

Participatory Action Research for myLearn Network of Provision Pilot Completion of Cycle 2 & 3

Funded by the Ako Aotearoa Southern Regional Hub Project Fund

Project Leader TANZ - Keith Tyler-Smith

Research Supervisor - Jan Kent

Participants

- Northtec – Peter Bruce, Vasi Doncheva
- EIT – Donna Petry, Joyce Seitzinger
- UCOL – Phil Thomsen, Sue Ireland, Kay Lewis, Kevin Brennan
- NMIT – Sue Malthus, David Sturrock
- CPIT – Louise Taylor, Adam Hollingworth, Nick Ford
- Otago – Darrell Love, Terry Marler, Kay Lion
- TANZ – Rachel Pringle

Acknowledgements - Michael Winter, Senior Researcher, Core Education,
Christchurch

Table of Contents

Executive Summary	3
Themes.....	3
1. Overall impression of the online network of provision pilot.....	3
2. Project sponsorship, communications, organisation and change management ...	3
3. Project and team management	3
4. Professional Development (PD).....	4
5. Workload.....	4
6. Technical and administrative support.....	4
7. Project resourcing.....	4
8. Differences in institutional academic, administrative and technical processes	4
9. Collaboration	4
Key principles.....	4
Principle #1 – Project Championship.....	4
Principle #2 – Project Management.....	5
Principle #3 – Professional Development	5
Principle #4 – Tutor Workload.....	5
Principle #5 - Support.....	5
Principle #6 – Project Resourcing.....	5
Principle #7 – Differences in institutional processes and structures	5
Principle #8 - Collaboration	5
Summary Description of the Project.....	6
Introduction	6
Description of Pilot Project to Date	6
Research Project Rationale	7
Research Methodology Design.....	8
Research Project Objectives.....	8
The Three Cycle Spiral Action Research approach	8
Research Project Outputs	10
Rationale for recording phone interviews with project participants.....	11
Developing recorded phone interview questions	12
Interview process	12
Themes generated from the interviews	12
1. Overall impression of the online network of provision pilot.....	12
2. Project sponsorship, communications, organisation and change management .	13
3. Project and team management	15
4. Professional Development (PD).....	17
5. Tutor Workload	20
6. Technical and administrative support.....	22
7. Project resourcing.....	24
8. Differences in institutional academic, administrative and technical processes ...	26
9. Collaboration	28
Conclusions.....	30
References	35
Appendix 1: Graphic Representation myLearn Pilot Action Research Groups.....	37

Executive Summary

This report covers the activities of cycles 2 & 3 of the Participatory Action Research (PAR) project investigating the tutor and learner experiences of the myLearn Network of provision pilot project as well as those of support and administrative staff. It also covers the technical and administrative impact on institutions.

The myLearn pilot project itself was designed as a proof of concept for networking the Moodle eLearning environments of the six TANZ member institutions. This objective was to test the network's ability to enable the sharing of courses, learners and tutors. Moodle is an open source online Learning Management System that has had extensive development and wide adoption in New Zealand. The pilot consisted of six NZ Diploma in Business courses being delivered, (one from each of the six TANZ members), via the Moodle network. All courses were delivered online with varying levels of face to face support at each institution.

The present research project employed a three cycle "Daisy Model" methodology for Participatory Action Research, in order to investigate teaching and learning issues associated with the pilot project. However the research methodology was modified in the third cycle to minimise the inconsistency of responses from the original core research group. This was done by the addition of the eLearning Advisor at each institution as co-core researcher and the use of recorded phone interviews to gather the relevant data and reflections. (See appendix 1 for illustrative diagram)

This research has so far generated a wide range of findings which, for the purpose of this report, have been organised according to their relevance to the original research objectives, namely:

- determining what the impacts are of delivering fully networked online/blended courses are on learners; teachers, institutional practices and learning support;
- determining what the technological and administrative constraints and issues are in networked provision delivery;
- determining what the staff professional development needs are in networked provision delivery to assure highest quality teaching and learner support and engagement;
- determining the range of co-teaching and blended delivery options and strategies that can be implemented in a widely distributed network of provision;
- creating and documenting a robust set of guidelines for, and emergent grounded theory about networked provision of blended eLearning courses;

Themes

Eight themes were generated from the interview process:

1. Overall impression of the online network of provision pilot

The universal view of those interviewed was that it was a very successful project that engendered great enthusiasm for the possibilities and potential of this type of network, notwithstanding the problems, frustrations and the complex issues involved.

2. Project sponsorship, communications, organisation and change management

A key to successful inter-institutional and intra-institutional collaboration is the championing of the project within an institution at a sufficiently senior management level, so that adequate resources can be ensured and inter-departmental communication, conflicts and issues can be appropriately managed.

3. Project and team management

One of the main themes to emerge from this interview process was the manner in which the project was managed at each institution. While the TANZ project team established the overall framework and structure, it was left to each institution to manage their end of the project in the way they thought best. Each institution managed this project in a different way.

Some took a project team approach and appointed people to particular roles to manage and coordinate different levels of activity. Other institutions took a more “hands off” approach and left much of the organising to the eLearning Advisor or the Moodle Administrator. Others approached this in a way that fell somewhere between the other two poles.

4. Professional Development (PD)

The critical need for online tutors to access appropriate PD in a timely manner prior to teaching in a networked online course was a major theme to emerge from the interviews. This fell into two broad streams, training in Moodle, the online delivery platform and experience in online facilitation.

5. Workload

The issue of the heavy workload generated by the pilot, and experienced especially by the tutors teaching online for the first time, was commented on by virtually all the participants in the interview process. In particular the issue of a general lack of support, and in some cases a lack of a functioning project team from which support could be expected, was of significant concern.

6. Technical and administrative support

The theme of support was also a significant concern for the interviewees and was focused on two sub-themes, Moodle technical and operational support and administrative/project support. While technical support was an obvious and well recognised need, the high level of administrative and project support required was, in general, not well anticipated or addressed.

7. Project resourcing

The theme of project resourcing is one that emerged quite forcefully from the interviews, with a general consensus that resourcing was, for the most part, inadequate and resulted in unreasonable levels of workload, stress and, in some cases, poor student support.

8. Differences in institutional academic, administrative and technical processes

This theme was one that brought home to the key project participants the very real differences that the TANZ institutions have in terms of their institutional, academic, administrative and technical structures and processes. These differences account for some of the complexities encountered in this pilot especially around communications and information sharing and exchange.

9. Collaboration

One of the main reasons cited by the respondents for the success of the pilot, was the high level of collaboration, inter-institutional cooperation and support that was a significant feature of this pilot.

Key principles

Highlighted here are the key principles that have been developed as a result of completing the eLearning network of provision pilot. These form the basis of a set of guidelines and recommendations that have been developed as an outcome of the completed pilot project.

Principle #1 – Project Championship

A key to successful inter institutional and intra-institutional collaboration in eLearning network of provision project is the **championing** of the project at a sufficiently senior level within the institution’s management structure. This ensures that adequate resources can be made

available and that inter-institutional and internal communication, conflicts and issues can be appropriately managed.

Principle #2 – Project Management

The complex demands of an eLearning network of provision collaboration are such that a **project management and project team approach** by each of the participants is required in order to manage the technical, academic, administrative, internal and external communications, learning support and teaching tasks involved.

Principle #3 – Professional Development

Tutors expected to teach in an eLearning network of provision environment should have prior eLearning facilitation experience and familiarity with the delivery platform. The added complexity of the networked environment makes it unrealistic to assign teachers inexperienced in eLearning delivery without providing ready access to appropriate **eLearning professional development** and training in the use of the delivery platform and adequate and appropriate support during course delivery.

Principle #4 – Tutor Workload

Adequate allowance should be made for online teaching hours that realistically take into account the online teaching experience of tutor and the added complexity and additional administrative course **workload** that the eLearning network of provision entails.

Principle #5 - Support

The additional complexity and high levels of intra and inter-institutional communications, the **administrative workload and technical support** required in an eLearning network of provision should be acknowledged and accepted by senior management and appropriate and adequate levels of support be provided .

Principle #6 – Project Resourcing

An eLearning network of provision initiative requires a higher level of **resourcing** than that usually required for non-networked modes of online delivery, particularly in the set up phase of the collaboration, and as such should be planned for and appropriately and adequately resourced.

Principle #7 – Differences in institutional processes and structures

Different institutions involved in a network of provision of eLearning courses will have **different administrative, academic and technical structures, processes and roles**. These must be recognised, accepted and ways found to accommodate these realities and mitigate the potential problems they may generate.

Principle #8 - Collaboration

Collaboration cannot be mandated. It must arise out of a history of consistent behaviour, integrity, trust, a willingness to listen, a commitment to share experience and knowledge and an ability to put aside tendencies for patch protection and exclusivity of ownership.

Summary Description of the Project

Introduction

This Participatory Action Research (PAR) project was designed to investigate and evaluate of the impact on learners, teachers, and institutional practices of a pilot programme that networks the delivery of the New Zealand Diploma in Business from the 6 institutions that make up the Tertiary Accord of New Zealand, (TANZ). These are:

- Northland Institute of Technology (Northtec)
- Eastern Institute of Technology (EIT)
- Universal College of learning (UCOL)
- Nelson Marlborough Institute of Technology (NMIT)
- Christchurch Polytechnic Institute of Technology (CPIT)
- Otago Polytechnic

Description of Pilot Project to Date

The pilot project which was the subject of this action research was a proof of concept project designed to test the technological, human and organisational capability of the six TANZ institutions to network, and share teaching, learners, courses and resources across all the institutions. To do this, six papers in the New Zealand Diploma in Business (NZ Dip Biz) were offered to selected learners in each of the six regions that the TANZ institutions service.

Each TANZ member institution offered one paper in the NZ Dip Biz and learners from each region were enrolled in a single online paper through their home institution. The paper chosen may have been delivered by another institution, and support for the online learning experience was provided by the learner's home institution as well as the course tutor. For the purposes of the pilot and to make some administrative tasks easier to manage, the delivering institution's course and academic regulations were adopted and results passed onto the enrolling institution for ratification and recording.

The six papers that were delivered are as follows:

- NZDB 400 Accounting Principles (delivered by NMIT)
- NZDB 510 Commercial Law (delivered by CPIT)
- NZDB 130 Organisation and Management (delivered by UCOL)
- NZDB 541 Fundamentals of Marketing (delivered by Northtec)
- NZDB 550 Business Computing (delivered by Otago Poly)
- NZDB 630 Leadership (delivered by EIT)

Using the network capability of Moodle (an online learning software delivery platform, Learner Management System - LMS), each institution delivered a single paper to 6 groups of learners drawn from each of the 6 TANZ regions. This pilot was designed to test a fully flexible network of provision and was intended to achieve the following goals:

- Sharing programme/course content, course information and materials; and student management data across the 6 TANZ institutions;
- Testing the technology framework that enables learners at one institution to access taught courses, resources and learning materials from partner institutions through a "single sign on" login process, while retaining the home institution's logo and other brand identification;
- Co-teaching 6 NZ Dip Bus Papers courses/programmes thus leveraging expertise across the whole learning and teaching network and evaluating the issues, benefits and possible downsides of this strategy;
- Providing a measure of sustainability for important and specialist programmes/courses made marginal by low local numbers through harvesting learners from partner institutions and / or through shared teaching and delivery;

- Broadening learner access to a wider range of education and training options than may be obtained locally.

Research Project Rationale

TANZ has had 6 years experience in designing, developing and delivering eLearning programmes and courses to a wide range of learners in a wide range of contexts. Each of these projects has been accompanied by rigorous evaluation research (see Winter (a), 2004, Winter (b &c), 2005, Winter (d & e), 2006, which has informed the design, development and facilitation of subsequent courses. In particular, issues of eLearning course design, along with learner attrition and early withdrawal from online courses have been raised and research undertaken to determine some of the factors that lead to learners dropping out early from online courses (Tyler-Smith, 2005, 2006, 2007)

In addition to these developments, TANZ has also made programmes available to both member institutions and institutions outside TANZ. To support this course distribution, a system of online tutor support, management of course updating and quality assurance has been implemented as well as a range of documented policies, procedures and protocols that govern the collaborative development, design and delivery of online courses. This foundation of collaborative practice has proved essential in the implementation of the pilot and, in large measure, responsible for its success.

Little research exists on eLearning collaboration between institutions of further or higher education. What research there is generally focuses on attempts to create a virtual university network with a consortium of universities to share development and delivery of courses between the members of the consortium. (Duin and Baer, 2000, Lepori, Rezzonico and Succi, 2003, Pollmann, 2004) The stumbling blocks with many of these collaboration attempts between institutions in the development of shared eLearning courses resources and delivery is comprehensively pointed out by Georgieva, Todorov and Smrikarov in their 2003 paper "*A Model of a Virtual University – some problems during its development*" in which they point out 13 unresolved yet mission critical issues including: Accreditation, Copyright Issues, Quality Assurance in Learning, Mechanisms for Student Examination and Evaluation, Pricing, Communications, Administration, Common Credit System and Content of Learning Materials.

Successful collaborations, such as the Open University of Australia, tend to work as brokering arrangements managed by a centralised clearing house which handles enrolments on behalf of the institutions and funnels students to specific institutions for their study. There are other examples of successful collaboration, but these are generally involve joint or collaborative developments of Reusable Learning Objects (RLOs), (Leeder et al, 2004), usually in response to government funding initiatives. While these institutions are happy to participate in setting up project teams, the actual products of these collaborations do not generally impact on the institutions themselves in anything other than a circumscribed and peripheral way; they do not engage the institution in a manner that is likely to change practice.

The TANZ eLearning network pilot is unique in that it is built on a number of years of successful collaboration between the member institutions during which time many of the issues, that are often viewed as problematic in terms of collaboration, have been addressed. Where there are issues for which there is no ready resolution or agreement, mechanisms and protocols have been developed to deal with divergent needs and opinions.

This project is designed not only to understand and resolve the technical issues involved in a network operation, but to also to leverage the collaborative capability that has already been developed among the TANZ group. This Participatory Action Research project has been designed to investigate the human factors and organisational issues such sophisticated and complex collaborations generate. It is particularly concerned with the experience of those most closely engaged in the actual network of provision delivery.

Research Methodology Design

The research methodology employed for this pilot project was based on a 3 cycle variant of that proposed by Melrose and Reid (2000), in their “Daisy” Model for Collaborative Action Research. This approach in turn is based on work by McTaggart (1998) Winter (1996) and Zuber-Skerrit (1992).

The “Daisy” model uses small teams of action researchers in a range of related “mini-projects that contribute to a larger whole. In this case each of the six TANZ institutions provides a venue for the research, focused around that institution’s delivery of a NZ Dip Biz paper. Each group of researchers concentrate on delivery of their institution’s NZ Dip Biz paper and this becomes their mini project.

In the original design of the research project each tutor responsible for teaching/facilitation of a NZ Dip Bus paper also had the role of core researcher in a group of action researchers from the 6 TANZ institutions. They in turn were to work with a small team of stakeholders in their own institution involved in the blended / online delivery of the course. In general, this team was to include the programme leader; the eLearning advisor and IT support person and other staff members as required.

The core group members formed a Community of Practice (COP) under the guidance and support of a research facilitator. This group was expected to meet regularly, either face to face or virtually, via internet meeting software to discuss the progress of the pilot, their particular issues, concerns, observation and insights and contribute to the development of guidelines and grounded theory focused on the networked delivery of education and training.

These core group action researchers were also expected to maintain an ongoing journal of reflection on and description of the pilot project issues, concerns and achievements using a web log (blog), to record their experience and the insights of their individual team.

In most cases learners for the myLearn pilot were specially selected from outside normal enrolment channels and were offered free enrolment by way of a scholarship in recognition of their participation in the pilot project and agreement to participate as research project subjects.

Research Project Objectives

Through a structured investigation this research project has addressed the following objectives:

- determining what the impacts are of delivering fully networked online/blended courses on learners, teachers, institutional practices and learning support;
- determining what the technological and administrative constraints and issues are in networked provision delivery;
- determining what the staff professional development needs are in networked provision delivery to assure highest quality teaching and learner support and engagement;
- determining the range of co-teaching and blended delivery options and strategies that can be implemented in a widely distributed network of provision;
- creating and documenting a robust set of guidelines for and emergent grounded theory about networked provision of blended eLearning courses;

The Three Cycle Spiral Action Research approach

This Action Research project is using a three cycle, reiterative and spiral methodology, wherein each cycle re-examines, reflects and builds on the experience, data and outcomes generated in the previous cycle.

In this case the author has named three cycles spiral “Reconnaissance”, “Re-Design” and “Re-evaluation”.

Figure 1 graphically illustrates this spiral cycle approach.

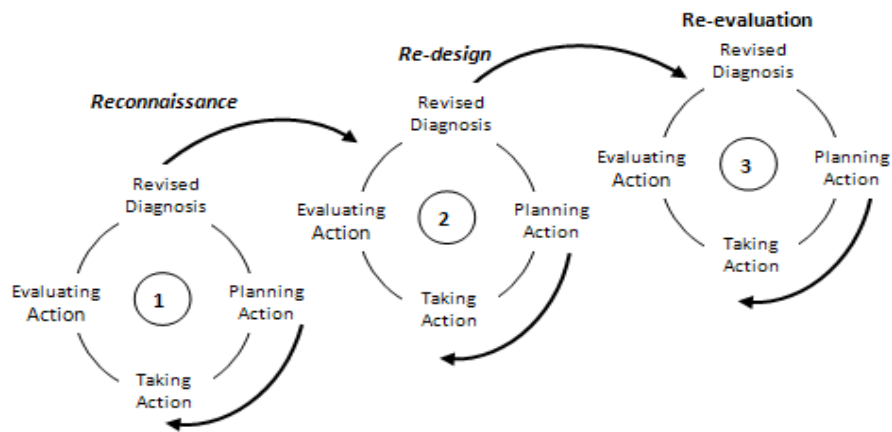


Figure 1: The 3 Cycle Spiral (after diagram from Coghlan & Brannick, 2001.)

Cycle 1: The Reconnaissance Phase This phase is completed and involved an exploration of the issues generated by the start up phase of the pilot of the myLearn networked online delivery of the NZ Diploma in Business.

Cycle 2: The Re-Design Phase. This cycle focussed on reviewing, in depth, the action research methodology employed in the start up phase of the pilot. This involved an examination of the experience of tutors and others closely involved in the pilot in order to address any shortcomings in the research design model or issues raised as a consequence. In addition it also examined the learners' experience, and reviewed the technical and administrative issues and any course learning design issues generated by the pilot.

To facilitate this re-design phase a one day workshop was conducted to which the eLearning tutors, eLearning advisors and programme leaders from each institution were invited. This workshop generated a good deal of data and led to a re-design of aspects of the delivery model, as well as strong recommendations for those aspects of the start up that would not impact on the balance of the pilot's implementation. This cycle was completed and reported on in late September 2008. (For details see http://www.tanz.ac.nz/projects_and_achievements/research.php).

The present report covers the 3rd and final phase of the PAR project:

Cycle 3: The Re-Evaluation Phase covered the entire pilot project and involved a re-design of the Action Research effort. In response to concerns raised at the re-design phase workshop (Cycle 2), about the workload for tutors and their consequent inability to contribute meaningful reflections on their practice and experience, it was decided that a series of recorded phone interviews would be used to collect this data. In addition, it was realised that the eLearning Advisors had a much greater depth and breadth of involvement in the project and a wider perspective of the operational issues than almost any other stakeholder in the pilot. Accordingly, it was decided to include this group in the phone interview process.

Recorded phone interviews were conducted with a total of 14 tutors and eLearning advisors over a period of three weeks. The recordings were then transcribed and form the majority of the Research Outputs section of this report.

Research Project Outputs

Workshop

A final workshop intended as a project wrap up for the pilot, was scheduled for early December. Initially it was intended that a combined tutor and eLearning Advisor group would be the primary participants. As it transpired only two tutors were available to attend as the others were either off contract, tied up with marking, involved in a detailed institutional review process or were presenting at a conference. Rather than cancel the workshop, it was re-focused to address a range of issues generated by the pilot and of concern to the eLearning Advisors. The workshop was attended by almost all the eLearning Advisors associated with the pilot. This workshop discussed and generated action points for the following:

1. Review & further development of joint eLearning PD offerings
2. Development of course design approaches to facilitate future collaborative course developments
3. Development of common course design standards to facilitate consistency of design, pedagogy and assessment practices
4. Development of recommendations for alternative assessment strategies appropriate for online delivery.

Workshop Outcomes

Through the collaboration of the six TANZ institutions in this pilot, there was recognition that each institution had a significant need for, and had undertaken or were about to undertake, development of online tutor professional development support resources. It was determined that the eLearning Advisors as a group, should further collaborate to develop a suite of short online courses designed to provide inexperienced online tutors with appropriate professional development and training. This would not only spread the resource and workload of course development throughout the TANZ group, but would also considerably speed up the design and development process of such courses.

Further it was determined that the most effective approach would be to design the courses as short just in time training episodes that could be done with or without assessment. For those interested in gaining credit for their online professional development assessment for credit could be undertaken as a matter of choice. It was also proposed that these short courses could be aggregated to provide a 15 or 20 credit module at NQF level 5, which might easily be incorporated into each institution's Certificate in Adult Teaching (CAT) programme.

Following the workshop a working party was set up to develop the following online courses for novice online tutors:

1. An introduction to online learning with Moodle
2. Using Moodle to enhance teaching & learning
3. Online facilitation
4. Online assessment strategies
5. Designing your online/blended courses

Some of these courses build on several short courses that have already been developed or are currently in development at different institutions. Work is underway on developing a detailed proposal to go to the CEs of each institution for ratification and sign off. The proposal also includes the following optional short course offerings to be considered:

1. Using free internet tools to enhance teaching and learning
2. Using other technologies to enhance teaching and learning
3. Developing your personal learning network
4. Intro to mLearning

Rationale for recording phone interviews with project participants

With the difficulty experienced in persuading the tutors to take on the role of core researchers and journal their reflections on their eLearning practice experiences, it was considered appropriate to gather the necessary data through a recorded phone interview process. This approach was suggested by the lead researcher following discussion with the research supervisor and agreed to by all participants.

The difficulties encountered by the tutors in fulfilling a core researcher role, was due to a variety of circumstances and conditions. The unexpectedly heavy workload tutors experienced, particularly in the start up phase of the project, deflated any enthusiasm they may have had for reflecting on their online experience.

The original action research design was probably over ambitious and complicated given the complexity of the project. The demands made on those involved and the operational realities of six institutions collaborating to deliver six different papers, one from each institution and, in turn, managing learners from those six different institutions, were sufficient to render the original Participatory Action Research project design unworkable.

Another difficulty was the relative inexperience of the online tutors involved in the project. This not only resulted in the heavy workload mentioned above, but also provided little in the way of relevant experience on which to draw and on which to reflect. This also had an inhibiting effect on committing thoughts and feelings to a record that could be viewed by others. The lack of thinking space, time and some conceptual model of what “reflecting on practice” actually means; and little previous experience with action research – further inhibited any attempt to set up and record reflections in an electronic journal.

Some tutors attempted to set up and record reflections on practice and the detailing of issues and events, but none of these attempts lasted for more than a couple of weeks. There was however a considerable number of contributions to the discussion forums set up on the project support site. This generated a lot of data about the issues and difficulties. In addition the regular virtual meetings, using interactive synchronous virtual meeting software such as Elluminate, provided opportunities for the active participation of tutors and eLearning Advisors. This also generated data on the significant issues and events of the pilot.

What was lacking however, were the individual reflections on the experience of the pilot, especially those of the online tutors. This then was the impetus to use a more pro-active approach by conducting phone interviews with each of the key pilot project participants.

Redesign Cycle

It can be argued that this departure from the original Participatory Action Research design for the project is one of the strengths of the Action Research methodology, in that the cyclical review of the methodology provides the opportunity and flexibility to respond to the realities faced in implementing the methodology. In this case there were two primary reasons for introducing another approach to achieving the reflections, insights and experiences of the participants. In the first place, the tutors’ workload issue, and general lack of experience made it impractical and unworkable to rely on the tutors to record their reflections individually. The other reason was the realisation that in fact the eLearning Advisors and not the tutors were the key actors in this project. Their much greater level of experience of eLearning practice and theory and their privileged context in which they has access to key actors across their own organisation and extensive networks with colleagues in other institutions, even beyond the TANZ group of institutions, meant that perhaps the role of key researcher should have been a shared one with the course tutors. In hindsight it would have been sensible to involve the eLearning Advisors in the initial PAR design process and the early workshops.

The phone interview process was seen as a realistic alternative to the original notion of individual reflective journals authored by the core researchers with input from others in their PAR team. In fact, the phone interview process which used a guiding set of questions produced as deep a level of reflection and insight as could be expected in the original design, perhaps even deeper. One main advantage of this approach meant that the questions used provided a quite tightly focused set of responses which made it easier to extract themes and similarities of experience. These were used to compare and contrast in the data analysis phase of the research. These insights and reflections on experience provided excellent macro level data about structures and organisational relationships that might not have been unearthed in purely personal reflections.

One important lesson learned from this PAR project is that far more time and support for scaffolding and discussion is needed in order that participants can practice individual reflection, than was allowed for in the original research methodology design. Only in this way can a culture and climate be created in which Action Research is seen as an important activity for front line educators. The tight constraints of availability, time and workload compromised the original research design concept and rendered it unworkable. However the research objectives were met through a timely shift in focus and methodology brought about by the collective experiences and insights in response to the realities of the situation.

Developing recorded phone interview questions

The questions for the recorded phone interviews were developed in consultation with several experienced researchers. The questions sought to gather personal reflections and insights into the experience of participating in the pilot project and to highlight issues, successes and challenges that were encountered. The purpose of these questions was to guide the progress of semi-structured interviews, rather than to be a rigid structure to be strictly adhered to. Copies of the questions used in the interviews are given in the Appendix to this report.

Interview process

The six tutors and seven eLearning Advisors, who were directly involved in the pilot, along with the TANZ eLearning content developer, (who had overall Moodle LMS administrative and support responsibilities for the pilot), were interviewed for this report. Each person was phoned at a pre-arranged time and the interviews were recorded directly to computer using a modified phone and Audacity audio editing software. Each interviewee was provided with a copy of the questions to be covered prior to the interview and was informed that the interview would be recorded and the outputs from the interviews would form part of the project's final report to AKO. The interviews were then transcribed into individual word documents, one for each interviewee and selected comments were then compiled into a report structure document that itemised the major themes that emerged from the interviews.

Themes generated from the interviews

1. Overall impression of the online network of provision pilot

Each respondent was asked for their overall impression of their involvement in the pilot. The universal view was that it was a very successful project that engendered great enthusiasm for the possibilities and potential that the pilot raised, notwithstanding the problems, frustrations and the complex issues involved.

- *I though it was very exciting project to be involved in and I think we've learned a huge amount both as participating organisations and as individuals.*

- *I think overall the project's exciting, the concept's exciting, I think the ability to deliver specialist papers or courses (in this way) is a very sound idea and I was very pleased to be involved, at this end of it anyway.*
- *I see real benefits in it. I get very excited about the possibilities it opens up and it's all this sharing of good practice and pooling all our good ideas, it's the way of the future.*
- *I think it's great actually. Like I know there have been problems, but I think it's been a wonderful initiative and what really impresses me has been the spirit of collaboration – there's a lot of good will out there (for the project)*
- *It's a brilliant innovation - I think it has been a very interesting project and it's opened up a fascinating set of possibilities.-*
- *It was good. At first there was a couple of week's frustration, but that was inevitable. I think it's been a very good project, I think it's been very well supported overall, nationally by the TANZ team. It was professionally done.*
- *I just hope it continues, I think it's an excellent concept. I can see a huge future in it and I'd be sad if nothing came out of the pilot. It's a very clever idea and it's worked well.*
- *It was very intense much more so than I thought it would be before, even when I read the project plan. But in the end it's been pretty exciting being a part of it and I think we came across some things that are quite significant in terms of new opportunities that became apparent. They weren't necessarily part of the aim of the pilot, but looking back on it they are perhaps some of the most important things to come out of it, for me anyway.*

Discussion

From the outset, this project was seen by many participants as offering great potential for increased flexibility, access and efficiencies in course delivery. The fact that this was a world first and based on networking technology pioneered here in New Zealand added to the excitement and enthusiasm of those who recognised its potential. There were those who were sceptical, especially in the early stages when the workload, technical and administrative complexities became evident, but even those who began with doubts and reservations, became enthusiastic promoters and supporters of this eLearning network of provision pilot as it unfolded.

2. Project sponsorship, communications, organisation and change management

It should be recognised that initiatives such as this pilot impact on the institution in ways that cannot always be foreseen. Added to this, people within institutions are often already very busy and have heavy demands placed on them. Without appropriate project sponsorship and change management processes, projects of this sort can often be seen as just one more thing to deal with, a disruption to normal well grooved institutional processes; not necessarily a priority and can even engender resentment and /or a reluctance to engage and provide the necessary collaborative support. This is suggested by the following comments:

- *I think it's really important to have someone senior, a senior manager to sponsor the project. I think one of the challenges we had this time was that this kind of sponsorship was not really evident or clear so that other parts of the organisation that were involved, or impacted did not cooperate, or contribute in a way as they would have done if there was a strong sponsorship from a senior level. So to definitely have someone at a senior level sponsoring that saying this is important just to make sure that the cross functional and cross departmental cooperation happens, otherwise with a project manager who has no influence over those people it a big challenge to get things done.*
- *I think the approach we took was the right one. We had a good team, especially with (our*

project leader). She was high enough up in the organisation to make sure things got done.

- *I also think we must have a sponsor, high enough in the organisation so that when things don't go well it can be sorted out really quickly and have the weight of the organisation behind it. This pilot touches on so many parts of the organisation that don't usually work together, do not share processes or policies or whatever. It's quite important to have that high level sponsorship because the different departments don't see this necessarily as a departmental priority because they don't have a high enough level perspective to see why it's important for the whole institution and not just their patch.*
- *I think that parts of the organisation might have felt a bit threatened by the pilot or resentful and not collaborating on purpose or not supporting it and because there was not a sufficiently strong message from the senior management I think it was a bit of a challenge here.*
- *I think my experience with this project has been clouded or coloured by all the institutional restructuring that was occurring at the time. The change in roles, the change in positions, change in the units, you know everything! So that really influenced everything that was done here and our approach to it (the pilot). So that was the state of flux we were in at the time. So essentially there were breakdowns in communication.*
- *For me clarity around roles was the thing. And the other thing I need to be clear about is who in the other organisations are carrying out the other roles and the same in my organisation. So I need to be clear about my role and a very up to date list of who does what in the participating institutions.*
- *I think the essential thing is communication and transparent communication. Have clear well defined structures, and people knowing exactly what their role is – like any project. I think this one fell through the cracks a bit.*

Discussion

eLearning in general and online network of provision in particular is still not sufficiently well understood and / or accepted by or integrated into most polytechnics, for it to be regarded as business as usual. Consequently, many of the additional or alternative administrative and academic policies, systems and processes required to support eLearning initiatives at an institutional level, have yet to be established. When an eLearning project, especially one of the scale and complexity of the online network of provision pilot is initiated there is a critical need for active senior management support and promotion within the institution. Affording such projects a sufficiently high level of priority and having someone sufficiently senior in the management hierarchy as the project's champion, should draw attention of those outside the core project team to the importance placed on the project by senior management and ensure the efficient and smooth facilitation of the project's passage.

In some cases there was a lack of clarity around roles and responsibilities and a lack of organisation that allowed some critical information sharing to fall through the cracks. In the main there were two issues around communication and organisation. One involved internal communication between different parts of the institution. The other concerned the extremely high level of communications traffic that occurred via the online Project Support Site, particularly in the run up to launching the courses. This traffic involved all the participants across the six institutions and demanded skilful organisation and management. The extreme level of communications traffic was a problem for some as it led to information overloading and important information not being picked up. This latter aspect of the communications traffic has been dealt with in an earlier report.

Recommended guidelines

1. Once the decision is made to embark on an online network of provision a sufficiently senior manager in the institution should be appointed to champion, oversee and provide a governance role for the project.
2. The role of project champion should include the ability to secure adequate resourcing for the project, ensure appropriate PD is made available where required and address and manage cross institutional issues and conflicts.
3. Project sponsorship is most necessary where there is no previous experience to draw on, and should primarily focus on the development of appropriate capabilities, establishing communications pathways, relevant systems and support processes.
4. Projects of this nature can have a disruptive effect on an institution's day to day functioning and introduce new and sometimes complex challenges; accordingly these challenges and changes will need to be addressed and managed appropriately, to ensure "buy in" from across the institution and mitigate potential barriers and the level of disruption to institutional procedures and systems.
5. Information about the project needs to be communicated across the institution so that all those who may be called on for their assistance and cooperation with the project are aware of it and of the expectation that they will provide their support.
6. Roles and responsibilities need to be identified and made clear to all project participants as early as possible.
7. Inter-institutional communications need to be formalised and agreement reached by all parties on the modes and formats of communication and the responsibilities and roles involved.
8. As early as possible the project leaders /managers in each institution should agree on what distributed network tools will be used for keeping all the stakeholders informed about issues, decisions made and processes to be adopted, without overloading individuals with excessive amounts of electronic communications.

Principle #1

A key to successful inter institutional and intra-institutional collaboration in eLearning network of provision project is the championing of the project at a sufficiently senior level within the institution's management structure to ensure that adequate resources can be made available and that inter institutional and internal communication, conflicts and issues can be appropriately managed.

3. Project and team management

One of the main themes to emerge from this interview process was the manner in which the project was managed at each institution. While the TANZ project team established the overall framework and structure, it was left to each institution to manage its end of the project in the way it thought best. Each institution managed this project in a different way. One took a project team approach and appointed people to particular roles to manage and coordinate different levels of activity. Other institutions took a more "hands off" approach and left much of the organising to the eLearning Advisor or the Moodle Administrator. Yet others approached this in a method that fell somewhere between the other two poles as illustrated in the following comments:

- *I was really quite impressed with our early commitment to the project and commitment to putting a project management structure around it here, which I think we haven't done to well in the past, but we are now ready to start using it more formally.*

- *From a project management perspective, it needed more milestone check points, even a project team*
- *(You need to), make sure you had a team around you and you didn't try to do it all on your own. The team means you can provide the sort of support learners need.*
- *I think half the time they (tutors) just get dumped in it without any training and little support. This goes back to the project approach. If it's managed properly then the training would get factored into it as part of the preparation for the project. I think a lot of what happens that it's not set up as a project and it just sort of happens and the people involved get brought in at the last minute. It might have been talked about several months prior, but they don't get round to involving the main players until the last minute and therefore they do just get dropped in it.*
- *Try and establish a team of people right from the start – the right people – in this particular project a lot of those that were there at the start, were not there at the end. I think working out who are the key people to have, which I think we learned from this project. I think we have an idea of who the key people are, or at least the roles needed at each institution..*
- *I would suggest first of all to definitely having a project team and a project manager to manage that. So a larger team presence as well as the smaller hands on team involvement and that would have involved the organisation better and would have highlighted the issues that we run into.*
- *I don't think educational institutions have a project management culture. They may use it if they are changing the finance system or the payroll system or something like that, but not for projects like the pilot. It's usually down to the tutor or the programme manager and they don't have that sort of experience or inclination. So getting a project team together at the start and having someone project manage it with some idea of what to do is so important.*
- *I also think it's important that for our institution we don't underestimate the planning and management that goes into a project like this and you can't just add it on top of the workload. To be honest, quite often in any sort of eLearning project, it's not recognised that that is actually a part of developing eLearning courses. In fact it was in this case, in something like this where you are collaborating with 5 or 6 other institutions, even if it was two institutions that just increases how much project management there is. I think that's just something we have to build into all our project of this sort, not just the networked delivery.*
- *I would say that anything to do with online course development is a major project – the expectation around here is that teachers are asked to take on online course development at a drop of a hat, with little if any extra time allowance or resource. It needs to be treated like the major project that it is and be managed and resourced accordingly.*

Discussion

The project team approach provided the benefits of clear and timely communication and a smooth operation. The “hands-off” approach tended to result in an increased workload for the tutor and less effective intra and inter institutional communication and a less well organised operational process. The comment made above about the lack of a project management culture in polytechnics is a pertinent one that is particularly relevant to eLearning development and delivery and especially in a network context. This was borne out comprehensively through the pilot, and this suggests that more attention should be paid to using more formal project management practices in this context.

The issue of support is closely linked to the degree to which institutions subscribed to, endorsed and resourced a project management approach to the pilot. Where this was recognised as an important aspect of successfully running an online network of provision initiative, support for tutors, learners and others closely associated with the pilot was well managed, coordinated and integrated. Where it was not committed to as an approach, support was patchy, uncoordinated and in some cases, led to tutors withdrawing from the courses they were teaching. The resulting impact on learners was also significant and unsatisfactory with some courses experiencing high levels of student attrition in response to changes in tutors and the resulting lack of continuity and dissipation of cohort cohesion. The start up phase of any network of provision initiative is the critical period requiring the management of a project team, once the courses are up and running and the courses bedded in the demand on the project team reduces significantly.

Recommended guidelines

1. Each institution involved in an online network of provision initiative should set up a specifically constituted project team to manage the internal and inter-institutional communication complexities and administrative activities.
2. Once a decision has been made to engage in an online network of provision initiative, a project team should be established, resourced and mandated to operate at the earliest opportunity.
3. Project team roles should be identified as early as possible, and where appropriate, to be common between participating institutions in order to reduce confusion and aid smooth and efficient transmission of information within and between institutions.
Project teams should consist of at least the following roles, particularly at the inception of a project:
 - Project Sponsor (a senior manager responsible for establishing and governing the project)
 - Project Manager (Should have project management experience and may be doubled up with another role)
 - Course tutor
 - eLearning advisor (in many cases this role may be doubled with that of Project Manager)
 - Course coordinator/administrator (this role may also be doubled with that of First Point of Contact person responsible for fielding enquiries from other institutions and requesting course related information from other institutions))
 - Moodle Administrator and/or ITC representative
 - Enrolments/Registry representative
 - Library /Learning Services representative
 - Programme Leader/Manager

Principle #2

The complex demands of an eLearning network of provision collaboration are such that a project management and project team approach by each of the participants is required in order to manage the technical, academic, administrative, internal and external communications, learning support and teaching tasks involved.

4. Professional Development (PD)

The critical need for online tutors getting access to appropriate PD in a timely manner prior to teaching in a networked online course was a major theme to emerge from the interviews.

This fell into two broad streams, training in Moodle (the online delivery platform) and experience in online facilitation. The following comments illustrate the issues:

Moodle Training:

- *(Online tutors) need to be really comfortable with the Learning Management System, (Moodle.) They need to do training, not just in online facilitation, but they also need to become familiar with the system (Moodle). Doing it as they go simply adds to the workload and adds to their stress and I found that that's a real big one.*
- *Because we were also using Moodle to communicate about the project some people couldn't be active participants in that because they were so unfamiliar with the Learning Management System. So they need training and they really need to have that before the project starts.*
- *Certainly making sure that they've got experience in using Moodle, and ensure they've got the basic skill set. Some tutors take to it (Moodle) like a fish to water, but others need a lot of support and training.*
- *One of the biggest problems is people simply not knowing how to do things, (in Moodle), especially when they are under pressure and ideally that's what should happen prior to them being involved in teaching online.*
- *I think perhaps if I had taken the time or perhaps get some training, (in Moodle), it wouldn't necessarily make it easier, but it would have taken a lot less time.*

Online Facilitation

- *A tutor really does need to have some experience in online facilitation, or being a student online or some form of professional development and training, otherwise their workload and stress just seems to increase and all these other things happen because of their inexperience and the challenges of dealing with the environment.*
- *I'd urge them (tutors) to spend some time just learning to deliver online before launching into myLearn or any collaborative projects like this.*
- *They (tutors) definitely need to have some kind of training like those online tutoring courses or something like that ideally before they get involved in actually tutoring and perhaps get some experience of being an online student.*
- *PD absolutely has a role. The confidence of someone stepping into that environment, if they have had some experience or had some PD or training, it's quite different.*
- *If they are experienced in eLearning and familiar with Moodle, it's probably fairly easy, I think the hard part is trying to do both of those plus get your head around the Network idea in one go. That's hard. I think it was a big ask, not only did they (tutors) have to get their head around eLearning they also had to get to grips with Moodle and other tools. It's very hard for instance to get your head around the idea of two or more Moodles talking to each other.*
- *If you can get a teacher to have a good experience with their first eLearning course, whether they are a student on a training course or are whether they are a teacher on an eLearning course – if they have a good experience then they are going to be excited about it and they are going to want to do it again. But if their initial experience is bad then it just colours the whole thing for them. So I think the training is absolutely essential.*
- *(Tutors need to) get some training. Become an online student and learn what it's like to be on the receiving end.*
- *We like our tutors to have at least done the Certificate in Adult teaching so they at least have some grounding in teaching learning theory and some sort of foundation on which to build, then to do some PD around facilitating online courses, it doesn't much matter what as long as they get exposure to the online environment and how it differs from*

classroom teaching

- *I think the biggest PD requirement is actually for the administrators – understanding what they are going to be dealing with and what their role is and how that might be different from an internal face-to-face delivery.*

Discussion

At least half of the tutors assigned to teach a networked online course in this pilot had little or no previous online tutoring or facilitation experience. This issue had two dimensions, experience with the online delivery platform and experience with actually teaching online. In the first instance, even those with experience and skills in teaching online had had little or no exposure to the Moodle platform. This created a double bind in that Moodle was also used as the main communication channel for technical, administrative and eTeaching community of practice information and knowledge sharing. In terms of online facilitation experience, the pilot showed that the assumption that good classroom teachers can teach online with little if any prior experience is spurious. This assumption not only adds significantly to tutor workload and stress, but also compromises the quality of the learner's experience.

Since the only online platform for the network of provision initiative is Moodle, it is both efficient and appropriate that it be used as the primary communication channel for sharing information, best practice and knowledge about the project. Moodle supports most of the tools that such communication requires, such as searchable Discussion Forums, email notice of Discussion Forum posts, wikis, chat and other tools. Other tools are available for supporting such communication channels, but their use requires all those involved to master several platforms rather than just one. This project did, however, make extensive use of virtual meeting software (Elluminate, hosted by Otago Polytechnic), which offered real time voice and visual communication and training opportunities with up to 12 participants at a time.

There were instances where an inexperienced tutor was used. The tutor was well supported by a properly functioning project team and mentored /coached by experienced people and provided with just in time PD. Where this strategy was adopted, it seems that the workload was more manageable.

For those new to online teaching and facilitation and/or the Moodle platform, PD support prior to taking on the role of online tutor in a networked course is essential, if the experience is not to be marked by unreasonably high levels of stress, frustration and workload and an unsatisfactory learner experience.

Recommended guidelines

1. Inexperienced online tutors should have adequate access to appropriate training in online facilitation well in advance of their being required to teach in an online course.
2. Inexperienced online tutors, required to teach in an online network of provision context, should also have adequate "at elbow" support and coaching in both online facilitation skills and the appropriate and effective use of Moodle.
3. To better understand and appreciate the eLearning experience from a learner's perspective, tutors new to the online context and who are required to teach in a network of provision initiative, should have the experience of being a student in an online learning course.
4. All tutors unfamiliar with Moodle functionality should have ready access to training and PD prior to teaching in an online course, particularly so in a network of provision context.

5. Allied staff, who are closely involved in an online network of provision initiative, should also receive training in the use of Moodle, particularly where this platform is also being used as the primary communication, knowledge/skill sharing and issues register platform.
6. PD focused on online learning pedagogy should also be made available, particularly in terms of understanding the value of alternative assessment strategies that are appropriate and relevant to the online context.
7. Where communications tools, including non-Moodle tools including virtual meeting software such as Elluminate, are used to support an online network of provision delivery, PD should also be provided for all those closely involved in this delivery, so that efficient and effective communication between all key stakeholders can be ensured.
8. As a continuous PD and capability building process, all those involved in an online network of provision delivery, both within and between participating institutions, should engage with and contribute to the sharing of experience, knowledge, skill development problem solving and information sharing in general, discipline specific and role specific communities of practice, set up in the project's Moodle communication channels space.
9. Where practical and appropriate, PD offerings for an online network of provision delivery should be developed and delivered collaboratively to all participating institutions so that consistency of message and training can be ensured and common understanding of issues and objectives can be established.

Principle #3

Tutors expected to teach in an eLearning network of provision environment should have prior eLearning facilitation experience and familiarity with the delivery platform. The added complexity of the networked environment makes it unrealistic to assign teachers inexperienced in eLearning delivery without providing ready access to appropriate eLearning professional development and training in the use of the delivery platform and adequate and appropriate support during course delivery.

5. Tutor Workload

The issue of the heavy workload generated by the pilot and experienced especially by the tutors teaching online for the first time was commented on by virtually all the participants in this interview process. In particular the issue of a general lack of support, and in some cases a lack of a functioning project team from which support could be expected, was of significant concern. Some of the following comments illustrate this concern:

- *This project was just added into our normal job and there was this huge expectation that we just fit it in, which we did, but it meant I hardly participated in the discussion forums or the wiki because I simply didn't have the time.*
- *I'd be a lot wiser going into it again and would have the sense to say no where I needed to or to say I need this or that. I would also be saying "Ok love to be involved in another project – what are you going to take off me so I can do a decent job on it?"*
- *I would block out some (regular) time, because I underestimated how much time it would require, I think I would pay a bit more attention to quality, therefore I would want more lead in time to address those things*
- *For a novice eLearning tutor they need to plan to spend a lot of time on it. It can be quite time consuming*
- *You know we had several tutors, but that wasn't to do with inexperience, the first tutor did have experience, but was more of an issue was the tutor workload. She already had several courses online and this project was added on top of everything else, and the fact*

that at the beginning there was no clear project structure, or roles, or responsibilities everything ended up being her responsibility and she just burned out very quickly.

- *More planning, more lead time, if adequate lead time is not available, then you need a well developed course ready to go - For a first time (online) teacher it was a major benefit to have a course already developed and ready to teach. If I had to start from scratch I wouldn't have been able to do it in the time, I would have needed six months at least to be anywhere near ready to teach it.*

Discussion

It must be recognised and acknowledged that teaching in a networked online environment imposes significant additional workload requirements on a course tutor due to managing the added administration and communication complexities that such delivery involves. This increase in workload is particularly significant during the start up phase.

There were several reasons for the reported high workload. In the first instance the use of inexperienced online tutors created a higher level of workload than if experienced tutors had been used. It is likely that some institutions had little choice as their pool of experienced online tutors, particularly in the specific course topic they were to be tutoring, was severely limited.

The problem for novice online tutors was that they had a considerable learning curve to negotiate in terms of becoming proficient in using technologies involved, the significant differences in skills required compared with those of traditional classroom teaching and the whole concept not only of online teaching, but of doing so in a complex network of provision environment. In addition the networking of courses across six institutions generated a great deal of communication about enrolments, text books to be used, on campus test and exam schedules, invigilation support and location logistics and a host of other incidental bits of information that would normally be managed out of sight of the tutor. In the networked environment this meant that without appropriate and adequate administrative support, these tasks fell to the tutor, thus contributing to the unduly heavy workload.

Even with online tutoring experience the lack of appropriate support led to at least one tutor pulling out of the pilot due to extreme stress and burn out. In a number of cases a project team was either non-existent or insufficiently resourced to provide the necessary levels of support to ensure a manageable tutor workload.

Heavy workloads were also experienced by participants other than tutors, but it appears that the tutors bore the brunt of it. In part this may be due to an underestimation of what was involved by their managers. This is perhaps understandable in such a pilot, with participants having little prior experience. However, this issue does need to be taken seriously in any future initiative of this type.

Recommended guidelines

1. Wherever possible, tutors with little or no online teaching experience should not be expected to teach in an networked online course;
2. Where there is no other option than to use a tutor with little or no prior online teaching experience, adequate measures for providing release time, support and coaching must be provided to ameliorate the risk of tutor burn out or poor student support. The steep learning curve and the complexity of starting up and teaching a networked online course adds significantly to a novice online tutor's workload and must be recognised, acknowledged and addressed;
3. Where a tutor with little or no prior online teaching experience is required to teach in a networked eLearning course, appropriate Professional Development in online facilitation

and an introduction to teaching with Moodle should be made available before the course goes live the programme.

4. The start up phase of a networked online course is particularly workload intensive for tutors, allied staff and technical support. Adequate release time for the start up phase must be provided to tutors teaching a networked online course for the first time, especially if they have not previously taught online;
5. All tutors teaching in a networked online course should have ready access to eTeaching guidance and advice and /or coaching from experienced practitioners, Moodle technical and administration support and course administration support;
6. Teaching hours assigned for the delivery of a networked online course should reflect the actual workload involved, especially the additional communication with students required for properly facilitating online courses, as well as that required for engaging and retaining learners and reducing attrition in online courses.

Principle #4

Adequate allowance should be made for online teaching hours that realistically take into account the online teaching experience of tutor and the added complexity and additional administrative course workload that eLearning network of provision entails.

6. Technical and administrative support

The theme of technical and administrative support was also a significant concern for the interviewees and was focused on two sub-themes, Moodle technical and operational support and administrative/project support. While technical support was an obvious and well recognised need, the high level of administrative and project support required was, in general, not well anticipated or addressed.

The project support sub-theme emerged from the way the online network of provision pilot was organised and managed in each institution. In some cases this was managed very well and the support and cross department internal and institution to institution communication was coordinated in an efficient and effective way. In other cases the pilot was not managed as well, resulting in communications breakdown, added tutor and associated staff workload and stress.

The following comments illustrate these themes:

Moodle Technical and operational support

- *Technical support that's explained in terms I can cope with and don't assume they know what will work for my subject and things like that.*
- *I need it right then and there. To be on the job and available - and if they are going to be away for a couple of weeks, to let me know and who to call if I need help. Because if you're in a bit of a flap and you ring the person and they are not there it tends to make the flap larger. So continuity is really important.*
- *If you can get someone to walk you through something like Moodle nice and easy – walk you through discussion forums and chat rooms etc and here's how you upload a file etc. and not all at once but as you need to know it. So it's like learning by doing.*
- *What would be useful is having at elbow support while scoping the course and working out what was possible and if I wanted to do something, what would be the best way to do it with the existing technology, that sort of thing.*

Administrative/project support

- *As for support, you can't really do this on your own, you need a good support structure*

around you, especially in a networked environment, there's just too much stuff to deal with. The reality is that there is (a lot of) extra work involved especially at the start.

- (For tutors) Get support as soon as possible from your local eLearning team and if possible get a coach to work with you while you are teaching on the course. A close link with their (course) administrator, maybe even more so than normal because the admin person is the one that needs to link across to all the other institutions in the network.*
- Don't put your hand up unless you are sure you can get the support you need – you need a good support team around you who can come to your aid at the drop of a hat - otherwise you can't do it.*
- It (support) definitely came from our eLearning Advisors and the project team, no question about that. I got good admin support from my admin lady, it's been very good that support, it meant I could get on with my job and not have worry about the admin stuff – I'm a teacher not an administrator.*
- Tutors really need to make sure they get support from the start*
- But the poor admin people who came in late and got lumbered with it, they weren't really part of the whole thing from the beginning and it was just added to their workload. This caused some resentment and made the whole thing rather difficult and a bit fraught.*
- The challenges are to do with the admin processes in terms of results and marks and all that, but that shouldn't be a tutor problem, that should be handled by somebody else, but unfortunately in some institutions and ours was one of them, it was the tutor's role to deal with that and it was overwhelming at the beginning.*

Discussion

The relatively high level of administrative support needed in an online network of provision is the result of the sheer amount of intra and inter-institution communication and exchange of course related information that such a collaborative initiative generates. Added to this the fact that learners are logging in from other institutions increases the rate of email, postal and general information exchange that must be managed.

This administrative support is particularly critical in the start up phase of a course, involving as it does the time consuming activities of running face to face and /or online orientation events, late enrolments, dealing with student login issues and the multiple other administrative tasks involved in any online course start up. This is exacerbated in a multi institution network context. In a number of cases this range of administrative tasks fell to tutors to deal with early on with administrative support either being provided late in the project or insufficiently to meet the need.

With one or two exceptions, Moodle technical and operational tutor support across the pilot was generally very good and the resource implications were probably better understood and accepted by senior management than perhaps other aspects of the pilot.

Recommended guidelines

1. Technical and Moodle platform support should be available to a tutor from the earliest possible moment in order to provide adequate and appropriate preparation for delivering an online networked course.
2. For tutors new to online delivery, "at elbow" technical and Moodle operational support should be available as required, particularly during the critical period prior to going live with a course and in the first few weeks.

3. The high level course administrative requirements of networked online courses must be accepted as an operational reality and be organised and resourced accordingly.
4. The full range of tutor, learner and course support requirements should be organised and managed in a coordinated and integrated manner in order to gain the maximum benefit from network of provision initiatives and achieve effective and satisfactory tutor and learner experiences.
5. The additional complexity and workload of online network of provision delivery should be acknowledged and resourcing should be available to deal with this complexity, particularly in the start up phase of course delivery and until such time as sufficient capability is developed and this mode of delivery becomes “business as usual”.

Principle #5

The added complexity and high levels of intra and inter-institutional communications, the administrative workload and technical support required in an eLearning network of provision should be acknowledged and accepted by senior management and appropriate and adequate levels of support be provided .

7. Project resourcing

The theme of project resourcing is one that emerged quite forcefully from the interviews, with a general consensus that resourcing was, for the most part, inadequate and resulted in unreasonable levels of workload and stress.

- *It'd be mainly around how they assign responsibility and resources up front. That it doesn't just evolve, because that's where things can slip between the cracks and you can really drop the ball because of the increased complexity of communicating with students and communicating with other parties. It doesn't have to be a lot – it has to be someone's time, particularly allowing for the extra administration work that's involved. - Even though management did assign responsibility up front, we were pretty poor in providing realistic resources. A lot of the times, people's efforts came at the cost of other things.*
- *One of the things I'm pleased about is the student retention rate. I think we started with 26 and we finished up with 21, so I'm happy with that, but I think that some of that is because it's been so labour intensive and I've been on their backs. I've found that as soon as they drop off, you have to be on their backs as soon as they show signs of dropping off, otherwise it becomes an insurmountable task for them to get back in.*
- *I think that's the key for someone getting involved in this sort of thing - it's not about technical expertise, but following up on students who may be falling behind or thinking about dropping out - being there for the student, being helpful and responsive, communicating in simple language and turning things round in a reasonable time.*
- *We had a large drop out rate, but just the time I've spent ringing people has created huge dividends because it means they (students) come back in - you must build a lot of connections with the students in the first place - my priority was to just contact people (learners). I haven't done as well with that as I should have. I'm still working on that and still trying to pull people in.*
- *Fix the pay rate, because what the polytechs paid was the same as for a face to face class. I can get up to 14 emails a day and to get paid for 5 hours a week – my estimate is that it takes 12 – 14 hours.*
- *So in terms of what advice I'd give to the institution, it would be pay rates, reflecting the actual work - taking some organisational responsibility, because it's going to be organisationally awkward and it needs to be set up for that.*

- *I think (my organisation) had the information in front of them about how much work it would be and they opted not to use it and I think they went on the goodwill of the people involved, which is time limited which is ok for a while, but there's never going to be a moment in history where I would let my students down, regardless of whether I'm getting paid for it or not, and that can be taken advantage of.*
- *There wasn't enough time up front for preparation and that was the one thing that didn't happen for us. More time up front to get organised, get your head around the course materials and the platform and to get properly prepared for the course delivery.*
- *We weren't adequately resourced – I mean I suddenly became the Moodle administrator, which was interesting, never having used it before. I'd definitely be willing to do it again – so long as it was resourced properly!*
- *It became quite apparent during the course of the pilot that a team of one was simply not viable.*
- *It needs to be recognised as a project in its own right. The institution is organised into different faculties and schools and it's not like one of your lecturers doing another paper, in actual fact it's a separate project and it needs to be organised as such. So it needs proper support, and there will be different procedures which will be specific to this particular programme (project), which would be different to what people normally do in house.*

Discussion

It is clear that the level of resourcing required for the online network of provision pilot was underestimated by the participating institutions, in some cases seriously. To some extent this may have been the result of the very tight timelines imposed on the project by the TEC project funding process, the late confirmation of the pilot project funding and the way these project timelines conflicted with the academic calendar timelines of each institution. In most cases the institutional business plans and resourcing had already been set and committed before the project got properly underway and this led to a situation where the pilot project had to be incorporated within already confirmed budgets, staffing levels and departmental /school resource allocations. So it is perhaps not surprising that some project participants felt compromised in their ability to manage their part of the project in a satisfactory manner and to provide students with the best possible learning experience.

This pilot has shown that any network of provision eLearning initiative needs to have appropriate levels of resourcing if students participating in the courses are to be retained and properly supported in their learning journey. Supporting students in an online course is time consuming but critical and is one of the most important factors in retaining students and avoiding large drop out numbers. Resourcing is also required to ensure that the goodwill, enthusiasm and commitment of tutors is not unduly exploited, and that workloads and stress levels are held at manageable levels.

Recommended guidelines

1. eLearning network of provision initiatives need to be regarded as significant projects requiring good project management processes and adequate resources of time, staff and financial support.
2. Such projects need to be sufficiently resourced to enable adequate lead time for communicating the details of the project across the relevant sections of the institution and the setting up of a properly constituted and mandated project team.
3. Project resourcing should also ensure appropriate PD (where and when required),

adequate course preparation time as well as appropriate levels of technical and administration course and tutor support.

4. Project resourcing should also ensure that unreasonable levels of workload and stress are avoided and that reasonable online course teaching hours for tutors are provided so that learners are properly engaged and supported, that retention of learners is achieved and that the quality of teaching and the student experience is not compromised.
5. Where the development or modification of online courses is required additional resources for release time should be provided and not expected to be handled within existing workloads.

Principle #6

An eLearning network of provision initiative requires a higher level of resourcing than that usually required for non-networked modes of online delivery, particularly in the set up phase of the collaboration, and as such should be planned for and appropriately and adequately resourced.

8. Differences in institutional academic, administrative and technical processes

This theme was one that brought home to the key project participants the very real differences between the TANZ institutions in terms of their institutional, academic, administrative and technical structures and processes. These differences accounts for some of the complexities encountered in this pilot especially around communications and information sharing and exchange. The respondent comments illustrate this well:

- *I was kind of surprised how some of the other institutions approached their assessments, that it seemed really restrictive, not that we are really open, but we are certainly much less restrictive than some of the others. And I was really surprised how big those differences could be between the institutions. I mean we are all polytechnics all working in the same system and teaching similar courses, I expected that they would be a lot closer.*
- *I suppose it opened up my eyes to how differently others operate and the models of where the eLearning Advisors sits and the way that alters their ability to contribute or add direction to things and highlighting to me how we are set up in my team and where we sit in the organisation and the way we do things works very well. There's also the interesting dynamic about the Accord of 6 institutions. There's not a strict alignment of ideas so that opened up my eyes to the reality of what that means and how everyone engages in things in completely different ways.*
- *... because of the issues we had with tutors falling over, so we decided to extend the deadline out to January for the final assignment. Now two institutions were ok with that, because the protocol was that the academic processes of the delivering institution would be run. One institution wasn't so keen. There's a real need for flexibility and there's a major need for customer focus in terms of these things, make sure we give people (students) a good deal basically.*
- *Just how different they (the institutions) all are in their processes and their thoughts around online learning and the way they approach and do things. I've learned a lot, especially about the nature of the bureaucracy and politics within the institutions. I guess I really have learned about that, because I really wasn't involved in any of that prior to this project and the project has really opened it up for me to have some sort of insight as to what goes on inside each of the institutions.*

- *I was surprised that a couple of institutions hadn't any project structure or anything formal in place and they actually managed. I'm not surprised that XXXX managed everything so well, he really is a good process person and we learned quite a lot from him and his team and the way they put things in place.*
- *The wide variability of approaches, particularly in terms of the orientation activities and the support, very different approaches and again I think this is an area where we can learn from each other.*

Discussion

The technical issues of the online network of provision are relatively straight forward to deal with and resolve; the really complex and difficult challenges are around the collaboration processes and alignment of practices and policies that the participating institutions must address. It is these issues and challenges that are potentially the most time consuming and having them resolved in a timely manner avoids adding to the workload, frustration confusion and miscommunication that are inevitable in any sort of complex multi-institution collaboration.

Recommended guidelines

1. Course regulations and academic policies need to be agreed, and where necessary amended to provide harmonisation between the networked institutions as part of the project set up process.
2. Programme Leaders and tutors from each institution need to agree beforehand what process will be used to manage withdrawals, non-participating learners, no-shows for exams and other issues that involve urgent and/or rapid cross-network communication.
3. Common administrative roles and processes should be set up at each institution involved in an online network of provision to reduce confusion and aid smooth and efficient transmission of information within and between institutions.
4. A critical role to aid inter-institution and internal communication is that of a "First Point of Contact" who manages the communication flow with respect of an online network of provision. This role is pivotal in ensuring that there is just one person for an institution to contact initially, who can then make sure the enquiry and/or issue is directed to the appropriate person to handle.
5. At an early stage in an online network of provision project, participating institutions need to agree on the financial model to be used in sharing and / or apportioning costs and revenues based on who delivers what courses, numbers of learners enrolled and into which courses and staffing resources required.
6. All relevant project information, including the financial costs and revenue sharing agreements to be communicated as widely as possible throughout the institutions and appropriate systems and reporting mechanisms set up to manage these negotiated terms of engagement.

Principle #7 – Differences in institutional processes and structures

Different institutions involved in a network of provision of eLearning courses will have **different administrative, academic and technical structures, processes and roles** that must be recognised, accepted and ways found to accommodate these realities and mitigate the potential problems they may generate.

9. Collaboration

One of the main reasons for the success of the pilot, cited by the respondents, was the high level of collaboration, inter-institutional cooperation and support that was a significant feature of this pilot.

I think it's been a really positive experience actually. Probably the main reason being all the learning that's come out of it. Probably one of the highlights has been the learnings and the collaboration between, probably the eLearning advisors I think have been the most successful collaboration, and I think that will carry on

I think it was the TANZ cooperation, particularly with the eLearning, flexible learning Advisors- we worked together through issues and with the Moodle Administrators as well with the TANZ project team. I think we managed to get this pilot through because of that. Otherwise, if we hadn't worked so well together I think it would have been a disaster. That was the best support – we actually supported each other and the TANZ project team did, so I think that was the best part.

I think the pilot was a success for a lot of reasons and like I said earlier about the collaboration and you can see it with the eLearning Advisors, they are now a team even though they are all from different institutions and I think that's really awesome and they are already looking forward to collaborate with the professional development for staff.

I think the level of communication between the TANZ eLearning Advisors, was the fact that this came out of this project and that's been incredibly helpful, not just for this project, but just because the communications lines are open it's easier to get support for other things as well. Also the idea of doing a shared staff development

I found it to be very valuable and a great opportunity to collaborate with my peers at other institutions. I thought that was just awesome, just great, the eLearning Advisor peers at other institutions. I think that has been one of the major pluses to come out of the pilot - the very good collaboration and the close working relationships with the eLearning Advisor group and it's something that carries on beyond the pilot, so that's excellent.

Discussion

One of the most satisfactory outcomes from the project was the high degree of inter-institution collaboration and the high level of knowledge sharing, group learning and institutional capability building that occurred. This collaboration included a range of groups including IT, Moodle Administrators, eLearning Advisors, library and learning support services and those who had the role of First Point of Contact at each institution. By and large the tutors were too busy dealing with their own course management and teaching responsibilities to engage in much of the inter-institution sharing of knowledge, skills and information, but their participation in the workshops did, to some extent, provide opportunities to share experiences.

So successful has been the inter-institutional collaboration that various groups such as the eLearning Advisors and Moodle Administrators are continuing to collaborate on a range of initiatives to produce shared resources that each institution would otherwise have to develop on their own. The pilot demonstrated the very real value of inter institution collaboration and this, if nothing else, is a major benefit to accrue from the project.

Ironically, and rather surprisingly the inter-institutional collaboration and cooperation was in some cases more effective than that experienced between various sections and departments within institutions.

Recommended guidelines

1. A networked provision of eLearning courses is a collaborative endeavour between two or more institutions and requires the key decision maker(s) of those institutions to agree to fully participate in the collaborative process and consider it as an integral part of their "real" decision making process.
2. The commitment of the key decision makers in an institution to collaborating in a networked provision of eLearning courses must be evidenced by a commitment of resources (money, in kind, support services, personnel, etc.).
3. The collaboration process requires resources, time and staff support. In order to be successful, collaboration must build from a basis of trust, mutual respect and time spent negotiating the rules of engagement at all levels.
4. Collaboration is best built on the enthusiasm and goodwill of individuals, without abusing it and by involving and supporting people and providing appropriate resources.
5. Ensure quality, by being flexible, open and responsive to critique, seeking to make continuous improvements in systems and processes and subscribing to shared values and standards of best practice.
6. Internal collaboration is as important as external collaboration and is best achieved, by internally and externally fostering good communications, open decision-making and teamwork.

Principle #8 - Collaboration

Collaboration cannot be mandated; it must arise out of a history of consistent behaviour, integrity, trust, a willingness to listen, a commitment to share experience and knowledge and an ability to put aside tendencies for patch protection and exclusivity of ownership.

Conclusions

This research project sought to:

- a) Determine what the impacts are of delivering fully networked online/blended courses are on learners; teachers, institutional practices and learning support;
- b) Determine what the technological and administrative constraints and issues are in networked provision delivery;
- c) Determine what the staff professional development needs are in networked provision delivery to assure highest quality teaching and learner support and engagement;
- d) Determine the range of co-teaching and blended delivery options and strategies that can be implemented in a widely distributed network of provision;
- e) Create and document a robust set of principles and guidelines for and emergent grounded theory about networked provision of blended eLearning courses.

Most the objectives of this research project has been successfully achieved with the exception of objective d). The primary findings of this PAR project are as follows:

Impact on Learners

The aspect of the research question that looks at the impact of delivering fully networked online/blended courses on learners has also been dealt with in earlier reports. By all accounts there is little if any difference in the impact on learners in an eLearning network of provision delivery than that in any more usual online course delivery. What impacts that learners did experience, were not to do with the networking environment per se, but were the result of such things as changes in course tutor, the lack of experience of some tutors and the fact that some learners were not prepared for engaging with a demanding online learning experience. There is also the possibility that providing the course for free may have contributed to an attitude in some of those enrolled in a course that it was not meant to be taken seriously which in turn resulted in high levels of student drop out in some courses.

Impact on tutors

This research reveals that the largest impact of the network provision of eLearning courses fell on the tutors. This was largely due to a number of related factors:

- Lack of experience in eLearning for the majority of tutors and in some cases none at all;
- Lack of familiarity with the networking LMS platform (Moodle);
- Underestimation of tutor workload;
- Lack of administrative support in the majority of cases;
- Lack of adequate lead time for tutors to become familiar with delivery platform and course content;
- Increased levels of course administration complexity and workload;
- However, the project did lead to a reported increase in eLearning capability from a majority of tutors and an enthusiasm for the potential benefits of networked provision of eLearning.

Impact on institutional processes and practices

The impact on institutional processes and practices were perhaps less obvious, but equally profound. TEC funding processes for the pilot resulted in a very tight timeline for the project, which in turn created some difficulties for the institutions involved. A lack of adequate lead time for the institutions to get appropriately prepared for the project's implementation, in large measure led to the following:

The lack of an active project champion in all but two institutions resulted in widely varying levels of internal communication, understanding about the project and support for the project from institution to institution;
Resourcing for the project also varied widely from institution to institution, and in most cases was significantly underestimated;
A lack of a project management ethos in all but one institution resulted in varying levels of efficiency, internal and external communications and tutor/learner support;
Differences in academic rules and regulations, registry processes and reporting requirements from institution to institution added to the project's complexity and workload elements;
Differences in levels of quality in the courses offered for the networked pilot were also an issue and needed reworking of some courses also caused some delays in adequate preparation prior to course launches;
However, very high levels of enthusiasm, cooperation and collaboration among some groups, such as the eLearning Advisors, library and learning services and Moodle Administrators ensured that the pilot was an overall success, despite the extremely tight time lines, complexities, difficulties and frustrations.

Technical Constraints

In the main the technical constraints in this pilot were mostly a factor of time and the varying levels of readiness to implement the required version of Moodle to facilitate the network capability between the institutions:

- Institutions were at widely different levels of technical readiness when the project began, leading, in some cases, to increased compression of already very tight timelines and varying ability to properly prepare for implementation;
- The project required institutions to have their own instance of Moodle installed or hosted in order to facilitate the network connection from their own institution to the courses they were accessing (students logging onto their home institution's Moodle instance are automatically networked to their course regardless of where it was being taught from and retaining their home institution's branding on their course site).
- In addition each of the Moodle instances had to be upgraded to version 1.8 or 1.9 in order for network functionality to be supported. This created issues for some institutions as the upgrading process conflicted with existing course delivery requirements, a lack of appropriate technical expertise or, in one case, the institution not having Moodle installed. This inevitably delayed some institutions' readiness to undertake the installation of the network's required technical data and patches, testing and usability.
- A lack of adequate lead time for the project also meant that the original plan for a fully distributed peer-to-peer network of all the institutions was changed to an easier to implement "hub and spoke" networking arrangement; because of the extensive technical work and the Moodle technical capability that the peer to peer network would have required.
- The online collaborative support network created in Moodle, provided all IT and Moodle Administrators with the ability to share expertise and knowledge. This was used extensively and greatly assisted each institution in setting up, testing and implementing their particular connection to the course delivery and teaching network;
- Once the network arrangements were implemented and the courses were up and running there were few technical issues and very little observable difference between networked delivery and more usual modes of eLearning delivery from the point of view of learners and tutors.

Administrative Constraints

The administrative constraints were mainly around managing the very high level of inter-institutional communications needed to transmit information about individual courses, key contacts for sourcing required text books, exam venues, timetables and invigilation requirements, learning support, reporting results, withdrawals and following up on non participating students from across the six institutions. There were varying levels of commitment to a project team and project management approach by individual institutions. Hence:

- A key development in helping to manage the high level and complexity of inter-institutional communications was the nomination of a First Point of Contact (FPoC) person at each institution. This FPoC person was able to field enquiries from other institutions and manage the information flow to the appropriate person, department or service within their own institution;
- The technical and operational aspects of networked provision of eLearning courses works well, however there is still work to be done on harmonising academic rules and course regulations between participating institutions, agreeing on apportioning costs and revenues and subscribing to agreed quality standards of eLearning course design, assessment practices and facilitation;
- The online collaborative support network used for the technical aspects of the project was also used to facilitate communications between institutions and manage the information flow about the administrative and academic processes and tasks the pilot project required. However, Because the online network support site grew with the development of the pilot a number of discussion forums about specific issues proliferated and the email traffic generated from the discussion forums (posting to a discussion forum in Moodle automatically generates an email to all those subscribed to the forum) increased to the point where many people were overwhelmed by the sheer volume. This was not helped by the fact that many participants were automatically subscribed to multiple discussion forums, even to those not strictly relevant to the subscriber. In some cases this volume of email traffic caused some to unsubscribe from the “push” email option, which in turn caused them to miss or ignore critical information.
- As the problem of “too much information” became apparent, attempts were made to manage the structure and flow of information more effectively by combining or consolidating several functions and multiple instances of updateable data into a single page on the site to aid navigation. This was only partially successful as the high volume of communications traffic was mainly focused in the start up phase of the pilot and once the courses were up and running the volume of communications traffic was considerably reduced.
- In hindsight there needed to be a more rigorous oversight of the way in which the discussion forums and other tools such as wikis were deployed and used, especially as there were some, mostly tutors, who were unfamiliar with the use of Moodle and this created problems for them in managing their communications about the pilot and navigating around the site to find relevant information.
- The tools and discussion forums on the site grew as the needs arose, there was no clear structure or methodology developed before hand as the needs were not well enough known or understood at the time. Any future online network of provision would benefit from the experience of the pilot and the required structures and protocols for using such a network support site could be established beforehand and many of the issues experienced in this pilot could be avoided.

Professional Development Needs

It is clear from this research that Professional Development in eLearning and the use of Moodle in teaching and learning was a major issue for the pilot. The fact that most of tutors involved in the pilot had limited online teaching experience, had not taught online at all or had not had the opportunity to become familiar with the Moodle platform prior to the pilot represented a significant constraint. It also contributed to a perception of an unrealistically heavy workload for those tutors. They were required to learn on the job while at the same time trying to manage the complex set of teaching and course management issues that the network of eLearning provision imposed.

The recommendations for Tutor PD are outlined above, but the underlying issue of inadequate PD support for tutors assigned to teach online is one that is all too common and must be addressed, particularly in a networked teaching environment. The fact that the pilot succeeded in spite of this major constraint was largely due to the skills and support provided by the eLearning Advisors and some Moodle Administrators who were able, in most cases to get the tutors up and running and helped them come to grips with teaching in an unfamiliar online environment. However this was often either at the expense of other tasks and responsibilities required of them by their institutions; or added to their already substantial workloads, or both.

The need for training in the use of Moodle and other technologies in teaching and learning and development of online course facilitation skills prior to being required to teach in any online context is overwhelming and is even more so in a networked teaching environment.

This then informs probably the most important and far reaching finding and recommendation from the pilot; that teachers experienced in eLearning facilitation be used in delivering Networked provision of eLearning courses. Where this is not possible then appropriate Professional Development for tutors in eLearning facilitation skills along with training and practice in the use of the networked eLearning platform before implementing a network of eLearning provision should be accorded the highest possible priority. It is also strongly recommended that this PD includes opportunities for tutors to experience what it is like to be an online student and gain an appreciation of the limitations, constraints and frustrations of online course delivery from the student's point of view.

Co-teaching and blended delivery options

This research question was dealt with in an earlier report. The structure, complexity and timing constraints of the pilot precluded anything other than a limited attempt to implement co-teaching or the blending of online and face to face teaching. Apart from an on campus orientation event and, in a few cases, on campus exams, no other blended or co-teaching activity was undertaken by any institution. Accordingly this aspect of an eLearning network of provision delivery research was not able to be investigated. Further research into this aspect of networked delivery is recommended as it has the potential to be an important future development in online network of provision delivery.

Tangible Benefits

Finally, there are a range of tangible benefits to come out of the pilot, these include:

- The pilot has unequivocally demonstrated that the Moodle networking technology works effectively and that technically networked delivery of online courses is little different from normal modes of online delivery;

- An increased level of capability across all six TANZ institutions in the technical, administrative and online teaching skills in the implementation and delivery of an online network of provision;
- A greater awareness of the issues and constraints of such delivery and the resources and skills required across all TANZ members
- The realisation that this mode of delivery and the sharing of courses, tutors and students has some very attractive potential benefits for polytechnics and other institutions, particularly smaller regional institutions.
- A powerful and enthusiastic spirit of collaboration, especially among the eLearning Advisors at each institution, which has continued beyond the pilot itself and is finding expression in the collaborative effort to develop and deliver a range of technically and pedagogically focused tutor PD in eLearning capability building.

There is however a caveat to consider in terms of the high level of successful collaboration generated by this pilot project. Inter-institutional collaboration has been a much discussed ideal amongst government policy makers in the education sphere for a long time and there has been an assumption that it is largely a matter of mandating collaboration between institutions and it will happen. Long experience shows that collaboration is much easier to say than to do. This pilot project was built on a foundation of six years of continuous effort and commitment by the TANZ collective in building a climate and culture in which such collaboration can thrive. That said, a modest venture into delivering an eLearning network of provision could well be a vehicle for developing and fostering a collaborative culture between several institutions.

References

- Coghlan, D. & Brannick, T. *Doing Action Research in Your Own Organisation*. London: Sage Publications, 2001.)
- Duin, A.H. and Baer, L.L. (2000) Virtual U: Creating the Minnesota Virtual University - Assessing Results and Readiness Criteria. *Educause Quarterly* Volume 23, Number 1, 2000
- Georgieva, G., Todorov, G. and Smrikarov, A. (2003) A Model of a Virtual University – some problems during its development. *International Conference on Computer Systems and Technologies - CompSysTech'2003* - June 2003, Sofia, Bulgaria. (Accessed May 2008 from <http://ecet.ecs.ru.acad.bg/cst/Docs/proceedings/S4/lv-29.pdf>)
- Leeder, D., McLachlan, J.C., Rodrigues, V., Stephens, N., Wharrad, H. and McElduff, P., (2004) "Universities' Collaboration in eLearning (UCeL): a virtual community of practice in health professional education" *IADIS Web-based communities 2004* pp. 386 – 393 Edited by: Kommers, P., Isaias, P. & Nunes, M B. ISBN:972-98947-4-4 IADIS Press 2004 (accessed May 2008 from http://www.ucel.ac.uk/documents/docs/IADIS_UCeL_final_79.pdf)
- Lepori B., Rezzonico S., Succi C. (2004). eLearning in Swiss Universities. Recent Developments and Future Prospects, in V. Mahnic, B. Vilfan, *EUNIS 2004*, Bled, Slovenia (accessed May, 2008 from http://www.newmine.org/newmine_lepori_eunis2004.pdf)
- McTaggart, R. (1998) Participatory Research: How to do Research Inside and Outside Classrooms. Seminar at Kohia Teachers Centre. Auckland, June 30.
- Melrose, M. & Reid, M. (1999) The Daisy Model for Collaborative Research: application to educational practice. *New Zealand Action Research Network Newsletter* (un-refereed article)
- Nunes-Baptiste, J. M., McPherson, M. (2002) No Lectures On Campus: Can eLearning Provide a Better Learning Experience? *IEEE International Conference on Advanced Learning 2002* (Accessed on 24/04/2008 from http://ltaf.ieee.org/icalt2002/proceedings/t1404_icalt124_End.pdf)
- Pollmann, O. (2004) E-learning: virtual universities in context. *Vocational Training European journal*, no. 31, January-April 2004. pp.46-51 (accessed May, 2008 from http://www2.trainingvillage.gr/download/journal/bull-31/31_en_pollmann.pdf)
- Tyler-Smith, K. (2005) [The Workplace eLearner: Designing and delivering eLearning into the workplace](#) Refereed paper presentation to the World Association of Cooperative Education Conference, North Western University, Boston, Mass., USA, June 11-14, 2005
- Tyler-Smith, K. (2006) [The First Time eLearner's Journey: An examination of attrition and withdrawal issues in workplace-based eLearning programmes](#) Refereed presented at the International Conference in eLearning, held at the University of Quebec, Montreal, June 21-23, 2006
- Tyler-Smith, K. (2006) [Early Attrition among First Time eLearners: A Review of Factors that Contribute to Drop-out, Withdrawal and Non-completion Rates of Adult Learners undertaking eLearning Programmes](#). MERLOT Journal of Online Learning and Teaching / Vol. 2 / No. 2 / June 2006 http://jolt.merlot.org/documents/Vol2_No2_TylerSmith_000.pdf
- Winter, M. (a), (2004) Retrospective Study of Asure First Line Management e-Training Programme Unpublished Report for TANZ - Christchurch Polytechnic Institute of Technology
- Winter, M. (b), (2005) [Why do Learners Withdraw from the Online National Certificate in First Line Management Course?](#) Unpublished research report for TANZ - Christchurch Polytechnic Institute of Technology

- Winter, M. (c), (2005) Final Evaluation Research Report eCDF Project 124 ["Delivering Applied eLearning in the Workplace: Polytechnics and ITOs working together"](#)
Unpublished Report for TANZ - Christchurch Polytechnic Institute of Technology
- Winter, R. (19986) Finding a Voice – Thinking with Others: A Conception of Action Research. *Educational Action Research*, 6, (1), pp. 53 - 68.
- Winter, M. (d), (2006) [Learning Management Systems for the Workplace:](#) Unpublished research report for TANZ - Christchurch Polytechnic Institute of Technology
- Winter, M. (e), (2006) [Effects of Organisational Culture on e-Learning in Public Sector Organisations](#) . Unpublished research report for TANZ - Christchurch Polytechnic Institute of Technology
- Zuber-Skerrit, O. (1992) *Action Research in Higher Education: Examples and Reflection*, London: Kogan Page.

Appendix 1: Graphic Representation myLearn Pilot Action Research Groups

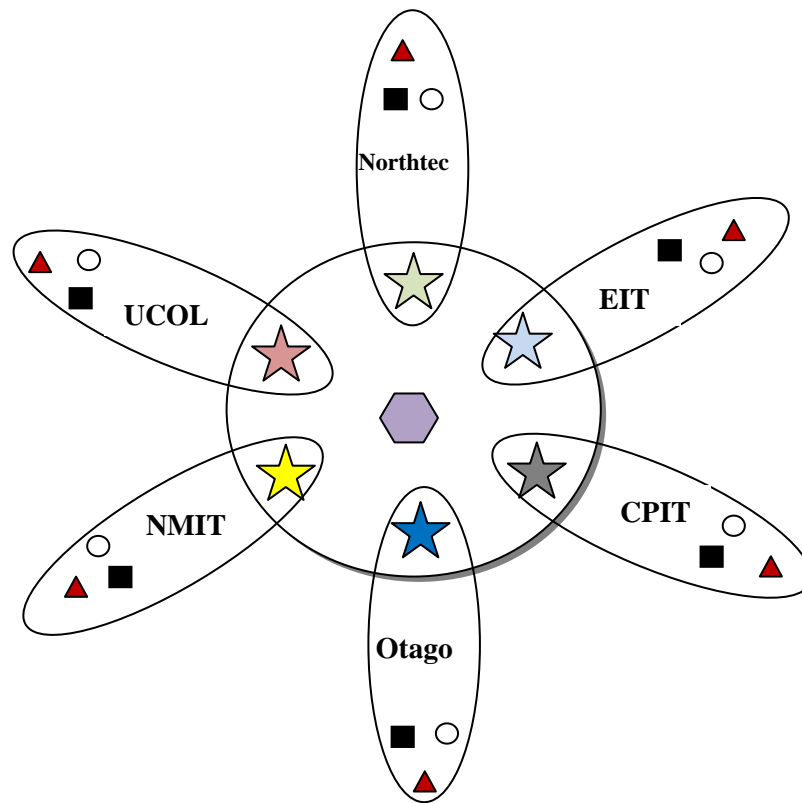


Figure 1: Graphic Representation myLearn Pilot Action Research Groups

