Schools were provided with an introductory workshop (approximately 2.5 hours) for their project teams during which they were introduced to the theoretical notions emerging from the inschool observations made earlier in the larger *Children, Online Learning and Authentic Teaching* project with a particular focus on

1. *Three Levels of Consideration* which proposes that in order for schools to successfully incorporate the use of ICT into class programs it is necessary for the use of ICT to be considered at three levels within the school, viz,
 - o School level: governance, infrastructure, people and applications
 - o Class level: students, teaching & learning, student outcomes
 - o Activities level: activities, knowledge, experience, products and insight
2. *Key Success Factors*. From the inschool observation four key success factors had been identified quite consistently across all the observations. These observations were also supported by responses to the CCCI survey of an even all Tasmanian Grade 3,5 and 7 teachers (in order of significance)
 - o Shared purposes and practices
 - o Matching and available technology for the intended purposes and practices
 - o Adequate working knowledge to 'comfortably' operate and troubleshoot the use of the technology
 - o Cost effectiveness of its applications

In the course of the workshops the school team developed an action plan for their project to undertake the following steps

- 1) Assess the current situation (general) - initial workshop and follow-up reflection
- 2) Choose a professional learning focus for action
- 3) Gather information about the present situation (focus)
- 4) Implement initiatives
- 5) Study results
- 6) Act in response to findings

The members of the University's research team provided minimal ongoing support and advice during the course of the action research projects.

Each of the schools provided a presentation for a project workshop, *RazzamaTas 1*, and most teams were fully represented. The research team and some other stakeholder representatives also participated in the workshop.

A summary of each presentation is provided in the following pages (in alphabetical order)

7.3 Evandale - An ICT Audit

Goals of the ICT Audit Process

Provide staff with appropriate ICT tools, sources & PL
 Get better value from SACS: collating all info about children, use SACS for anecdotal info, e.g. behavioural issues.
 Support teachers
 Ensure that teachers are well informed
 Encourage and support teachers to use the available ICT tools, eg, email, internet, Discover, newsletters..
 Aim to have teachers using ICT for their own purposes in an integrated way, including use of digital camera, email, internet
 Use ICT effectively to support teaching & learning in classes

ICT Audit leading to a School-staff profile with respect to ICT

Start with ICT practices - "We can better understand current practices in our school by

1. Mapping the current staff use of ICT (what, how recently)
2. Applications (software)
 - Devices (camera, projector...)
 - Purposes (knowing what is happening, about children...)

And then, with the long term in mind, we can establish arrangements and procedures that facilitate a greater focus on T&L" and be well informed about

3. Colleagues who act as an ICT mentor to others
4. Levels of ICT certification
5. Hopes for more ICT training
6. Use of fault reporting system provided by the school
7. Use of technical support within the school. How satisfactory?
8. The ideal classroom provision
9. Present level of comfort with ICT
10. Staff access to ICT at home
11. Capacity to carry out common ICT based tasks

RESULTS - some preliminary findings:

1. Some staff are yet to achieve accreditation at any level
2. All staff members indicated the need for more training – many in use of programs such as FrontPage and PowerPoint – others in classroom management and use.
3. Teaching staff generally felt comfortable and knowledgeable to an average degree, whilst most ancillary staff were not so.
4. Half of the staff considered 3 computers in their class were sufficient; others thought 5 would be preferable though space was an issue. One staff member considered 25 would be the ideal situation.
5. Every staff member indicated they had a computer at home ranging from an eight year old Macintosh to very up to date models, most had access to the internet, digital and video cameras and colour printers.
6. Further analysis of the data will allow the school to meet the needs of the school and its staff efficiently and effectively thus achieving its goals

A useful insight - information for staff

The school has a commitment to supporting teachers use of information to enhance their practice. To this end the school is beginning to map the categories of information that staff need to categorise:

- Information about what is happening
- Information about students
- Information about professional matters (teaching , learning, instutional...)
- Private information

7.4 Fairview - (2 projects) Staff Perceptions and Authentic Teaching

Project A. Staff purposes, concerns and confidence

Method: a simple open ended teacher survey re ICT in class: results are as follows

Purposes for incorporating ICT into the class program (Note: these were not consistent throughout the staff)

- Information: Acquire, Present, Supply and Store
- Communication
- Extending and Motivating Students
- Tool for Activity
- Learning – skills in ICT

The impact of teacher confidence on using ICT

- Low confidence results in a specific focus on learning about ICT in highly controlled context and reliability a higher level of concern.
- High confidence teachers generally use a more integrated approach and more inclusive view of the technology: focus on pedagogy and the contribution that ICT might make to teaching and learning

Staff Concerns focused on

Technology

- Availability & reliability
- Expertise related to the technology

Teacher

- Knowledge of ICT
- Application of ICT– match to old or new purpose

Student use of ICT

- Significant products
- Time use

Class Operation

- Groupings
- Noise
- Time management

School response to the survey results

- Several matters relating to the availability and reliability of technology in the classrooms have been resolved thus improving the confidence of staff in their ICT resources
- The use of a newly acquired data projector is enhancing and extending the role for ICT in making and sharing real products from real experiences
- Future professional learning and school development will be more closely linked in order to develop a more consistent shared view of the life and work of the school.

Project B. Authentic Learning

A collaborative learning unit undertaken by 2 classes utilizing authentic teaching & learning involving a real investigation & useful products involved the following steps

1. Interviews of older citizens revealed neglected local cemetery
2. Site visit led to discussions of issues with local council staff
3. Ongoing collection, organisation and presentation of information and ideas
4. Efforts by class & council began improvements
5. Class prepared fliers to promote community awareness
6. Class submitted proposal for a community development grant
7. ICT enabled the classes to
 - Capture and share important information from the local environment,
 - Organise, process and then present it in a 'professional' form
 - Ensuring that the local community took the students seriously
 - Thus enabling all to experience the democratic process first hand

Curriculum categories? Take your pick!!

7.5 Lauderdale Primary - Learning to use Inspiration

Project goals (see initial [Action Plan](#)) Investigate:

1. A successful model for PD so that it is convenient, relevant and useful to staff
 2. The impact of using a buddy system for professional learning
- Trial (capturing the learning): requested participating staff to keep a shared electronic journal of experiences and issues

Project Team

In School ICT Mentors (2)
 School's network manager (new role emerging!!)
 Principal

Being informed

Initial staff survey re Inspiration showed that
 Most staff had engaged in PD but had not used with students.
 Limited uses for Inspiration had been trialed in the classroom

Staff had identified a wide range of uses for Inspiration
Confidence with using Inspiration was low
Staff identified time & opportunities as a barrier to expertise

Inspiration Learning Group

Team of 8 teachers selected to be involved
Varying range of ICT competence
Teachers were motivated and optimistic
About half had already tried using Inspiration with their students after PD
Lauderdale – Short timeline, specific focus

Timeline - Activities and events (2003)

| | |
|---------|--|
| 29 Sep | Introductory workshop |
| 7 Oct | Project team meeting to decide on Action Research |
| 8 Oct | Staff survey |
| 13 Oct | Staff workshop: how to use Inspiration introduce project |
| Interim | Staff begin inclass use of Inspiration Student-free day (20 Nov) staff work on progress Extensive informal sharing and support |
| 30 Oct | Focus group session sharing of experiences, knowledge and insights |
| 5 Nov | Sharing with other staff during staff meeting |
| 14 Nov | Preparation for Project presentation |
| 20 Nov | Presentation by Project Team UTAS Next? |

Summary of Outcomes

1. Effective transferral of professional learning into the classroom
2. Stimulated interest in using Inspiration
3. 'Community of Practice' – the group helped each other to share ideas and troubleshoot problems.
4. Buddy system was highly motivating for learning group members
5. Timeline – intense period of activity was very effective and welcomed by participants
6. Promoted an extensive range of alternate way of looking at current classroom activities
7. Participants achieved a high level of 'comfort' with software
8. Many unexpected positive outcomes, eg, leadership, insights, expanded knowledge of human resources...
9. 'Buddy system' expanded naturally during the course of the professional learning
10. Staff made their own arrangements for specific small scale tutoring
11. Adequate resources need to be provided
12. Ongoing learning strengthened

7.6 New Norfolk - Taking professional learning into the classroom

Background: The school has a proud history of professional leadership in the use of ICT in teaching and learning, however efforts to maintain the previous level of expertise and practice have become more difficult with loss of leading practitioners and reduced resources.

Aim: To make better provision for ICT professional learning leading to more consistent integration of ICT into actual teaching and learning in classes

Action Plan

The school project team devised an action plan with three steps

1. Find out where staff are 'at'
2. Select a meaningful starting point and provide appropriate training using 'buddies' where possible
3. Plan and make provision for the participating staff to take their learning into their classrooms

1. Survey of staff:

- Confidence with current software and devices
- Professional learning needs – using ICT in-class, problems with programs
- Hopes & needs for literacy purposes
- Peripherals – confidence and hopes

2. PD workshop: short (40 mins), focused, simple - narrowed down to one package to begin with: Kidpix 3

Workshop strategy

- Don't overload people – focus on one package for whole PD session
- Use confident teachers to present examples of ICT use to show less confident teachers how it is used/ managed as a package in their classes

Workshop aim:

- to increase confidence
- to increase collaboration by
 - Sharing knowledge to achieve standard format
 - Ongoing PD same process but different packages
 - How would teachers like to use ICT support in-class?

3. Into the classroom

Taking the learning into the class program: provide in-class support in the form of

- Modelling sound practice incorporating the use of Kidpix
- Co-teaching with the learner
- Providing operational and troubleshooting back-up in an introductory lesson.
- Follow up by negotiation.

Findings

1. About staff expertise

- The distribution of expertise varies across the staff and for an individual staff member
- ICT knowledge and skills are quite specific and initially abstract (especially for beginners)
- Some staff members are an 'expert' in only one program. It was a liberating insight for some teachers to know that their colleagues, previously seen as experts, are only 'expert' in a limited number applications. Teachers tend to focus on what they don't know, their inadequacies and are conscious of teachers who 'do know'.

2. The following important principles have been identified for the design of professional learning

- Have a narrow focus, achieving confidence one program at a time
- Lead by example
- Build community support for linking professional learning and professional practices

3. The **questions we ask** imply expectations of knowledge and abilities. Almost a negative approach... finding out what staff don't know rather than what they do. We need to know both to begin building a community of practice

4. Address the needs in '**natural**' teams where possible – in this case study both the PD team and the group of learners were a 'natural' teams with a mix of expertise, resources, times that work together

5. **Confidence starts** from being good at something, maybe even only one thing

6. **Challenges (on-going)**

- Catering for P/T, casual staff
- Stretching the resources - resourced on FTE but have to provide per capita
- Moving on from a focus on applications: initially the survey seemed to focus on use of ICT applications when ideally the focus should be on using applications in a classroom for teaching and learning purposes – focus should be on using applications rather than the applications and devices per se.
- However as confirmed in the Fairview study the focus will only shift from applications and or devices (the technology) to their use in classrooms when teachers are comfortable/ feel competent to use the application or device