Workplace-Based Learning:
Introducing a new applied degree paradigm

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Contents

Executive Summary

This report covers the activities of the research project which sought to identify and investigate the issues and practices in implementing a pilot for a work-based learning, (WBL), degree pathway focused on the Bachelor of Applied Management. It was designed to consider Otago Polytechnic's institutional resources, culture, policies and systems that may be impacted on and /or affected by the introduction of Work-Based Learning (WBL) programmes, for degrees and post graduate awards.

A three cycle participatory action research methodology was used to investigate the issues and document the experiences of those involved in the pilot's delivery. The learnings generated by and the issues that emerge from the pilot have been closely monitored. We have engaged with work-based learners, employers, academic teaching and managerial staff around the implementation of the programme with the aim of developing appropriate and robust practices around facilitation, assessment, curriculum negotiation and design, roles and responsibilities and support structures. Generated from this research is a set of principles, which are intended to inform and underpin policy and guide the development of WBL at Otago Polytechnic and beyond.

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:

- determine what the impacts of the WBL degree delivery are on learners; academic advisors / facilitators institutional practices and employing organisations;
- determine what the technological and administrative issues are in supporting distributed learners through this mode of higher education delivery;
- determine what the staff professional development needs are in WBL delivery to assure highest quality teaching and learner support and engagement;
- develop a robust set of principles that can guide the development of WBL, using best international practice;
- develop emergent grounded theory about the practice of WBL in the New Zealand context and how it compares with the experience in other jurisdictions;
- use action research to foster a culture that focuses on improvement in practice through a continuous cycle of, investigation, intervention, reflection, planning and implementation.

Due to a range of factors, including delays encountered in getting the pilot underway and up to speed, only one person was able to complete the whole WBL programme within the research project's funded time frame. Consequently the research covers the pilot only to the end of the second stage – the development of the learning agreement process for all but one of the pilot's learners. The third phase of the pilot; the process and experience of implementing the learning agreement is not covered in any useful way. For the same reason it has not been possible to get informed responses from employers and so this research objective has not been met at this time. It is intended to follow this research with further

documented investigation at a later date, which will provide data not adequately covered at the time of writing.

Key principles to guide development of WBL

This research process has culminated in fifteen principles drawn from the themes and issues, generated from the research process. These principles are intended to guide the development of WBL. A summarised version of these principles follows:

Principle 1: Work-Based Learning is more than an alternative mode of delivery.

It has become clearly evident that WBL is far more than simply an alternative mode of delivery. To be successfully implemented, WBL requires a profound shift in appreciation of the nature of commonly accepted notions of teaching and learning practice. The most important of which is that it challenges the traditional power relationship between teacher and learner as it places significant responsibility for identifying the learning to be done, what the 'curriculum' will consist of and manner of assessment squarely in the hands of the learner.

Principle 2: Selection of potential WBL candidates requires careful, accurate and effective profiling.

The key to accurately determining the suitability of a candidate's suitability for the WBL process is the early and accurate profiling of the candidate. The profiling process consists of detailed discussions around the nature of the WBL, areas of interest that currently exist within the workplace that have the potential for substantive project work. Also of importance is the ability to gauge the level of a candidate's interest in and commitment to investigating new areas of learning appropriate to degree level understandings.

Principle 3: An effective Assessment of Prior Learning process is the foundation of effective WBL and is an essential ingredient.

WBL philosophy and practice acknowledges that the potential candidate brings to the process considerable pre-existing experience, knowledge and skills from the workplace. As such it behoves the institution to use a holistic, academically robust and philosophically aligned system of assessing and accrediting prior learning (APL).The APL process, as developed by Otago Polytechnic, provides a solid and essential foundation for WBL as it not only measures what can already be accredited, but the process provides the candidates with the necessary skills of reflection, critical thinking and the means to align a candidate's prior learning with relevant theories and concepts required by the degree award.

Principle 4: WBL places the learner, the learner's understandings and knowledge and the learner's workplace context at the centre of the educational process.

Workplace–Based Learning is focused on those with significant workplace knowledge, experience and skills and aims to both give recognition to the learning from that experience as well as providing the means to generate new learning from their workplace and position it within an academic construct. It is undertaken in a way that both benefits their employer and earns credit for a degree, graduate diploma or post graduate qualification.

What differentiates WBL from the usual academic practice of curriculum design, teaching and assessment is the fact that WBL practice seeks to wrap academic rigour, processes, and resources around the learner and their workplace context as a means of supporting both the learner and the employing organisation to meet their respective goals.

Principle 5: WBL requires highly motivated, committed, capable and educationally flexible staff

Serious consideration should be given to recruiting specialist educators who have had mentoring or coaching experience and /or roles within workplaces in addition to wide educational experience. The ability to listen carefully and understand the richness of the learner's context and knowledge from the learner's perspective is critical. The skills of supervision, mentoring and coaching are crucial skills for WBL academic advisors and facilitators in supporting and guiding the learner to frame their experience and knowledge in such a way as to both meet the academic standards and empower the learner to fully engage with new learning. In so doing the philosophy of learning that WBL is predicated on is more likely to be supported and strengthened in practice.

Principle 6: Well developed and articulated learning agreements are critical to the success of WBL.

The philosophical underpinning to contemporary WBL theory posits that a critical feature of learning agreements is that the learner has control over the curriculum and determines how the learning is to be undertaken, the context in which it is to be learned, the identification of appropriate learning outcomes and the manner and criteria which the learning will be measured and assessed.

A well written learning agreement will also articulate the resources required; the time frame in which the work is to be done and identify mentors and coaches, within and without the workplace, who can support the learner. In particular mentor/coaches can help the learner consider what best practice in their workplace context is and how their connection to multiple others can assist in their area of exploration.

Learners need skilled support to develop the necessary analytical tools to ensure a well-constructed learning agreement. It involves a generating a robust framework to identify and explore the dimensions of the learning opportunities and to articulate this in terms of learning outcomes and assessments.

Principle 7: Guidelines, templates and exemplars provide academic advisors and learners with a structured approach for developing learning agreements

Well written guidelines and learning agreement templates along with exemplars from previous learners can provide a useful structure to work with and at the same time be sufficiently flexible to accommodate wide variation in project types, learning needs and contexts without forcing all learners into a one size fits all container. It should provide the security of a planned and framed entry point into the process that can get the proposed work underway quickly while supporting a departure from the standardised approach at a later date, if this is appropriate.

Principle 8: A formal and well-structured learning agreement approval policy and protocol is a key element in the WBL process.

The submission of the developed learning agreement for assessment and approval is pivotal in the WBL learner's journey. An assessment process that is not only fair, flexible and relevant to the learner's context, but also is sufficiently robust, valid and able to withstand external critique as to its credibility is essential. This approval process ensures that the proposed learning outcomes are achievable and are aligned with the programme's graduate profile and criteria, that the learning can be achieved within the available resource constraints, are acceptable and approved by the employing organisation and provide genuine opportunities for new learning. It requires the development of an assessment framework that has the required academic rigour that ensures consistency across a wide range of learners and learner contexts. This must be addressed at an institutional level rather than at the programme level, so that it not only to gives WBL assessments the required validity, but so it can also be exported to other discipline centres of the institution.

Principle 9: WBL is a three way partnership and employer engagement is paramount.

WBL is based on a tripartite contract between the learner the employer and the institution. This requires a deep and strong engagement or relationship to be built between the institution and the employing organisation. This is necessary to ensure adequate and appropriate understanding by all parties of the type and extent of support required by the WBL learner to achieve their learning goals.

This means that employers need to be informed about the academic requirements, practices and language as it relates to WBL. In turn the academic advisor needs to be familiar with the language, practices and constraints of the workplace. In both cases these considerations must be incorporated into the engagement process. This also suggests that as the institution needs to develop a strategic framework and policies around employer engagement.

Principle 10: Accommodation of self-employed WBL candidates requires a different approach

New Zealand has a relatively high proportion of entrepreneur types who are self-employed and therefore have no formal employer. In these cases it is necessary to ensure that the role of employer is taken up by a suitably qualified person with a deep understanding of the business and the issues involved. This is necessary in order to meet the widely differing candidate contexts and aspirations, while maintaining the academic integrity and validity of the WBL model we are evolving.

Principle 11: Introducing WBL represents a disruptive change in practice and requires careful change management processes.

The degree of change that introducing WBL brings with it should not be underestimated. It is tempting to think that academic institutions by definition have a flexible and open learning culture that will readily embrace innovation and change in practice. The reality is that institutions of learning are as susceptible to regarding change negatively as any other workplace and in some cases more so. Where the introduction of WBL is perceived as an increase in workload, or where comes at the end or alongside of ongoing organisational restructuring, there is likely to be resistance to such an innovation. It also challenges long

held views on the nature of learning, the role of the academy and role of academics and their practices.

Principle 12: Locate WBL as a centre of excellence within the institution.

WBL is a specialist function and needs to operate as a centre of excellence attracting highly motivated and enthused facilitators and academic advisors as well as establishing itself as a credible and responsive enterprise in the eyes of employers, offering a highly relevant and effective alternative to traditional forms of training and development.

This centre needs to be able to operate across institutional schools and departments and qualifications and to foster the development of cross discipline learning, without being captured by the specific discipline practices policies and regulations of any particular school or department.

Principle 13: The potential for growth in WBL is high and requires strategically acute management.

Experience indicates that once launched WBL attracts keen interest from employers who immediately see the value and efficacy of the model. This can lead to rapid uptake and demand for WBL partnership arrangements. Strategies need to be developed to manage the rate and scope of growth. A primary tension that must be balanced here is the ability to be responsive to employer needs, which are of high value to employers, and at the same time ensuring that appropriate support structures, administrative systems and staff capacities and capabilities are equipped to cope with this growth.

Based on overseas experience, there is a strong argument for developing a costing model specific to WBL to account for the fact that typical costing formulas for classroom-based teaching and learning are not readily adapted or applied to WBL.

Principle 14: Research and evaluation of WBL initiatives is essential to underpin, support and strengthen practice.

A mission critical issue for the success and sustainability of WBL at Otago Polytechnic is the judicious and wholehearted use of research and evaluation to inform practice along with the development and the long term strategic direction of the model.

The Ako Aotearoa funded action research project, to whom this report is addressed, represents the initial step in establishing WBL as a critical area of research, representing as it does a new paradigm of higher education.

Principle 15: WBL will change academic perceptions of how knowledge and qualifications should be structured

The nature of WBL is such that it requires a broadening of understandings of the content, context and structures of qualifications and even of the taxonomical arrangements of knowledge disciplines.

The question this raises is how to recognise the breadth of new knowledge within existing discipline specific qualifications. A second dimension of this is that the need for new forms of qualification is likely to emerge. For instance majors within a discipline or across one or more disciplines could well be merged to enable experienced adult learners to present a more comprehensive and complex presentation of their new knowledge and skills.

Part 1: Introduction

This research project sought to investigate and evaluate the impact on workplace-based learners, facilitators, employers and institutional practices of a pilot for a work-based learning programme leading to the Bachelor of Applied Management.

Through the pilot a range of issues generated by the implementation of a Workplace-Based Learning (WBL) initiative were explored and evaluated. An action research methodology was used to investigate these issues and the learnings from this investigation documented to form the basis of a set of guiding principles that can inform the development of appropriate protocols and policies. These are to be made available to all the key WBL pilot stakeholders and other interested parties.

The objectives of the research were to:

- determine what the impacts of the WBL degree delivery are on learners; teachers, institutional practices and employing organisations;
- determine what the technological and administrative issues are in supporting distributed learners through this mode of higher education delivery;
- determine what the staff professional development needs are in WBL delivery to assure highest quality teaching and learner support and engagement;
- develop a robust set of principles that can guide the development of WBL, using best international practice
- develop emergent grounded theory about the practice of WBL in the New Zealand context and how it compares with the experience in other jurisdictions;
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Due to a range of factors, including delays encountered in getting the pilot underway and up to speed, only one person was able to complete the whole WBL programme within the research project's funded time frame. Consequently the research covers the pilot only to the end of the second stage – the development of the learning agreement process for all but one of the pilot's learners. The third phase of the pilot; the process and experience of implementing the learning agreement is not covered in any useful way. For the same reason it has not been possible to get informed responses from employers and so this aspect of the research objectives has not been met at this time. It is intended to follow this research with further documented investigation at a later date, which will provide data not adequately covered at the time of writing.

WBL pilot project description

This research project sought to explore and identify issues and practices in implementing a pilot for a workplace-based learning degree pathway focused on the Bachelor of Applied Management. The action research project was designed to consider Otago Polytechnic's institutional resources, policies and systems that may be affected or impacted by degree based Work-Based Learning (WBL) programmes.

A three step approach:
The work-based learning model developed for this pilot used a three phase approach:

Phase 1) A recognition of prior learning phase in which a learner's experience and training is assessed and credit towards the terminal qualification determined. An outline for the work to be undertaken in phase 2 and 3 is presented at the APL assessment event and feedback is given as to its scope, scale and academic appropriateness.

Phase 2) Following the APL assessment, the negotiation of a tri-partite learning agreement / contract, (learner,employer and acadmeic institution) that outlines the manner in which the balance of learning, needed to fullfil the degree requirements, is undertaken. This learning agreement will articulate the learning outcomes to be achieved, the milestones and timeframes to be met and method by which the outputs will be assessed. The programme of study may be made up of a major project, a reiterative series of smaller projects or a combination of taught courses and project work. The learning agreement is given final approval by an academic panel to ensure rigour and compliance with the regulations of the qualification sought and the liklihood of it satisfying the learning outcomes as articulated in the qualificat's graduate profile.

Phase 3) The implementation of this programme of learning and fullfilment of graduate outcomes, including the assessment regime and appropriate academic rigour of project outputs. The implementation phase terminates in a final assessment to a panel of academics and practitioner experts.

The pilot
The WBL pilot began with a two day workshop in November 2010, with nine candidates; the two primary facilitators and the two pilot project co-leaders. Four of the candidates were internal Otago Polytechnic staff members with mid-level managerial responsibilities. The five others were from external work environments. Of these five only three actually continued beyond this stage. Other candidates were enrolled at a later date. At its peak the pilot had twelve people going through the WBL programme.

This workshop was designed to introduce the candidates to the concept of WBL and an assessment of prior learning process that under-pinned the WBL model. Otago Polytechnic had, over the past decade, developed highly regarded and an internationally recognised process for assessing learning gained through experience and prior learning. This process has a proven track record for developing high level skills in reflective and critical thinking as well as skills in integrating theory with practice. This is done through an exhaustive exploration of case studies from the candidates work and personal life, in which the candidate is able to present evidence of their knowledge, skills and learning journey in a three to four hour presentation to a panel of academics and expert practitioners.

This workshop also began the assessment of prior learning process by getting the candidates to identify two significant workplace events that could serve as in-depth case studies with which to demonstrate the levels of learning and knowledge/skill acquired as a result of the event.

After the workshops candidates were each assigned a facilitator / academic advisor with whom they were to work with to develop their APL portfolio. Candidates were also introduced the resources and materials hosted on Otago Polytechnic's Moodle Virtual

Learning Environment (VLE). As some of the candidates were geographically remote from the Otago Polytechnic campus, this was thought to be a useful in supporting the candidate's learning. From this point candidates worked with their facilitator one-on-one, by email, phone, face to face where possible and in some cases by Skype[1].

It was originally intended that candidates would complete their APL process in six to eight weeks, their learning agreement in twelve to fourteen weeks and the implementation of their workplace projects to be completed by late October the following year (2011), a total of 13 months. Facilitators were available throughout the time with minimal time off for statuary holidays. No term or semester breaks were included.

As it turned out, only one of the candidates was actually able to complete all three phases of their WBL programme, by the envisaged October deadline. For a variety of reasons; some because of institutional issues some because of candidates' personal circumstances; some because of changes in the workplace situation, the bulk of candidates were still working on the implementation of their workplace projects when the closing date for the research component of the pilot was reached. As a result, some of the research objectives were unable to be met.

Part 2: WBL Literature Review

Through work-based learning pilot, Otago Polytechnic aimed to explore the epistemology and practice of workplace-based learning developed in overseas jurisdictions and consider them along with internationally benchmarked practice. This project is built on the research and literature outlined below, and will contribute to existing knowledge by applying the theoretical paradigm of WBL to the NZ context.

The concept of experience as a foundation of human learning was first articulated in Dewey's theory of learning (1938/1976), which, he suggests, emanates first and foremost from experience. This was further elaborated with Kolbe's (1974), theory of experiential learning in which a person's experience is translated through reflection into new concepts and ideas. These are then applied in a reiterative cycle that involves (1) concrete experience followed by (2) observation and experience followed by (3) forming abstract concepts followed by (4) experimentation or testing in new situations. A cycle of experiential learning that Borzak (1981) described as a 'direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it.'

Knowles' (1984) theory of andragogy posited that adult education needed a different approach than that normally associated with the pedagogy of children. The maturity and experience of adults meant that their existing knowledge, skills and world view needed to be taken account of when designing education and / or training curriculum, and that they demanded greater control over the learning process.

These ideas were later developed by researchers and theorists such as Becket, (1996), Stephenson (1993), Boud (1998) Solomon,(1999), Hager (1998), Costley (2001) and Billett (2001), whereby so called 'informal learning' done in the workplace should validly be recognised as learning that could equate to that done in academic circles. These concepts

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[1] Skype: an online phone and video-conferencing platform.

were further developed into a new paradigm of higher education, one in which the locus of learning and site of curriculum was the workplace. Smith and Betts (2000), Boud and Solomon (2001),

In 1996 the UK Government commissioned the Dearing Report into UK HE and skills for the future. The Dearing report[2] (1997) of the National Committee of Enquiry into Higher Education in the UK was published, citing international consensus that higher level skills are crucial to future economic competitiveness. The report recommended a closer alignment with industry & commerce and the establishment of a comprehensive workplace learning initiative.

By this time, institutions such as University of Technology in Sydney, Middlesex and Anglia Ruskin Universities in the UK and Glasgow Caledonian University in Scotland had already trialled and established workplace-based degree programmes, Revill and Terrill (2005)

The UK Government subsequently accepted the major recommendations in the Dearing report, establishing and funding Foundation Degrees and providing money for expanded workplace-based learning initiatives in existing undergraduate and post graduate degrees.

Currently more than 90 Higher Education & Further Education institutions in UK now deliver Foundation Degrees, (a programme equivalent to the first two years of a taught degree), with more than 87,000 learners enrolled[3]. Foundation Degrees are designed as WBL skill/knowledge development for young people in work, but with minimal qualifications. To support this, a funding stream for development of new HE / Business / industry partnerships has been established.

WBL is seen as essential strategy for increasing productivity, competitiveness and innovation in a globalised world. In a recent survey of UK HE institutes, 73% say they promote 'work-based learning' (for professional development' or 'training and development')[4]. The main drivers for WBL in UK HEIs include:[5]

- the reduction in State funding of HE institutions,
- viewing WBL as an untapped revenue stream – a new market
- drive to maximise innovation, enterprise and creativity
- widening of access to and participation by non-traditional learners
- the recognition of workplaces as legitimate site of HE level learning
- the recognition of need for closer alignment with industry & business, i.e. curriculum and skills relevance
- drive to create and apply new knowledge

WBL for HE qualifications is also being extensively deployed in other jurisdictions such as South Africa, Canada, Scandinavia and other European Union countries

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[2] Higher Education in the Learning Society (1997) report from National Committee of Enquiry into Higher Education http://www.leeds.ac.uk/educol/ncihe/
[3] Popularity of Foundation degrees continues to rise, News item 05/02/09, Foundation Forward website http://www.fdf.ac.uk/page.aspx?id=4&newsid=7
[4] Work-based learning: Illuminating the higher education landscape, (2006) Report by The Higher Education Academy, York ,UK (page 16)
[5] Work-based learning: Illuminating the higher education landscape, (2006) Report by The Higher Education Academy, York ,UK (page 12)

Emerging Theory & practice

New research and theory propose a new higher educational paradigm based on demonstrable value and validity of informal learning done in the workplace and the development of practice. Boud and Solomon (2006), Kenyon and Hase (2001), maintain that WBL has its own heutagogy, (theory of self-determined learning) and curriculum design, assessment and moderation practices and processes.

Hagar (2006) puts forward the proposition that there are two types of learning. Type one is propositional and is favoured by traditional HE institutions. Type two is informal learning which is based on direct experience and workplace practice. He suggests that the major issue with propositional learning is its authenticity and relevance of assessment in relation to real world practice, termed situated cognition. On the other hand the major issue with informal learning is the lack of knowledge of underpinning theory of practice and ability to generalise from specific contexts.

Hager further claims that WBL's great value is that it provides the necessary interface between propositional and practice-based informal learning, thus building on the strengths of each and getting the best of both worlds. He also suggests that regardless of quality of traditional academic education, recently qualified workers get absorbed into the normative structures and cultures of the workplace and are unable to effectively influence creativity and, innovation, and consequently practices and productivity remain largely unchanged. He believes workplace culture, ethos and practice that enable competitiveness based on increased innovation and productivity and has to be built from within. Thus the notion of WBL programmes that situate the curriculum and learning within the needs of the workplace greatly increases the likelihood of such change occurring.

Beckett (1996) proposed a new theory of practice through the use of critical reflection as a way of developing judgement which he sees as an essential ingredient of strategic thinking and the ability for business to navigate the shoals and tides of a globalised economy. He sees the effect of combining informal workplace learning within a higher education framework is the ideal seedbed for developing skills of high level judgement.

Vygotsky's (1978) Zone of Proximal Development theory in which workers learn by example, coaching and shadowing expert practitioners. This has been extended and enhanced by Lave & Wenger's (1998) theory of Community of Practice as a primary vehicle for workplace learning and authentic situated cognition.

Formally accrediting WBL provides status and recognition of learning done in the workplace and the validity of the WBL model. In addition it is seen to provide benefits to academic institutions and employing organisations as well as strengthening career prospects of learners and making WB learners more valuable and productive to their employer.

After more than two decades of WBL practice in the UK an extensive body of literature and case study documentation has developed, as well as more recent research on the implementation and outcomes of WBL. The funding of a centre of excellence (CETL) in the UK enabled a significant leap in research outputs in the variety of dimensions of interest to successful WBL implementation in higher education, as did the emergence of research units within universities, the most prolific being from Middlesex University. Journals focused on WBL theory and practice has also emerged, the most significant of which is the Journal of Higher Education, Skills and Work-based Learning.

WBL theory-based practice has led to new employer organisation and institutional partnerships which promote closer alignment and understanding of each other's needs and measurable through the increased level of cooperation, collaboration and sharing of mutually beneficial information. WBL seen as crucial in elevating productivity, innovation, competitiveness, sustainability and profitability for industry and commerce and is also seen as key in retention of talented employees and providing good career advancement prospects.

WBL in the New Zealand context

According to a recently published Industry Training Federation (ITF) report workplace-based learning is '*comparatively under-researched'* and the status of workplace learning is '*under-recognised.'* Vaughn, O'Neil and Cameron (2011).

WBL in New Zealand as a formally recognised strand of vocational education has in recent years, primarily taken the form of education/training organised around Industry Training Organisation (ITO) standards based qualification structures and largely intended as 'on-job; training. Established under the Industry Training Act 1992, this system of industry training largely replaced the older forms of workplace-based training such as apprenticeships and 'in-house' training and career progression regimes that were common, particularly in government departments and ministries pre the 1992 Act.

 ITOs are the standard setting bodies for industry sector groups and are largely responsible for developing training standards which inform the industry specific qualifications registered on the National Qualifications Framework. In this arena of work-based learning, qualifications are largely based on unit standards which are at national certificate and national diploma level. The majority of these certificates and diplomas are at level 2, 3, and 4 on the NZQA framework. A few are set at level 5 and occasionally these can be at level 6. A recent innovation has been the approval given to establish an under-graduate degree in Youth Development based on unit standards at levels 5, 6 and 7.

In unit standards based education and training, the curriculum is centrally controlled and closely prescribed as is the content structure, performance criteria, the form of the evidence required and the method of assessment for the qualification. This is also true of other forms of vocationally focused qualifications such as the New Zealand Diploma in Business and MBA programmes that purport to be positioned as work focused education.

WBL as a new higher education paradigm

Herein lays the primary difference between, what is presently considered work-based learning and the form, structure, educational philosophy and pedagogy (or heutagogy) of the WBL model that Otago Polytechnic is piloting. There is no precedent in New Zealand for WBL at degree or post graduate level in which the curriculum is determined by the learner and the learner's workplace context. In the Otago Polytechnic model of WBL, the curriculum, learning outcomes and method of assessment is negotiated with the learner, the learner's employer and the academic institutions by way of a learning agreement (contract) and operates within the framework of the graduate profile of the qualification.

It is this paradigm of higher education that sets it apart from other models of work-based learning. A model in which the learning is situated entirely, in the workplace; where the locus of power is shifted away from the academy's traditional mode of teaching and more towards the learner and the learner's context; and where responsibility for academic validity is held by the institution without it determining the specifics of what will be learned when it

will be learned or in what order. There is little if any precedent for work-based learning at degree, graduate diploma or post graduate level, nor one that deliberately attempts to have the learner's context as the driver of the learning process, and in which the role of the institution is to support that journey rather than control the nature and content of it

What this pilot sought to achieve was the delivery of a new mode of higher education in which mature and experienced working people are given the opportunity to use their workplace experience, knowledge and context to explore issues, developments and practices that exist within their own workplace. The workplace itself becomes the source of their curriculum and the practice issues of the workplace become the topic of academic study..

This approach provides multiple benefits to the learner, the employing organisation and the academic institution, (Costley, 2000) For the learner, not having to take time off work to gain qualifications is important particularly in the current economic environment. Of more significance this mode of study provides a level of contextural relevance and immediacy that is highly attractive to learners and is one with which traditional taught courses struggle to compete.

For the employer, the topic and mode of WBL study provides tangible benefits to the employing organisation as the projects are able to directly add value and new opportutinites for improvements in efficiencies, products and services. As Doncaster, (2000),points out projects done as part of the WBL programme provide organisations with focused, on the ground research and directly relevant and appliable development resources, thus increasing intellectual capital and providing gains in operational performance.

The institution benefits through the importation of new ideas and developments that are occuring in industries and businesses as they respond to rapid changes in the global marketplace, particularly those driven by the use of new technologies. For the educational institution, keeping up with the ever increasing speed of workplace change, is an ongoing problem and one that WBL can assist with by importing new knowledge and practice into the academy as a direct result of projects and research undertaken by the WBL learner.

Part 3: Research Project Objectives

A participatory action research methodology was used to investigate the issues and document the experience. The learnings generated by and the issues that emerge from the pilot have been closely monitored. We have engaged with work-based learners, employers, academic teaching and managerial staff around the implementation of the programme with the aim of developing appropriate and robust practices around facilitation, assessment, and curriculum design and support structures. These were used to form the basis of a set of, principles, which are intended to inform, underpin policy and guide the development of WBL at Otago Polytechnic and beyond.

Using a structured investigation this research project sought to address the following objectives:

- determine what the impacts of the WBL degree delivery are on learners; teachers, institutional practices and employing organisations;

- determine what the technological and administrative issues are in supporting distributed learners through this mode of higher education delivery;
- determine what the staff professional development needs are in WBL delivery to assure highest quality teaching and learner support and engagement;
- develop a robust set of principles that can guide the development of WBL, using best international practice
- develop emergent grounded theory about the practice of WBL in the New Zealand context and how it compares with the experience in other jurisdictions;
- use action research to foster a culture that focuses on improvement in practice through a continuous cycle of, investigation, intervention, reflection, planning and implementation.

Research Methodology

This research project used a combination of collaborative, insider and participatory action research methodologies to evaluate the pedagogical underpinning, administrative practices and operationalisation of the WBL pilot. It will use a range of data gathering approaches including journaling, focus groups and structured and partially structured interviews of key participants and stakeholders.

> *Action research is highly appropriate to the development of e-Learning where changes in delivery mode imply not only alterations in course models, but also development of new attitudes, in order to accommodate the new challenges posed.* (Nunes-Baptiste & McPherson 2002)

Action Research uses a reiterative and spiral cycle methodology, each cycle re-examining, reflecting on and building on the experience, data and outcomes generated in the previous cycle.

In this case it is proposed to use a three cycle spiral that the author has named Reconnaissance, Re-Design and Re-Evaluation phases.

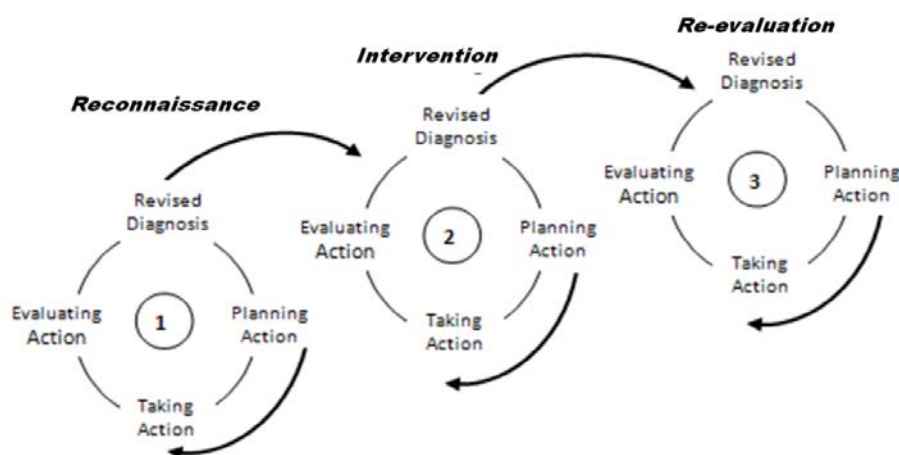Figure 1 graphically illustrates this spiral cycle approach.

Figure 1. The spiral of action research cycles *(After a diagram from* Coghlan & Brannick 2001).

The action research process starts with identifying and investigating a problem or set of issues, in this case the implementation of Workplace-Based Learning initiative, that require resolution and / or a better understanding of the complex factors and dynamics involved.

In the Reconnaissance phase, problems, issues and incidents that arise out of the early stages of implementation are diagnosed, some type of intervention that addresses the initial diagnosis is planned, and action is taken and then evaluated. Subsequent action research cycles follow a similar pattern, but address wider issues that inevitably emerge as both the course activity progresses and results of interventions from the earlier cycle are analysed and further modifications are proposed.

Regular meetings of the researchers provide a venue for discursive identification and exploration of the issues as a group as well as determining what interventions are needed and reviewing actions taken previously. A core researcher or research coordinator is responsible for collecting the data generated from all these action research activities. The data is analysed collaboratively and reported on at regular intervals by way of interim progress reports and a final report.

Research methodology in practice

From the beginning it was determined that all those both directly and peripherally involved with the pilot had a role in the research as practitioner researchers. Practitioner research, as described by Campbell (2007), involves practitioners learning from their research into practice with a view to improving their practice. In doing so 'those involved in practitioner inquiry are bound to engage with both 'theoretical' and 'practical' knowledge moving seamlessly between the two' Groundwater-Smith and Mockler (2006:107) cited in Campbell (2007).

Accordingly, it was understood that any and all relevant information deriving from conversations, discussions and debates whether face-to-face, by email, phone or any other means was considered grist to the pilot's research mill, with the proviso that all ethical considerations would be observed. Ethical approval for the research was sought and obtained from Otago Polytechnic's Research Ethics Committee.

Data Collection

A range of data gathering methods were used, some formal and structured and some informal emanating from conversations, discussions and problem solving activities as part and parcel activity of the pilot process. Semi-structured interviews were conducted, mostly by phone which were recorded by audio software to computer and were later transcribed. These interviews generally followed a structured question line, but where un-anticipated information was forthcoming the interviewee was encouraged to expand their answers as a means of enlarging on the issues being discussed.

In addition to these structured interviews, regular and ongoing conversations between the pilot's co-leaders, (of which the lead researcher was one), were sometimes recorded with a digital voice recorder, otherwise notes were taken. Frequent if irregularly held conversations with others, including facilitators, learners and other academic and administrative staff were also conducted, sometimes in a formal or semi-formal setting as in a section meeting, sometimes in a chance or an ad hoc on the fly opportunity. These were often followed up by conversations between the pilot co-leaders and de-constructed to extract important learnings.

Frequent email exchanges, phone conferences and the occasional Skype or Adobe Connect video conference between facilitators, learners and pilot co-leaders also provided a wealth on important information. This was particularly useful when grappling with the details of preparing APL assessment presentations and learning agreement proposals. Regularly scheduled formal meetings with the project sponsor and senior management team member to track progress, identify issues and seek assistance with operational and academic matters.

A number of workshops and seminars were held with other staff, including heads of schools and these were used to explain the pilot and the research and to seek input and feedback on the project by non-involved academics. This helped to keep the pilot members' objectives in perspective as well as gauging interest and potential support for the WBL concept beyond the particular Applied Management discipline used for the pilot.

To help focus the pilot and the research investigation a flow chart of issues, learnings and actions was developed. (See Appendix 1)

Part 4: Work-based Learning – Towards a definition:

The Higher Education Academy's 2006 report on Work-Based Learning: Illustrating the higher education landscape makes the following observation:

> *'Everyone has a view on what work-based learning means and they use a wide range of terms interchangeably (e.g. workplace learning, work-related learning, vocational learning). This all goes to confuse the situation and undervalue the potential benefits of work-based learning as a mode of learning at a higher level.'*
> (Nixon, Smith, Stafford & Camm, 2006)

The research interviews conducted showed that a breadth of perspectives exists on the definition of WBL - and so one of the outcomes sought through the project was a consensus on a definition appropriate for Otago Polytechnic and its specific application as an emerging educational paradigm. The following quotes give some notion of the diversity of perspectives encountered.

> *"At its simplest it's learning done in the workplace, but at a slightly more sophisticated level it's an alternative delivery mode - an approach that provides an opportunity for learners to meet the outcome requirements of a standard programme [such as a] degree through a curriculum built around the work they do in the workplace or built around the workplace context … that will be appropriate for the learning that a particular candidate is interested in pursuing"* (I*nterview with Phil Ker, CE of Otago Polytechnic*)

> *"I put it under the umbrella of experiential learning, its learning by experience in the workplace. It can be related to learning that we [OP] would want people to learn, but …more likely it's learning in the workplace that we can relate back to the curriculum."* (*Interview with Robin Day Deputy CE of Otago Polytechnic and Director of Capable NZ)*

> *"Learning where the majority, if not all the learning, takes place in the context of a workplace and is applied to the work going on in the workplace." (Interview with Jean Tillyshott, Group Manager Central Otago Campus, Otago Polytechnic)*

"Rather than meeting a series of learning outcomes in a traditional classroom situation, candidates or students would meet those learning outcomes through either a workplace based project or a series of workplace projects." (Interview with Kay Lion, Head of School of Applied Business, Otago Polytechnic)

"Learning that's defined in terms of meeting a qualification, a programme of learning, but the learning itself is accomplished in the workplace." (Interview with Sue Thompson, General Manager, Academic Services, Otago Polytechnic)

"It's education through work, in work, for work, at work." (Dr Peter Critten, Institute of Work-Based Learning, Middlesex University)

"It's education that puts the learner, the learner's knowledge and understandings, and the learner's workplace context right at the centre of the educational process rather than the qualification and the institution's curriculum being at the centre of the process." (Kris Bennett, WBL Project Leader, Business Development Manager, Capable NZ, Otago Polytechnic).

While arriving at an agreed and appropriate definition of Work-Based Learning has yet to be finally determined it is clear from the above comments that Otago Polytechnic's approach to the model is:

- that of education conducted in, by and for the workplace,
- where the learner, through negotiation with employer and polytechnic, determines the nature of the curriculum;
- that the curriculunm is situated in the learner's workplace context;
- that the learner determines the order and pacing of the learning;
- that the method of assessment is negotiated
- that it is a learning process agreed between the learner, his or her employer and Otago Polytechnic;
- that there is a percieved and tangible benefit to the employer
- that Otago Polytechnic safeguards the academic integrity of the learning;
- that the learning must demonstrate evidence of and be aligned to the graduate attributes as articulated in the qualificaton's graduate profile;

Workplace-Based Learning – The project's progress to date

- The initial cohort of learners has grown to 24 individual learners enrolled in the bachelor of Applied Management through the WBL mode.

- Of these 6 are individuals from Otago Polytechnic enrolled in the Business Excellence major, 6 are employed by large organisation, 4 are elite athletes on Prime Minister's Gold Scholarship grants, 4 are self-employed the balance are enrolled in Graduate Diploma programmes by WBL related to Applied Management.

- So far 5 WBL learners have been through their APL presentation and are currently developing their Learning Agreements for their balance of learning.

- A contract has just been signed with the Royal NZ Police College to develop a WBL programme that fits with their Youth Aid Officer training and provides a pathway to fulfil requirements for papers in the bachelor of Social Services for up to 60 learners a year.

- Responding to strong expressions of interest in WBL by a variety of employers and processing quotes and negotiating contracts for staff development programmes using a WBL approach.
- Presentation have been made to:
  - NZQA: invitation to present to NZQA staff as part of their professional development programme
  - Heads of School and Senior Management team at Otago Polytechnic to explain the WBL approach and examining some of the institutional issues.
  - Staff of Capable NZ Polytechnic to explain the WBL approach and examining some of the issues for the professional development of Capable staff and changes to roles and responsibilities.
- Workshop with senior management team of Otago Polytechnic to explore institutional and academic issues to do with WBL.
- A further 4 candidates enrolled between March and May 2011
- 4 have dropped out or failed to complete the enrolment process of the pilot due to personal circumstances
- 12 have completed their APL process
- 5 have completed, or very nearly completed the Learning Agreement Approval process
- 4 are currently engaged in implementing their LAs
- 1 has completed all phases of their WBL programme, has submitted final reports, has presented their portfolio of learning to a panel of assessors and has been awarded the degree and approved to graduate in December.
-

Other activity

Although not actually part of the WBL pilot for which this research has been commissioned, the following projects are providing valuable learnings about the range, scope and potential of WBL models which is contributing to and extending our understandings of the issues involved.

Royal NZ Police College

A contract has been signed with the Royal NZ Police College to develop and deliver a WBL programme that fits with their Youth Aid Officer training and provides a pathway to fulfil requirements for papers in the Bachelor of Social Services.

A cohort of 12 learners began their WBL programme in August and a further cohort of 12 learners begun their programme at the beginning of November. A further cohort is expected to engage with the programme between December 2011 and February 2012.

Cardrona Ski

An agreement to deliver a WBL programme to 9 staff members of Cardrona Ski Ltd. has been signed and an orientation workshop was held in early October in Wanaka.

Part 5: Workplace-Based Learning – Summary of of emergent themes and issues from cycles 1 and 2 of the action research

In the first two cycles of this action research a number of issues emerged out of the interviews conducted with those Otago Polytechnic teaching staff and managers involved in the pilot and members of the senior leadership team. These issues centred on the following eleven themes: (see Appendix 2 for details)

1. **Profiling** – the process by which potential candidates are selected or provided guidance to undertake a degree by WBL following a robust Assessment of prior Learning process.
   1.1 This process largely operated in an ad hoc fashion and the need to formalise the process and provide guidelines and structure to those doing the profiling has been identified. Steps need to be taken to implement a more structured approach.

2. **APL Assessment** – Assessment of prior learning is seen as an essential foundation for successful WBL implementation. There are three aspects to this:
   2.1 In the first place it is an absolute requirement in order to identify the gap between what may be accredited towards a degree and the learning required to bridge that gap.
   2.2 In addition the APL process that has been developed by Otago Polytechnic provides the WBL facilitators, who also facilitate the candidates APL process, with the necessary skills to guide the workplace learner in the development of their learning agreement and in the implementation of the project/s described in that learning agreement

3. **Learning Agreements –** The additional learning and assessment required by a workplace learner to complete the balance of learning for the degree is negotiated through the development of a learning agreement. The learning agreement process involves the following:
   3.1 the learner has control over the curriculum and determines how the learning is to be undertaken, the context in which it is to be learned, and the manner in which the learning is to be measured and the criteria used to assess the learning.
   3.2 a description of what learning will be undertaken, how it will be done and when it will be done by
   3.3 as a tripartite contract between the employer, employee (learner) and the academic institution (Otago Polytechnic), the learning agreement must be acceptable by and be seen as beneficial to the employing organisation as well as satisfying the academic requirements of the degree
   3.4 a shift in role for the academic advisor from that of a traditional tutor in being the gate keeper of core knowledge and the one who determines the curriculum and the terms of the assessments to that of a facilitator guiding the learning journey of the workplace learner who determines the curriculum and how, what and when of the final output of work
   3.5 Three key dimensions of the learning agreement process emerged for the institution:
      3.5.1 the need for a learning agreement to clearly link to the "academic" dimensions of the qualification
      3.5.2 the learning agreement to clearly contain the dimensions of the discipline's body of knowledge that will be explored through the project

> 3.5.3 the need for a learning agreement to clearly link to the reality and context of the workplace
>
> 3.5.4 to ensure that the employer's objectives are accounted for

4   Learning agreement approval process - involves development of an assessment framework that not only has the required academic rigour that ensures consistency across a wide range of learner and learner contexts, but is also flexible enough to accommodate the highly individualised nature of WBL.

It was determined that work is to be done on developing the appropriate specifications and assessment rubrics that can address the various dimensions of WBL assessment.

5   Employer engagement - This is necessary to ensure adequate and appropriate understanding by all parties of the type and extent of support required by the WBL learner to achieve their learning goals. It also is key in determining the nature of the learning to be undertaken so that there is an identifiable and tangible benefit for the employing organisation.

5.1 It was determined that work is to be done developing the appropriate policy and practice framework that can address the various dimensions of engagement with employers.

6   UK Mode - NZ Context - Otago Polytechnic's WBL initiative is largely based on the experience of a number of UK universities and on extensive international literature. WBL has been a feature of UK's HE landscape for nearly twenty years and the most commonly recognised model of WBL is based on high level agreements between an institution and corporate companies with large workforces. These agreements usually involve a commitment of supporting and fully or partially funding, multiple cohorts of learners. The reality is that the UK has many companies with large workforces while New Zealand has very few. Two key issues were identified in this dimension:

6.1 We have a number of candidates who are self-employed and therefore have no employer. In these cases we have to adjust our thinking and come up with ways of dealing with these types of variations of context and circumstance in order to meet the widely differing candidate contexts and aspirations, while maintaining the academic integrity and validity of the WBL model we are evolving.

6.2 To remediate this, the use of expert mentor/coaches to support self-employed learners in place of a workplace supervisor or manager is being explored. This is especially important as in these cases where there is no actual employer to act as the third party to the learning agreement. In this context, the expert mentor/coach will have a workplace supervision role of sorts, able to provide the business specific guidance and direction that might otherwise be taken on by a workplace line manager.

7   Staff and institutional capability – a number of questions about staff capability were raised through the interviews. It was strongly recommended that these be identified as early as possible. They include:

7.1 What are the main academic challenges in implementing WBL at Otago Polytechnic?

7.2 In what ways might WBL potentially challenge the normal operating processes and policies of OP?

7.3 What are some of the main quality assurance issues for OP in terms of the WBL initiative?

7.4 WBL represents a substantial departure from more conventional or traditional ways of providing higher education at OP, how might this difference might be viewed by academic teaching staff?

7.5 How does the concept of privileging learner constructs in terms of negotiating curriculum and assessments rub up against more traditional attitudes and conceptions about teaching and learning in the tertiary education system?

7.6 What are the main challenges for getting buy in from academic staff for what is regarded as yet more change and a new and as yet untried (in NZ) higher education paradigm?

7.7 How will long held notions of academic rigour and validity need to be adjusted to accommodate WBL?

Attention is being paid to this issue and strategies are being developed to manage the rate and scope of growth. A primary tension that must be balanced here is being responsive to employer needs, which are of high value to employers, and ensuring that appropriate support structures, administrative systems and staff capacities and capabilities are equipped to cope with this growth.

In addition it was recognised that there is a growing need to recruit people to the WBL facilitation role who have the necessary academic qualifications and skills as well as a good understanding of the world of workplace practices, demands and perspectives.

People deeply grounded in academic processes and practices often find difficulty in appreciating the workplace environment and freeing up their attitudes about traditional notions of teaching and learning practices and the role of the academic.

On the other hand people who come out of a purely business background often have difficulty in understanding and appreciating the rigours and requirements of academic study. WBL facilitators need to have a full appreciation and understanding of both worlds as well as the necessary attributes for supporting, challenging and guiding workplace learners.

8 **Managing speed and scope of growth –** An unanticipated consequence of implementing this WBL initiative has been the level of interest and demand for this service from employers who have picked up on the opportunity this method of education delivery offers. In responding to these expressions of interest we are confronted with the issues of how to manage the potential speed and magnitude of growth given our nascent and evolving experience and skills with WBL. Two key issues emerge from this:

8.1 Finding a balance between being responsive to employer needs and interest, and ensuring that appropriate support structures, administrative systems and staff capacities and capabilities are equipped to cope with this growth.

8.2 The recognition that strategies need to be developed to manage the expectations of all stakeholders so that the impetus to accommodate keen interest in the model and the rate of growth of new business does not outstrip available resources and capability to meet the demand.

This growth has also come in the form of consultancy opportunities. As a consequence of launching this WBL pilot a number of opportunities have emerged whereby employers are seeking support in establishing the necessary groundwork to engage with WBL as a delivery model for staff professional development. Two significant opportunities have been undertaken:

8.3 Mapping existing "in house" training programmes that employers run, to outcomes of qualifications that can be credited by Otago Polytechnic.

8.4 Employing the tools and skills developed over many years in the profiling, facilitation and assessment of APL in developing a learning culture within a workplace. In practice this means working with groups of employees to collaboratively develop the skills of critical reflection of practice; unpacking of case studies and peer review and constructive critique.

8.5 work has been undertaken to develop practice frameworks and systems to both formalise what amounts to an enhancement to the WBL model we are evolving, and provide guidelines and benchmarks for future possibilities.

9 **Resource development** - Given the nature of a highly individualised programme of study and the wide variation in learner contexts and situations, there is an inevitable question of how to fund this in a cost effective and efficient manner. Allied to this is the fact that the learner group is not only disparate but also widely distributed which also has the potential of adding additional costs.

One of the strategies that are being put in place is the development of flexible, online resources and tutorials that enable and support a higher level of self-directed and independent study on the part of the learner than might be appropriate for in class learners. At the same time there is the opportunity to employ a wide range of communications, rich media and social media tools to reduce distance and isolation and provide a more streamlined and targeted collection of resources and learner activities that can be accessed at any time from any place. Two particular initiatives have been undertaken in response to this need:

9.1 Professional development activity to upskill Capable NZ staff in the use of social media, communications tools and support structures.

9.2 Development of interactive online resources and activities along with articles and readings, including include such things as Skype, Google Docs, Adobe Connect virtual classroom/meeting tools, Moodle (LMS), wikis, discussion forums as well as the more commonly used tools of email and telephone.

10 **Research and evaluation** - A mission critical issue for the success and sustainability of WBL at Otago Polytechnic is the judicious and wholehearted use of research and evaluation to inform practice along with the development and the long term strategic direction of the model. Otago Polytechnic has a sound and productive research culture. This action research is being well supported and work is ongoing in terms of establishing a platform from which a continuing programme of research and publication will be undertaken.

Part 6: Report on final action research cycle for the work-based learning pilot

Description of final action research cycle

In the original research plan it was intended that the research would cover all phases of the work-based learning pilot, from candidate recruitment, pilot launch, APL process, Learning Agreement development process, Learning Agreement approval process, Learning Agreement implementation and final assessment of project work. As a result of a number of false starts, some setbacks and other factors, both organisational and as a result of personal circumstances of learners and others, the pilot's implementation and progress has been far slower than expected.

Consequently, only one candidate has completed all phases of the pilot at the time of this report and only four others have completed or are very close to completing the Learning Agreement approval process. The final cycle of the action research therefore can only cover the activity so far concluded within the time agreed time frame of the research contract. That said, the activity so far has generated a large quantity of data and has identified a range of issues that will be discussed. The focus for this cycle of the action research was to investigate the efficacy of the Learning Agreement process.

In terms of methodology, the data has been generated formally by interviews with work-based learner and academic advisors/facilitators and informally with wide ranging conversations with key stakeholders involved with the pilot.

Summary of emergent themes and issues from final cycle of investigation

1. Learning Agreements process
Learners
The general experience of learners in developing their learning agreement is mixed in terms of the positive and negative experience of the process. All found the process ultimately rewarding and very effective in focusing their thinking about what they were to learn, the enabling the successful negotiation of the learning outcomes and assessment. It also contributed to them gaining increased confidence in their developing understanding, knowledge and skills in terms of their project and their workplace context. However, the actual process of developing the learning agreement was generally experienced negatively, in large part due to unclear expectations and confusion about how to proceed.

WBL academic advisors
Academic supervisors/facilitators were provided with a professional development workshop in the creation and management of learning agreements. However, it transpires that while this was a useful and worthwhile exercise, the efficacy of the workshop in imparting the appropriate level of understanding of the pedagogical issues and the procedural and operational functions required to be carried out by academic advisors to work successfully with learners in the learning agreement process was significantly underestimated.

2. **Learning agreement template and exemplars**

Belatedly, it was recognised that a comprehensive learning agreement template was necessary to provide:

2.1 an effective structure and formalised guidelines for individual learners in their development of a learning agreement that is readily understood, time-saving and can focus the learner's efforts more efficiently

2.2 a benchmarking tool for academic advisors to be able to provide guidance and support for the learners they are working with

2.3 a better and more efficient process of ensuring all aspects of the learning agreement outcomes and their alignment with the graduate profile are attended to

2.4 a clearer, more robust, more rigorous and more efficient method of ensuring consistency in assessment and moderation.

3 **Academic advisor support**

In all cases, learners reported that the level of support and encouragement from their academic advisors was excellent. Academic advisors were regarded as being highly responsive, available and willing to engage in whatever way the learner wished.

It was noted that the all the academic advisors were carrying heavy workloads, with large numbers of candidates and this did on occasion seem to slow things down, particularly where providing timely feedback on work submitted for review was concerned.

4 **Employer engagement and support**

Generally speaking, and where relevant, employer support was regarded as good. As indicated earlier, there were several occasions where the agreed focus of the LA a learner was developing had to be changed, either because of issues of political sensitivity of the topic or because the learner's department was reorganised and they were moved to another role losing their line-manager / WBL workplace supervisor and the context within which the WBL project was meant to be conducted.

In several cases, where learners are self-employed the support from the employer was not available. In these cases, mentor/coaches with extensive sector or discipline experience and knowledge were assigned to these individuals and their role was to both provide guidance and act as the de facto employer or workplace supervisor. This arrangement has worked well and is one that will be developed further and strengthened for the future as it appears this programme is likely to be attractive to the large numbers of potential candidates who are largely self-employed.

5 **Relocation of the WBL team**

A number of significant challenges have emerged within the operational context that the WBL pilot and other WBL initiatives is required to operate. It was decided at senior management level that the appropriate location that the WBL team and pilot should operate is within the Capable NZ unit. Capable NZ is a stand-alone business unit primarily responsible for managing Otago Polytechnic's APL programme for awarding part or whole qualifications.

This was seen as both operationally and philosophically appropriate for three reasons. In the first place the fact that WBL is so grounded in the pedagogical and operational methodology of the Capable NZ APL process provides an essential symbiosis. Not only

does the nationally approved and acknowledged APL process provide the foundation and underpinning for WBL practice, the APL facilitation skills and processes developed over many years of successful operation are also immediately transferrable to WBL academic advisor practice.

While this decision is seen as organisationally, philosophically and operationally appropriate there have been a number of challenges in its implementation that has impacted on the work and timetable of the WBL pilot.

6   Staff resistance

Perhaps surprisingly, given the close relationship shared by the Capable NZ staff and the WBL team members, (most of whom were drawn from the Capable team); the very close alignment of the educational philosophy and practice of the APL and WBL processes, as well as the directive from the CE to embrace innovative practice, there has been elements of resistance to the WBL work on the part of some Capable NZ staff.

In part this is the result of workload increase, staff losses and disruptive re-organisational changes that have occurred over the past year and the WBL pilot being perceived as something loaded on top of this as "yet another change".

7   Staffing capability and capacity

In the midst of this a number of changes were forced on the Capable NZ operation due to several staff leaving, including the operational manager and the long-time administrative assistant. This left a significant leadership hole and extended the already noticeable lack of leadership, strategic direction and critical decision making.

This situation has impacted on the WBL pilot in a lack of administrative support in developing essential systems such as procedures for managing and processing new learners. It has also resulted in long delays in making decisions about appointing additional contractors to academic advisor roles to relieve workload pressures on the small number of academic advisors managing large numbers of learners.

8   Growth

While this WBL initiative is essentially still in pilot mode, there is growing interest and demand from employer organisations and individuals to engage with WBL. This comes about because the WBL model so closely fits and aligns with the training and development needs of both employers and individuals that it is seen as a far more effective and efficient method of achieving transformational change in behaviour, attitude and performance, than traditional modes of staff training and professional development.

Part 7: Principles to guide development of WBL

Principle 1: Work-Based Learning is more than an alternative mode of delivery.

When Boud and Costley (2001) describe Work-Based Learning (WBL) as a new paradigm in higher education, they are accurately ascribing a profound shift in traditional educational practice and understanding.

At the time WBL was first considered at Otago Polytechnic, it was promoted as simply an alternative mode of delivery for a taught degree that already had nascent elements and

flexibility of WBL practice. This included negotiation of Special Topics as part of the curriculum, a 60 credit Cooperative Education course, the use of learning contracts/agreements and recognition of Assessment of Prior Learning (APL) as a legitimate credentialing process for recognising experiential learning gained in the workplace that can contribute towards the final qualification.

While this degree programme provided an appropriate vehicle to pilot a WBL initiative, it has become clearly evident that WBL is far more than simply an alternative mode of delivery. To be successfully implemented, WBL requires a profound shift in appreciation of the nature of commonly accepted notions of teaching and learning practice.

In the first place it challenges the traditional power relationship between teacher and learner as it places the responsibility for identifying the learning to be done, what the 'curriculum' will consist of and manner of assessment squarely in the hands of the learner.

Far from disempowering and /or making the academic function redundant, it requires of the academic advisor a new set of roles and a different, broader and more holistic appreciation of the ways in which people learn and the way learning happens in the WBL process. The academic engagement with a Work-Based Learner provides for a stronger, richer and ultimately deeply rewarding experience where the learning journey is jointly shared and explored.

Commonly, in classroom–based, taught programmes, the learner is aiming to achieve qualifications that will provide entry level acceptance into the workforce. Because the ultimate workplace destination and context of the learner is usually unknown the course of study, by definition, must be relatively generalised with the hope that some of what is learned will find application in the working life of the learner.

WBL learning turns this notion on its head. The locus of learning for WBL is in the workplace, it is the site of curriculum and the workplace provides the context and experiential opportunity for new learning. Work-based learners usually bring a high level of maturity, experience, skills and a wealth of tacit and informal workplace learning along with a wide range of formal, but un-credentialed training and professional development experiences. They are usually already well-established in their professional or workplace identity and their learning needs and motivations are entirely different from those seeking to access entry to their chosen career. They are also able to bring to bear the necessary disciplines and focus in terms of carrying out their WBL projects and providing the required theoretical, analytical and strategic thinking of the academic programme.

The academic facilitator's role in all this is to safeguard the academic rigour of the learning outputs and to provide guidance and direction to the learner.

Principle 2: Selection of potential WBL candidates requires careful, accurate and effective profiling.

Profiling of candidates is a practice used at the start of an Assessment of Prior Learning (APL) process to determine the appropriate subject pathway and likely credit value that may be obtained through APL. With the introduction of WBL, a further step is now required by the profiler, that is, to be alert for indications and consider whether or not the candidate being profiled may be both eligible and appropriate to be offered the WBL pathway as either an alternative or additional option to a straight APL process.

Effective profiling in the selection of potential WBL candidates requires a systematic and open-minded process in order to determine the best option for a candidate. These options include:

a) APL for whole qualifications
b) APL for part qualifications and the balance of learning bridged by traditionally taught papers
c) APL for part qualifications and the balance of learning bridged by project centred WBL
d) A combination of b) and c)

The key to accurately determining the suitability of a candidate's suitability for the WBL process is the early and accurate profiling of the candidate. The profiling process consists of detailed discussions around the nature of the WBL, areas of interest that currently exist within the workplace that have the potential for substantive project work. Also of importance is the ability to gauge the level of a candidate's interest in and commitment to investigating new areas of learning appropriate to degree level understandings.

Priority should be given to candidates who have a supportive workplace, a clear concept of what issues, dilemmas or problems that their workplace presents as possible WBL projects and that can inform the development of what learning agreement might involve. Also of importance is to find out if the candidate has links with people within or without their workplace who would be appropriate to supporting their learning as mentors and / or coaches.

Principle 3: An effective Assessment of Prior Learning process is the foundation of effective WBL and is an essential ingredient.

WBL philosophy and practice acknowledges that the potential candidate brings to the process considerable pre-existing experience, knowledge and skills from the workplace. As such it behoves the institution to use a holistic, academically robust and philosophically aligned system of assessing and accrediting prior learning (APL). APL provides a solid and essential foundation for WBL as it not only measures what can already be accredited, but the process provides the candidates with the necessary skills of reflection, critical thinking and the means to align a candidate's prior learning with relevant theories and concepts required by the degree award.

The facilitation and assessment process of Capable NZ Assessment of Prior Learning model (APL) enables learners to explore the understandings from their experience and position them within the context of the theoretical framework of the relevant discipline. This APL experience brings important benefits to learners as they undertake their WBL process. These benefits include providing the learner with a framework within which to articulate their understandings with an appropriate vocabulary and language; introduces learners to academic tools, resources and skills including deep reflection; provides affirmation and feedback through the assessment process and imbues a level of confidence and empowerment that helps ensure that a key step in their WBL journey is achieved.

A key element of Otago Polytechnic's APL process is the presentation for assessment to a panel of assessors. Although not a mandated approach to assessment, most candidates choose to present evidence of their learning by way of a verbal presentation supported by a portfolio of evidence and a slide presentation. Not unlike a doctoral Viva, the presentation

requires the candidate to present findings from at least two significant case studies from their work or personal life experience and to demonstrate a full understanding and command of the content and its relevance and alignment to the degree outcomes. These findings are framed within the theoretical and conceptual structure of the relevant degree, however, the experiential learning is measured not against the learning outcomes of individual papers, but rather against a fully developed graduate profile that details the expected, knowledge, attributes and skills required at each level of the degree; that is at year one, year two and year three.

The process of facilitating a candidate's APL journey and assessment to a panel requires professional judgement, a holistic view of learning and a well-grounded understanding of the academic programme's body of knowledge. In addition is must also be cognisant of and appreciate how this body of knowledge might be translated and its relevance accounted for when considered in the context of real world conditions and workplace realities. Developing this professional judgement requires broad teaching experience, an evolved view of education and theories of learning, well-targeted professional development and academic support from experienced practitioners.

The APL component of WBL is not something that can be established quickly, or bolted onto a hurriedly established WBL initiative. Overseas experience shows that where this is the case, WBL fails. A robust and academically sound APL process is not only a foundational element of WBL; it is also an essential precondition for its establishment.

Principle 4: WBL places the learner, the learner's understandings and knowledge and the learner's workplace context at the centre of the educational process.

Hager and Halliday (2002) challenge the notion that academic learning is the paradigm for all other forms of learning. In their view learning is related to the context in which it occurs, and the wider the range of contexts, the more productive the learning.

Learning in the workplace ranges from informal, unplanned learning that may not be recognised by the learner, to formal, planned, new learning that is linked to organisational goals as well as individual goals. Key to the academic legitimacy of this learning is 'intentionality' whereby the learning is consciously and systematically pursued rather than indirectly accumulated as a by-product of task-based work.

Workplace–Based Learning is focused on those with significant workplace knowledge, experience and skills and aims to both give recognition to that experience as well as providing the means to generate new learning about their workplace. It is undertaken in a way that both benefits their employer and earns credit for a degree, diploma or post graduate qualification.

What differentiates WBL from the usual academic practice of, curriculum design, teaching and assessment is the fact that WBL practice seeks to wrap academic rigour, processes, and resources around the learner and their workplace context as a means of supporting both the learner and the employing organisation to meet their respective goals.

Principle 5: Well developed and articulated learning agreements are critical to the success of WBL.

The design and development of appropriate learning agreement creation processes is an important focus area for WBL. While learning contracts have been used extensively and for many years in a Cooperative Education/ Workplace Internship context, where traditionally taught learners take project work within workplace placements, the scale and scope of the WBL experience is such that a more robust and learner directed process for the design and development of the learning agreement is required.

The philosophical underpinning to contemporary WBL theory posits that a critical feature of learning agreements is that the learner has control over the curriculum and determines how the learning is to be undertaken, the context in which it is to be learned, the identification of appropriate learning outcomes and the manner and criteria which the learning will be measured and assessed.

In other words the learner determines how the learning outcomes required to meet the terminal qualification will be met, rather than the institution determining the prescription for meeting the learning outcomes.

A well written learning agreement will also articulate the resources required, the time frame in which the work is to be done and identify mentors and coaches, within and without the workplace, who can support the learner. In particular mentor/coaches can help the learner consider what best practice in their workplace context is and how their connection to multiple others can assist in their area of exploration.

To adequately support a wide range of learners and workplace contexts, it requires well developed and sound academic judgement. It also requires a flexible, responsive and supportive approach to the learner's needs along with a willingness to engage with the learner and their employer on equal terms. It must also recognise that the learner's workplace context is dynamic and subject to sudden change. Accordingly the learning agreement process must be able to accommodate change in focus and outputs as determined by the context and realities of the workplace.

This represents a signal change in role of the academic from being the gate keeper of core knowledge and the one who determines the curriculum and the terms of the assessments. The academic's role must now facilitate the learner's journey and provide guidance in shaping the learning in such a way as to both meet the requirements of the path of study and needs of the employing organisation, without imposing unnecessary and irrelevant academic strictures that may satisfy the academic advisor's professional ego, but do little to advance the learning of the WBL candidate.

Principle 6: Guidelines, templates and exemplars provide academic advisors and learners with a structured approach for developing learning agreements

The importance of developing and providing detailed guidelines and learning agreement templates cannot be underestimated. They provide:

 a. an effective structure and formalised guidelines for individual learners in their development of a learning agreement that is readily understood, time-saving and can focus the learner's efforts more efficiently
 b. benchmarking tool for academic advisors to be able to provide guidance and support for the learners they are working with A learning agreement template has now been developed and is being trialled with learners who have completed their APL, but are at an early stage or yet to engage with their learning agreement development.

c. a better and more efficient process of ensuring all aspects of the learning agreement outcomes and their alignment with the graduate profile are attended to

d. a clearer, more robust, more rigorous and more efficient method of ensuring consistency in assessment and moderation.

It is perhaps a reasonable assumption to think that a standardised learning agreement template could not properly accommodate the wide variety of WBL project types and the associated learning contexts and needs. Approaching this process by working with each learner to develop a learning agreement that is specific to that learner, can lead to some learners floundering and losing focus in trying to figure out how to organise what it is they need to establish and articulate what their learning outcomes should be. The lack of standardised guidelines and template for the learning agreement process can also mean that the process of exploration and articulation can result in false starts and wasted energy and time. This can impact equally on the academic advisor as well as the learner, and can result in a loss of confidence in the process.

Well written guidelines and learning agreement templates along with exemplars from previous learners can provide a useful structure to work with and at the same time be sufficiently flexible to accommodate wide variation in project types, learning needs and contexts without forcing all learners into a one size fits all container. It should provide the security of a planned and framed entry point into the process that can get the proposed work underway quickly while supporting a departure from the standardised approach at a later date, if this is appropriate.

Principle 7: A formal and well-structured learning agreement approval policy and protocol is a key element in the WBL process.

The submission of the developed learning agreement for assessment and approval is pivotal in the WBL learner's journey. An assessment process that is not only fair, flexible and relevant to the learner's context, but also is sufficiently robust, valid and able to withstand external critique as to its credibility is essential. This approval process ensures that the proposed learning outcomes are achievable and are aligned with the programme's graduate profile and criteria, that the learning can be achieved within the available resource constraints, are acceptable and approved by the employing organisation and provide genuine opportunities for new learning.

It requires the development of an assessment framework that has the required academic rigour that ensures consistency across a wide range of learners and learner contexts. It also needs to be flexible enough to accommodate the highly individualised nature of WBL. In addition it also requires the development of appropriate specifications and assessment rubrics that can address the various dimensions of WBL assessment. This must be addressed at an institutional level rather than at the programme level, so that it not only to gives WBL assessments the required validity but so it can also be exported to other discipline centres of the institution.

Principle 8: WBL is a three way partnership and employer engagement is paramount.

WBL is based on a tripartite contract between the learner the employer and the institution. This requires a deep and strong engagement or relationship to be built between the institution and the employing organisation. This is necessary to ensure adequate and

appropriate understanding by all parties of the type and extent of support required by the WBL learner to achieve their learning goals.

This means that employers need to be informed about the academic requirements, practices and language as it relates to WBL. In turn the academic advisor needs to be familiar with the language, practices and constraints of the workplace. In both cases these considerations must be incorporated into the engagement process.

On both sides understanding is required to:

a) meet the employer's expectation of a direct benefit from the WBL learning process
b) meet the institution's expectation that the workplace environment will be sufficiently "learning friendly" and supportive to enable the learner to meet the desired learning outcomes.

Otago Polytechnic's WBL initiative is largely based on the experience of a number of UK universities and on extensive international literature. WBL has been a feature of UK's HE landscape for nearly twenty years and the most commonly recognised model of WBL is based on high level agreements between an institution and corporate companies with large workforces.

The New Zealand context throws up a number of conditions that require an adaptation of the model. For instance, WBL agreements usually involve the commitment by employer s with large workforces supporting and fully or partially funding, multiple cohorts of learners. The reality is that the UK has many companies with large workforces while New Zealand has very few and

One of the important signals that have been received from employer groups here is that the WBL model must be focused on small to medium sized businesses. SMEs employ the vast majority of nation's workers and historically have been generally unsuccessful in leveraging the skill development opportunities and/or tapping the intellectual / knowledge resources of our tertiary vocational education system.

The issues that are emerging along this front are to do with how a model of WBL can address the wide variety of skill development needs of SMEs that occupy widely differing market and occupational spaces. In many instances, SME have few workers; have limited resources for upskilling and training, especially when these opportunities are delivered in off site or off job situations. Further, there is a strongly held perception that such training delivers, at best, highly variable, are of limited relevance and hard to measure benefits.

Principle 9: Accommodation of self-employed WBL candidates requires a different approach

New Zealand has a relatively high proportion of entrepreneur types who are self-employed and therefore have no formal employer. In these cases it is necessary to adjust pre-determined concepts of how WBL should operate and come up with ways of dealing with these types of variations of context and circumstance. This is necessary in order to meet the widely differing candidate contexts and aspirations, while maintaining the academic integrity and validity of the WBL model we are evolving.

In these cases it is worthwhile considering the use of expert mentor/coaches to support learners, especially where, as a self-employed candidate, there is no actual employer to act as the third party to the learning agreement. In this context, the expert mentor/coach would

have a workplace supervision role of sorts, able to provide the business specific guidance and direction that might otherwise be taken on by a workplace line manager.

Principle 10: Introducing WBL represents a disruptive change in practice and requires careful change management processes.

The degree of change that introducing WBL brings with it should not be underestimated. It is tempting to think that academic institutions by definition have a flexible and open learning culture that will readily embrace innovation and change in practice. The reality is that institutions of learning are as susceptible to regarding change negatively as any other workplace and in some cases more so. Where the introduction of WBL is perceived as an increase in workload, or where comes at the end or alongside of ongoing organisational restructuring, there is likely to be resistance to such an innovation.

Many long serving teaching staff and tutors have had successful careers within the traditional teaching and learning ethos of tertiary vocational education. Resistance may also occur by way of an apparent reluctance to engage with the perceived radical departure from traditional roles of the teacher and learner and the relative power relationships the traditional view of education engendered.

By its nature WBL puts much of the responsibility in the hands of the learner for determining the curriculum, the project type and format, learning outcomes and the process of assessment. This also shifts the traditional locus of power from the teacher to the learner and changes the role of the academic advisor from that of "sage on the stage" to that of "guide on the side" This change in the power relationship is perceived by some as being an unnatural state and one which should not be encouraged.

This attitude can also appear to be connected to a reluctance to take on new ideas about education particularly in terms of engaging with the literature and shifting notions about what is "right and proper", to encompass more creative and educationally innovative approaches to learner needs and aspirations. In short, what the WBL asks for is more flexibility, creativity and new ways of thinking and acting and this can be seen as being too much to think about, too hard to engage with and a resented intrusion to a well grooved, understood comfortable work life.

Introduction of WBL into an institution requires good leadership, communication and an effective and careful change management process. It is suggested that specialist WBL facilitators with broad educational experience, who are open minded and are excited and enthused by innovation, be recruited. Individuals who have had mentoring or coaching roles within workplaces as well as professional supervision experience ensure the philosophy of learning that WBL is engaged with as much as the administrative and institutional systems that surround it.

A primary tension that must be balanced here is being responsive to employer needs, which is of high value to employers, and ensuring that appropriate support structures, administrative systems and staff capacities and capabilities are equipped to cope with this growth.

Principle 11: WBL requires highly motivated, committed, capable and educationally flexible staff

The effort, resources and time required to change the attitudes and practice of those imbued with and embedded in traditional notions of teaching and learning so that WBL may be wholeheartedly embraced and accepted is substantial, and will also likely require expert change management processes.

Serious consideration should be given to recruiting specialist educators who have had mentoring or coaching experience and /or roles within workplaces in addition to wide educational experience. The ability to listen carefully and understand the richness of the learner's context and knowledge from the learner's perspective is critical. The skills of supervision, mentoring and coaching are crucial skills for WBL academic advisors and facilitators in supporting and guiding the learner to frame their experience and knowledge in such a way as to both meet the academic standards and empower the learner to fully engage with new learning. In so doing the philosophy of learning that WBL is predicated on is more likely to be supported and strengthened in practice.

Principle 12: Locate WBL as a centre of excellence within the institution.

The nature of WBL is such that it needs to be able to work across all institutional disciplines. While it may be necessary of expedient to begin an institutional WBL initiative within an existing school or department in order to develop the necessary skills and administrative systems, it will quickly become associated with that school or department and this may preclude its acceptance by other areas of the institution. As early as possible it should be located in its own centre, possibly associated with another standalone enterprise, especially one with an external, business / industry focus.

The argument that each school or department should be able to develop its own WBL initiative seriously underestimates the skills involved and the degree of change management processes it will require to have teachers, lecturers and tutors embrace an innovation as demanding as WBL

WBL is a specialist function and needs to operate as a centre of excellence attracting highly motivated and enthused facilitators and academic advisors as well as establishing itself as a

Principle 13: The potential for growth in WBL is high and requires strategically acute management.

It seems that employers not only see the WBL model as one which will work for their context and circumstance, but also one that provides a direct and tangible benefit to the company. It is a model that resonates with employers who have no difficulty seeing how it would fit into their operation. It is also seen as a model that is readily customised, contextualised and is fit for their purpose and not training that has only a tangential relevance and/or application. Attention needs to be paid to this issue and strategies are being developed to manage the rate and scope of growth. A primary tension that must be balanced here is being responsive to employer needs, which are of high value to employers, and ensuring that appropriate support structures, administrative systems and staff capacities and capabilities are equipped to cope with this growth.

It is also important that strategies are developed to manage the expectations of all stakeholders so that our willingness to grow new business does not outstrip our resources and ability to meet the demand.

Principle 14: Research and evaluation of WBL initiatives is essential to underpin, support and strengthen practice.

A mission critical issue for the success and sustainability of WBL at Otago Polytechnic is the judicious and wholehearted use of research and evaluation to inform practice along with the development and the long term strategic direction of the model.

This Ako Aotearoa funded action research project, to which this report is addressed, represents the initial step in establishing WBL as a critical area of research, representing as it does a paradigm of higher education that is new and largely untested in the New Zealand context. Work is already underway in the development of a Masters of Professional Practice by WBL and the learning from this pilot is playing a significant role in its creating a credible and responsive enterprise in the eyes of employers, offering a highly relevant and effective alternative to traditional forms of training and development.

A number of UK Universities have research centres dedicated to the study of WBL itself and for which masters and PhD degrees are awarded. It has become one of the fastest growing areas of educational research in the UK and is also firmly established as a major area for research in Australia. It is our belief that continued research and evaluation in WBL will provide the necessary evidence to firmly establish WBL in the mainstream of NZ's tertiary education landscape.

Principle 15: WBL will change academic perceptions of how knowledge and qualifications should be structured

The nature of WBL is such that it requires a broadening of understandings of the content, context and structures of qualifications and even of the taxonomical arrangements of knowledge disciplines.

Academic knowledge disciplines are a construct developed to organise knowledge for the purposes and convenience of teaching and learning. The world of work does not organise its knowledge structures in the same way, employing as it does, knowledge from across a range of disciplines as needed. Consequently, experienced adult learners in the workplace have to operate across these knowledge disciplines on a daily basis, and can find difficulty in trying to constrain their interests and WBL project work to fit into the arbitrary knowledge structures represented in the form of academic qualification.

The question this raises is how to recognise the breadth of new knowledge within existing discipline specific qualifications. A second dimension of this is that the need for new forms of qualification is likely to emerge. For instance majors within a discipline or across one or more disciplines could well be merged to enable experienced adult learners to present a more comprehensive and complex presentation of their new knowledge and skills

Conclusions

The learnings and understandings generated by this research are significant and far reaching and provide a glimpse of what work-based learning promises and how it might fundamentally change both the landscape of learning and performance development in the

workplace as well as the perception of the value of learning done in the workplace. It also signals an as yet underperforming potential for tertiary education in NZ and how it might more effectively engage with workplaces for mutual benefit and gains in productivity, performance and innovation.

In seeking to apply lessons learned in jurisdictions where work-based learning is well established, it has become evident that the New Zealand workplace landscape is very different in size, organisation, make-up, and resourcing. The small numbers of large enterprises, compared to say the UK and the comparatively large numbers of small to medium sized enterprises, (which in this country is defined as fewer than 20 employees compared to the UK definition of 200 employees or less), means that the overseas models of WBL cannot always or easily translate directly, but need to be adapted to the NZ context.

While not exactly starting from scratch, the experience of the pilot is that there are, by necessity, a wider range of variables and unique employment contexts that must be considered. Consequently the model of work-based learning that is emerging is that in order to deal with the wider range of contexts involved, requires far more flexibility and innovative thinking in its application. Without the resource base implied by the size and mass of the UK commercial sector, the university sector and government support for instance, the NZ model not only has to work within the resource and support limitations of its size but must find ways to use this to advantage. There is nothing new in this, NZ has a long and proud history of using innovation and creativity to make up for its lack of size. To paraphrase the comment of one of NZ's great minds, Sir Earnest Rutherford, "We didn't have any money so we had to think".

This research is a first step in developing a sustainable and effective model of WBL that provides access to and partnership with the intellectual resources, skills in structuring learning experiences and the qualifications that higher education can offer.

The limitations of the research timetable have meant that there is perhaps a greater focus on the operational and institutional aspects of the pilot than originally intended. There is much more still to be done, particularly in terms of longer term study of how WBL impacts on workplaces and their practices, the perceived benefits to business and their employees, and how tertiary education organisations can better support and engage with business and industry. A deeper investigation is required to determine such things as:

- the resourcing implications for tertiary institutions;
- the impact on the role of the academics;
- implications for employment conditions and professional development demands;
- implications for the current structure of degrees and other qualifications;
- the need for trans or cross-discipline qualification structures;
- for the government there are implications for both education policy and funding arrangements;
- policy, funding and support issues for the government in terms of industry training and development

We anticipate this will be an exciting and rewarding journey and one which offers a real opportunity to make a difference to the way we learn and work.

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Appendix 1: Flow chart of WBL pilot issues, learnings and actions

WBL Institutional Framework

Requires → Formal processes → **for** → Profiling & facilitating for Wbl

Educating & Upskilling → **of** → Academic Advisors / Employers / Mentors / WP Supervisors

Educating & Upskilling → **CAPL for** → APL/WBL integration

Profiling & facilitating for Wbl → **and** → Scaffolding & streamlining LA process → **Which needs to be** → Scalable to accommodate large cohorts & individuals

Profiling & facilitating for Wbl → **and** → Managing Learning Agreements → **and** → Approving Learning Agreements → **and** → Assessment practices & processes

Managing Learning Agreements → **and** → Supporting learners → **by** → connecting them to expert mentors → **and** → successful predecessors & others

Supporting learners → **by** → creating resources, flexible access sytems & tools → **including** → Handbook, interactive Learning objects, templates & exemplars

Needs to → Manage Growth → **With** → Control & responsiveness → **Because of** → Rate of growth in demand

Rate of growth in demand → **Requires** → Increased capacity & capability → Resources & Staff

Rate of growth in demand → **Span & scope** → Wider range of Programmes → **Needing** → WBL Options

Rate of growth in demand → Consultancy services → **Required by** → Expectations of employers

Engagement with → Employers → **needs to** → Understand their language, drivers & modus operandi → **Needs** → OP to develop systems & expertise for responsive & appropriate engagement → **and** → The development of innovative pedagogies & approaches → **connected to** → Consultancy services

OP to develop systems & expertise for responsive & appropriate engagement → **and** → maintining continuous dialogue with employers/groups → **to meet & manage** → Expectations of employers

Employers → **needs to** → Be sytematic & wholehearted → **suitiable for** → SMEs as well as corporates & Govt departments

Needs → Srategic framework → **Means** → Engaging with other institutions → **in order to** → share resources & establishing WBL across a wider front

Srategic framework → **Means** → OP to be more business/empoyer focused → **needs structures to** → Manage employer engagement → **and**

Srategic framework → **Means** → developing OP infrastructure → **To** → Engage whole institution with WBL → **Requires** → Comprehensive staff PD plan

Needs → Appropriate OP corporate systems & policies → **also** → new roles → **such as** → research & evaluation iofficer → **to** → Gather & analyse evolving practice → **to** → Facilitate staff development & disemination → **and** → Institutional wbl capability

new roles → **such as** → Programme support officer → **Informs development of** → Institution systems Resources & processes into infrastructure → **required by** → Employers & employee/learners

new roles → **such as** → Learner development Officer → **supports & contributes to** → Emerging academic strategy & approaches to design & pedagogy

new roles → **such as** → Business developemnt Officer → **for** → Employer interface & growing new markets

Appropriate OP corporate systems & policies → **to** → Support & appropriate cost WBL → **needs** → different approach → **because** → Current funding/costing model not suitable for wbl → **consider** → York U WBL Costing model

Appendix 2: Matrix of emergent themes and issues from cycle 1 and 2 investigation

	Issue	Description	Action Required/Taken
1.	**Profiling**	Profiling of candidates is a practice used at the start of an APL process to determine the appropriate subject pathway and likely credit value that may be obtained through APL. With the introduction of WBL, a further step is now required by the profiler, that is, to be alert for indications and consider whether or not the candidate being profiled may be both eligible and appropriate to be offered the WBL pathway as either an alternative or additional option to a straight APL process.	To date, profiling of potential WBL candidates has been something of an ad hoc arrangement. Steps have been taken to regularise the process and more focus is being given to include questions in the profiling practice that determine the best option for a candidate. These options include: e) APL for whole qualifications f) Apl for part qualifications and the balance of learning bridged by traditionally taught papers g) Apl for part qualifications and the balance of learning bridged by project centred WBL h) A combination of b) and c) As profiling has evolved, we have come to see the importance of early discussions around the nature of the WBL component, what areas of interest currently exist within the workplace, and to look for the mentoring and support options that exist generally within and without the workplace. We are currently finding that candidates who have a supportive workplace, a clear concept of a learning contract often have links with people very appropriate to supporting their learning as mentors.

| 2. | **APL Assessment** | One especially important advantage Otago Polytechnic has in terms of introducing WBL is a holistic, academically robust and philosophically aligned system of assessing and accrediting prior learning (APL). APL provides a solid and essential foundation for WBL as it not only measures what can already be accredited, but the process provides the candidates with the necessary skills of reflection, critical thinking and the means to align a candidates prior learning with relevant theories and concepts.

As with profiling, the facilitation of APL requires additional steps when employed with a WBL candidate. This step involves the WBL candidate being facilitated to outlining and giving expression to the shape and content of the learning agreement they intend submitting for approval. This includes getting preliminary approval for the WBL project/s from their employer. This draft learning agreement forms part of the APL assessment process and is intended to give the assessment panel a clear indication of how the balance of learning between that granted by APL and the requirements of the terminal qualification will be bridged and addressed. | Those charged with facilitating WBL learners need to be clear about:

- how the learning agreement process works,

- the criteria and specification of the learning outcomes that are required to be met,

- judging the scale and scope of the proposed WBL project/s

- the resourcing issues and availability

- the learner support required and available in terms of workplace supervision, academic advisor time and effort and expert coach/mentor input

- availability of expertise where the workplace context and project type is beyond the knowledge/experience of the academic advisor/facilitator

Professional development for those engaged as academic advisor/facilitator for WBL learners that addresses these areas is currently being explored and bench mark documentation from UK HE institutions that have more than 20 years' experience with WBL is being sought and used to frame the issues and provide guidance and direction in the development of capability building strategies. |
| 3. | **Learning Agreements** | The design and development of appropriate learning agreement creation processes is an important focus area for the WBL project team. While learning contracts have been used extensively and for many years in a Cooperative Education/ Workplace Internship context, where traditionally taught learners take project work | Facilitating WBL learners to design and develop their learning agreements requires guidance and input from the WBL academic advisor that ranges from a "loose reign", arm's length, and light touch involvement, to a closely monitored and directed |

within workplace placements, the scale and scope of the WBP experience is such that a more robust and learner directed process for the design and development of the learning agreement is required.

The philosophical underpinning to contemporary WBL theory posits that a critical feature of learning agreements is that the learner has control over the curriculum and determines how the learning is to be undertaken, the context in which it is to be learned, and the manner in which the learning is to be measured and the criteria used to assess the learning.

In other words the learner determines how the learning outcomes required to meet the terminal qualification will be met, rather than the institution determining the prescription for meeting the learning outcomes.

process depending on the learner's individual needs and knowledge base.

To adequately support a wide range of learners and workplace contexts requires well developed and sound academic judgement. It also requires a flexible, responsive and supportive approach to the learner's needs along with a willingness to engage with the learner and their employer on equal terms.

This represents a signal change in role of the academic from being the gate keeper of core knowledge and the one who determines the curriculum and the terms of the assessments.

The role must now facilitate the learner's journey and provide guidance in shaping the learning in such a way as to both meet the requirements of the path of study and needs of the employing organisation, without imposing unnecessary and irrelevant academic strictures that may satisfy the academic advisor's professional ego, but do little to advance the learning of the WBL candidate.

As in the previous issue, professional development for those engaged as academic advisor/facilitator for WBL learners that addresses these areas is currently being explored and bench mark documentation from UK HE institutions that have more than 20 years' experience with WBL is being sought and used to frame the issues and provide guidance and direction in the development of

			capability building strategies.
			From our experience to date two key dimensions have emerged for further exploration: 1. the wish of the institution for a learning agreement to clearly link to the "academic" dimensions of the qualification. 2. The institution is seeking a learning agreement to clearly contain the dimensions of management and leadership that will be explored through the project.
4.	**Learning Agreement approval process**	The submission of the developed learning agreement to a panel of assessors is a single high stakes assessment that is pivotal in the WBL learner's journey. An assessment process that is not only fair, flexible and relevant to the learner's context, but also is sufficiently robust, valid and able to withstand external critique as to its credibility is essential.	This issue requires the development of an assessment framework that not only has the required academic rigour that ensures consistency across a wide range of learner and learner contexts, but is also flexible enough to accommodate the highly individualised nature of WBL. This must be addressed at an institutional level, not only to give WBL assessments the required validity but can also be exported to other discipline centres of the institution. This issue is currently under examination and work is being done on developing the appropriate specifications and assessment rubrics that can address the various dimensions of WBL assessment.
5.	**Employer engagement**	WBL is based on a tripartite contract between the learner the employer and the institution. This requires a deep and strong engagement or relationship to be built between the institution and	Again this issue is currently under examination and work is being done on developing the appropriate policy and practice framework that can address the

		the employing organisation.	various dimensions of engagement with employers.
		This is necessary to ensure adequate and appropriate understanding by all parties of the type and extent of support required by the WBL learner to achieve their learning goals.	
		This means that employers need to be informed about the academic requirements, practices and language as it relates to WBL. In turn the academic advisor needs to be familiar with the language, practices and constraints of the workplace. In both cases these considerations must be incorporated into the engagement process.	
		On both sides understanding is required to:	
		c) meet the employer's expectation of a direct	
		d) meet the institution's expectation that the workplace environment will be sufficiently "learning friendly" and supportive to enable the learner to meet the desired learning outcomes.	
6.	UK Mode - NZ Context	Otago Polytechnic's WBL initiative is largely based on the experience of a number of UK universities and on extensive international literature. WBL has been a feature of UK's HE landscape for nearly twenty years and the most commonly recognised model of WBL is based on high level agreements between an institution and corporate companies with large workforces.	We are actively engaged in developing policies, structures and frameworks that support and inform our practice. We are taking from overseas experience and practice that which suits and adapting, re-inventing and developing anew to meet our particular needs and contexts.
		These agreements usually involve a commitment of supporting and fully or partially funding, multiple cohorts of learners. The reality is that the UK has many companies with large workforces while New Zealand has very few.	One of the main areas of development we are currently considering is the use of expert mentor/coaches to support learners, especially where, as a self-employed candidate, there is no actual employer which whom to act as the third party

| | | One of the important signals we have received from employer groups here is that our WBL model must be focused on small to medium sized businesses. SMEs employ the vast majority of nation's workers and historically have been generally unsuccessful in leveraging the skill development opportunities and/or tapping the intellectual / knowledge resources of our tertiary vocational education system.

The issues that are emerging along this front are to do with how our model of WBL can address the wide variety of skill development needs of SMEs that occupy widely differing market and occupational spaces. In many instances, SME have few workers; have limited resources for upskilling and training, especially when these opportunities are delivered in off site or off job situations. Further, there is a strongly held perception that such training delivers, at best, highly variable, are of limited relevance and hard to measure benefits.

In addition to this we are discovering that we need to develop other dimensions of our WBL model, in that we have a number of candidates who are self-employed and therefore have no employer. In these cases we have to adjust our thinking and come up with ways of dealing with these types of variations of context and circumstance in order to meet the widely differing candidate contexts and aspirations, while maintaining the academic integrity and validity of the WBL model we are evolving. | to the learning agreement. In this context, the expert mentor/coach will have a workplace supervision role of sorts, able to provide the business specific guidance and direction that might otherwise be taken on by a workplace line manager. |
| 7. | **Staff and institutional capability** | There are a number of questions around staff capability that have been raised and these need addressing. For instance:

   1. What are the main academic challenges in implementing | These and other questions and issues are currently being considered and staff development activities and policy frameworks are in development. |

WBL at Otago Polytechnic?

2. In what ways might WBL potentially challenge the normal operating processes and policies of OP?

3. What are some of the main quality assurance issues for OP in terms of the WBL initiative?

4. WBL represents a substantial departure from more conventional or traditional ways of providing higher education at OP, how might this difference might be viewed by academic teaching staff?

5. How does the concept of privileging learner constructs in terms of negotiating curriculum and assessments rub up against more traditional attitudes and conceptions about teaching and learning in the tertiary education system?

6. What are the main challenges for getting buy in from academic staff for what is regarded as yet more change and a new and as yet untried (in NZ) higher education paradigm?

7. How will long held notions of academic rigour and validity need to be adjusted to accommodate WBL?

| 8. | **Managing speed and scope of growth** | One unanticipated consequence of implementing this WBL initiative has been the level of interest and demand for this service from employers who have picked up on the opportunity this method of education delivery offers. In responding to these expressions of interest we are confronted with the issues of how to manage the potential speed and magnitude of growth given our | Attention is being paid to this issue and strategies are being developed to manage the rate and scope of growth. A primary tension that must be balanced here is being responsive to employer needs, which is of high value to employers, and ensuring that appropriate support structures , administrative systems and staff capacities and capabilities are |

		nascent and evolving experience and skills with WBL.	equipped to cope with this growth.
		In terms of the WBL model, staff training and skill development is no longer being perceived as something to be shunted into the "too hard to measure the ROI and can't afford the loss of productivity basket" , which is often the attitude that employers have about traditional means of training.	It is also important that strategies are developed to manage the expectations of all stakeholders so that our willingness to grow new business does not outstrip our resources and ability to meet the demand.
		It seems that employers not only see this model as one which will work for their context and circumstance, but also one that provides a direct and tangible benefit to the company. It is a model that resonates with employers who have no difficulty seeing how it would fit into their operation. It is also seen as a model that is readily customised, contextualised and is fit for their purpose and not training that has only a tangential relevance and/or application.	
9.	**Consultancy**	One particular aspect of employer interest in WBL as a fit for purpose training and development model concerns two areas of opportunity. In the first place there are consultancy opportunities in mapping existing "in house" training programmes that employers run, to outcomes of qualifications that can be credited by Otago Polytechnic.	Several consultancy opportunities have already been taken up by the WBL team and work is underway in developing practice frameworks and systems to both formalise what amounts to an enhancement to the WBL model we are evolving, and provide guidelines and benchmarks for future possibilities.
		There is then the opportunity of designing a programme that integrates WBL activity with the employers "in house" training programmes to provide the required staff development that also has recognised academic credentials attached.	
		The second consultancy opportunity is focused around employing the tools and skills developed over many years in the profiling, facilitation and assessment of APL in developing a learning	

		culture within a workplace. In practice this means working with groups of employees to collaboratively develop the skills of critical reflection of practice; unpacking of case studies and peer review and constructive critique. These skills form the essential bedrock of the APL process as applied by Otago Polytechnic; however it may also form the basis of a learning culture development that can ready a workplace for the implementation of an effective WBL programme. One that can lead to staff gaining higher level qualifications as well as inculcating a learning culture that seeks constant improvement in practice. This is particularly the case in the social service provision arena where such development is a critical part of providing a high level of service.	
10.	**Resource development**	In the development and implementation of the WBL pilot we recognise that there are two important cost and learner support issues that must be addressed. Given the nature of a highly individualised programme of study and the wide variation in learner contexts and situations, there is an inevitable question of how to fund this in a cost effective and efficient manner. Allied to this is the fact that the learner group is not only disparate but also widely distributed which also has the potential of adding additional costs. One of the strategies that Otago Polytechnic is putting in place is the development of flexible, online resources and tutorials that enable and support a higher level of self-directed and independent study on the part of the learner than might be	Work is underway in both the development of interactive online resources and activities along with articles and readings and the upskilling of Capable NZ staff in the use of social media, communications tools and support structures. These include such things as Skype, Google Docs, Adobe Connect virtual classroom/meeting tools, Moodle (LMS), wikis, discussion forums as well as the more commonly used tools of email and telephone.

		appropriate for in class learners. At the same time there is the opportunity to employ a wide range of communications, rich media and social media tools to reduce distance and isolation and provide a more streamlined and targeted collection of resources and learner activities that can be accessed at any time from any place.	
11.	**Research and evaluation**	A mission critical issue for the success and sustainability of WBL at Otago Polytechnic is the judicious and wholehearted use of research and evaluation to inform practice along with the development and the long term strategic direction of the model. The Ako Aotearoa funded action research project, to whom this report is addressed, represents the initial step in establishing WBL as a critical area of research, representing as it does a new paradigm of higher education. In some UK Universities WBL is itself a subject for study and for which masters and PhD degrees are awarded. It has become one of the fastest growing areas of educational research in the UK and is also firmly established as a major area for research in Australia.	Otago Polytechnic has a sound and productive research culture. This action research is being well supported and work is ongoing in terms of establishing a platform from which a continuing programme of research and publication will be undertaken.

Appendix 3: Matrix of emergent themes and issues from final cycle of investigation

	Issue	Description	Action Required/Taken
1.	**Academic Advisor Support**	In all cases, learners reported that the level of support and encouragement from their academic advisors was excellent. Academic advisors were regarded as being highly responsive, available and willing to engage in whatever way the learner wished. The comment of one learner illustrates this: *"Very well, very, very well - he's known when to push and when to step back. We had so many troubles over calving and he helped me readjust my dates because my potential graduation date was going to be in December and I was quite stressed about that and I actually rang him one day and said look I can't do this it's too hard I'm giving up. He sent me back a short terse message saying I don't think so basically!* *So he's been really, really good he's incredibly busy obviously. I've really enjoyed working alongside him and doesn't pull any punches. I found it a bit hard when he told me my piece was rubbish, but then I got my academic mentor at Telford who's helping me academically to have look at it and he said it was rubbish too.* *At that time I thought I was as thick as two planks and I was about to give up - which is my way – Paul said he'd just leave me for a week he could see I was under stress because of calving and when we finally got round to a discussion it was basically pick yourself up, dust yourself off and carry on. And it was after that that I really nailed that learning agreement and I started to do my own research and not rely on Paul to hand stuff to me on a platter, which he doesn't anyway, he makes me work a bit harder."* While the general level of Academic Advisor support to WBL learners was	Workload issues have been recognised and steps have been taken to address this issue. A combination of restructuring and several Capable staff resigning or taking on new assignments has meant that a satisfactory resolution to this problem was slow in being acknowledged and responded to. This is now being attended to.

		universally regarded as being of high quality, the fact remains that lack of an agreed, accepted and formalised process for inducting WBL learners into the Learning Agreement process did result in some learners floundering and having difficulty in understanding what was required of them. A contributing factor to this was the heavy workload being carried by a very few academic advisors, which impacted on their ability to fully engage with how the LA process should be managed and limited the amount of time available for the deep thinking and collegial sharing this process required.	

2.	**Learning Agreements Process**	**For Learners**
		
		The general experience of learners in developing their learning agreement is mixed in terms of the positive and negative experience of the process. All found the process ultimately rewarding and very effective in focusing their thinking about what they were to learn and enabling the successful negotiation of the learning outcomes and assessment. It also contributed to them gaining increased confidence in their developing understanding, knowledge and skills in terms of their project and their workplace context. However, the actual process of developing the learning agreement was variously described as:
		
		    "*Great in some ways, other parts could be improved.*"
		    "*slow and painful",*
		    "*difficult and frustrating",*
		    "*lacking in clear expectations",*
		    "*lacking in direction",*
		    "*confused and without any structure".*
		
		It was noted that the all the academic advisors were carrying heavy workloads, with large numbers of candidates and this did on occasion seem to slow things down, particularly where providing timely feedback on work submitted for review was concerned.
		
		In one case this process was made even more difficult when an employer
			More comprehensive and detailed professional development and training is clearly required to bed in understanding of the learning agreement process, particularly for those academic advisors new to WBL.
			
			It is particularly important that learners are given a good overview about the whole process as early as possible so they have a clear understanding of what they are undertaking. In part this should be available as documentation, (either electronic or hardcopy), but in addition they need to be compressively briefed by their academic advisor about their roles

decided that what had been negotiated as a workplace–based project was no longer acceptable and a new project needed to be found. In another case the learner's role, responsibilities and location changed to such an extent that the original learning agreement needed to be renegotiated.

Half of the WBL learners are from Otago Polytechnic itself and have been engaged in a parallel, but till recently, separate process as part of a specific programme development. In this case the need to formally engage with the Learning Agreement process was late in being recognised. This also has contributed to some of the learner dissatisfaction.

For WBL Academic Advisors

Academic supervisors/facilitators were provided with a professional development workshop in the creation and management of learning agreements. However, it transpires that while this was a useful and worthwhile exercise, the efficacy of the workshop in imparting the appropriate level of understanding of the pedagogical issues and the procedural and operational functions required to be carried out by academic advisors to successfully work with learners in the learning agreement process was underestimated.

One comment sums up this situation:

"Very importantly I finally came to understand key dimensions, key issues, identified within the literature - but I needed to experience them to deeply understand what the discussion was about. It was like going around a big circle. The outcome is a much richer understanding of the purpose, possibilities and process."

The lack of a formalised learning agreement process did have an impact on the learner / academic advisor relationship in some instances. Some learners felt that the lack of a template or set of guidelines for developing a LA resulted

and responsibilities.

Once the APL process is completed and the learner embarks on their learning agreement journey, they will need clear guidelines on how to proceed with shaping and articulating their Learning Agreement. This will require documentation such as a detailed Learning Agreement Template and exemplars.

The WBL process, from initial enquiry through profiling, the APL process, the learning agreement development and approval process through to the implementation and final presentation for assessment requires complete detailed documentation by means of a learner and academic advisor handbook. This maybe by way of a hardcopy manual type of publication or as a set of resources on the Moodle eLearning support site.

A WBL handbook is currently under development, detailing expectations and procedures for developing learning agreements

in what was perceived by the learners as a lot of wasted time, false starts and repeated attempts of documenting the LA, as both learner and academic advisor struggled to clarify how to structure the agreement and how to describe or articulate the learning outcomes in terms of the outcomes of the workplace projects to be undertaken and aligning the learning outcomes with the primary attributes, skills and knowledge base required of a graduate in the bachelor of Applied Management. One learner 's comments enlarge on this aspect:

The process of developing it, quite challenging, because we didn't know what was expected, but had a meeting with our supervisor or support person and got clarity around that, but didn't do that until about 6 weeks ago (October) and we started this process at the beginning of the year. The whole degree thing has been a bit back to front and inside out and the whole learning contract thing is a bit weird coming in at the wrong end.

The process itself once I got it sorted it was, yeah, ok.

In part this was the result of a trial and error process in developing an appropriate and formalised approach as to how learning agreements needed to be structured and written up. Initially it was thought that a standardised learning agreement template would not be able to accommodate the wide variety of learning contexts and needs. As a result facilitators approached this process by working with each learner to develop a learning agreement that was specific to that learner. However, what was not appreciated was that without a standard framework of template, each person was, in effect, reinventing the wheel. It also led to some learners floundering somewhat in trying to figure out how to organise what it was they needed to establish and articulate what their learning outcomes would be.

along with resources on the Moodle support site that can assist with this process for learners and academic advisors alike.

| 3. | **Learning Agreement Template** | Belatedly, it was recognised that a comprehensive learning agreement template was necessary to provide:

e. an effective structure and formalised guidelines for individual learners in their development of a learning agreement that is readily understood, time-saving and can focus the learner's efforts more efficiently

f. benchmarking tool for academic advisors to be able to provide guidance and support for the learners they are working with A learning agreement template has now been developed and is being trialled with learners who have completed their APL, but are at an early stage or yet to engage with their learning agreement development.

g. a better and more efficient process of ensuring all aspects of the learning agreement outcomes and their alignment with the graduate profile are attended to

h. a clearer, more robust, more rigorous and more efficient method of ensuring consistency in assessment and moderation. | A learning agreement template has now been developed and is being trialled with learners who have completed their APL, but are at an early stage or yet to engage with their learning agreement development. It will be refined and updated based on feedback from learners and academic staff.

As experience is gained, those academic advisors engaged with this pilot will also be able to provide models, strategies and support for new academic advisors. As more learners complete the WBL programme, learning Agreement exemplars will be generated and can be made available to future learners. |
| 4. | **Employer Engagement and Support** | Generally speaking, and where relevant, employer support was regarded as good. As indicated earlier, there were several occasions where the agreed focus of the LA a learner was developing had to be changed, either because of issues of political sensitivity of the topic or because the learner's department was reorganised and they were moved to another role losing their line-manager / WBL workplace supervisor and the context within which the WBL project was meant to be conducted.

In several cases, where learners are self-employed the support from the employer was not available. In these cases, mentor/coaches with extensive sector or discipline experience and knowledge were assigned to these | The lack of typical WBL contexts where there is an identified employer has meant that this aspect of the WBL pilot is under represented and little useful data has been generated that can offer clear areas for improvement or consideration.

However, the new WBl contracts, with both the Police Youth Aid Officer programme and the Cardrona |

		individuals and their role was to both provide guidance and act as the de facto employer or workplace supervisor. This arrangement has worked well and is one that will be developed further and strengthened for the future as it appears this programme is likely to be attractive to the large numbers of potential candidates who are largely self-employed. As discussed earlier in this report, the Otago Polytechnic model of WBL differs significantly from the UK model where the focus has been on engagement with large enterprises. This country has a very different employment landscape, which is made up of a much higher proportion of small to medium enterprises, (50 or fewer employees), a high proportion of self-employed and a much smaller proportion of large enterprises than in the UK. In the face of this reality, it has been necessary to adapt and adjust the local WBL model to respond to conditions and expectations on the ground. Thus addressing the lack of a formal employer arrangement for some candidates by using assigned mentor/coaches to take up this role is a necessary and critical expedient.	Ski are supplying ample opportunities for engagement with employers and this is proving a very rich source of data, and new areas for consideration.
5.	**Relocation of WBL Unit**	A number of significant challenges have emerged within the operational context that the WBL pilot and other WBL initiatives is required to operate. It was decided at senior management level that the appropriate location that the WBL team and pilot should operate is within the Capable NZ unit. Capable NZ is a stand-alone business unit primarily responsible for managing Otago Polytechnic's APL programme for awarding part or whole qualifications. This was seen as both operationally and philosophically appropriate for three reasons. In the first place the fact that WBL is so grounded in the pedagogical and operational methodology of the Capable NZ APL process provides an essential symbiosis. Not only does the nationally approved and acknowledged APL process provide the foundation and underpinning for WBL practice, the APL facilitation skills and processes developed over many years of successful operation are also immediately transferrable to WBL academic advisor	Initially the integration of the WBL unit into Capable NZ was implemented without sufficient or appropriate consideration of the change management issues involved. This resulted in some lack of clarity around roles and responsibilities and some confusion as to the significance of the integration.

practice.

The second reason for locating the WBL team in Capable NZ is that the WBL initiative needs to be seen as one which is both pan Otago Polytechnic, (able to operate across all schools and disciplines) and have a strong business focus and track record of taking on consultancies with external clients. As such Capable NZ already operates in this way and so incorporating the WBL team within this unit was considered both strategically and operationally appropriate.

Thirdly, the chief executive expressed a desire to see Capable NZ become a centre of educational innovation and for new approaches to vocational education delivery, practice and philosophy. By locating the WBL pilot and team within Capable NZ, it was thought this would be a catalyst to help drive the innovation and the development of new offerings on behalf of the institution.

While this decision is seen as organisationally, philosophically and operationally appropriate there have been a number of challenges in its implementation that has impacted on the work and timetable of the WBL pilot

| 6. | **Staff Resistance** | Perhaps surprisingly, given the close relationship shared by the Capable staff and the WBL team members, (most of whom were drawn from the Capable team) the very close alignment of the educational philosophy and practice of the APL and WBL processes, as well as the directive from the CE to embrace innovative practice, there has been significant resistance to the WBL work on the part of Capable staff. | The lack of operational leadership and management in the integration of the WBL unit into Capable NZ allowed the situation to evolve into one where Capable staff felt put upon and that their previously well grooved and understood routines were being disrupted and additional responsibilities were being imposed without appropriate discussion. |
| | | In part this is the result of workload increase, staff losses and disruptive re-organisational changes that have occurred over the past year and the WBL pilot being perceived as something loaded on top of this as "yet another | |

change".

Another reason for this resistance appears to be a reluctance to engage with the perceived radical departure from traditional roles of the teacher and learner and the relative power relationships the traditional view of education engendered. Many of the Capable staff are long serving polytechnic tutors who have had successful careers within the traditional teaching and learning ethos of tertiary vocational education.

By its nature WBL puts much of the responsibility in the hands of the learner for determining the curriculum, the project type and format, learning outcomes and the process of assessment. This also shifts the traditional locus of power from the teacher to the learner and changes the role of the academic advisor from that of "sage on the stage" to that of "guide on the side" This change in the power relationship is perceived by some as being an unnatural state and one which should not be encouraged.

This attitude also appears to be connected to a reluctance to take on new ideas about education particularly in terms of engaging with the literature and shifting their notions about what is "right and proper", to encompass more creative and educationally innovative approaches to learner needs and aspirations. In short what the WBL pilot was asking for was more flexibility, creativity and new ways of thinking and acting and this was generally seen as being too much to think about, too hard to engage with and a resented intrusion to a well grooved and understood operation and an already overextended workload.

This resistance coincided with a move to try and make the APL process more "operationally efficient" by reducing the requirement for professional judgement in working with candidates. The success of Otago Polytechnic's successful APL process is predicated on listening actively and closely and helping the APL candidate to go beyond the obvious by digging deeper and

With the reorganisation of Capable NZ and direct leadership from the CE, it is anticipated that this issue will be shortly resolved,

| | | making important connections that move the candidate's experiential learning journey from a strictly storytelling narrative to one that is properly transformational and deeply meaningful for the learner.

This was seen by some as not being sufficiently objective and relying too much on "subjective" professional judgement. Accordingly, increasing use of check lists, matrices and other objectivist instruments were introduced to try and streamline the process and make it less reliant on constructivist thinking and practice. In this light the WBL pilot was seen as a further encroachment in this move to make the APL process more efficient and operationally rational and as such was not a welcome addition to Capable NZ's responsibilities. | |
|---|---|---|---|
| 7 | **Capable NZ Reorganisation** | In the midst of this a number of changes were forced on the Capable NZ operation due to several staff leaving, including the operational manager and the long-time administrative assistant. This left a significant leadership hole and extended the already noticeable lack of leadership, strategic direction and critical decision making.

This has impacted on the WBL pilot in a lack of administrative support in developing essential systems such as procedures for managing and processing new learners. It has also resulted in long delays in making decisions about appointing additional contractors to academic advisor roles to relieve workload pressures on the small number of academic advisors managing large numbers of learners. | Both the operational leadership of Capable NZ and competent administrative support has now been resolved. |
| 8 | **Staffing Capability and Capacity** | Capable NZ's reorganisation and the appointment of new leadership talent strongly suggests that staffing capability and capacity will be attended to so that the Capable NZ's core services of APL will be properly aligned and integrated with WBL and other educational innovations and initiatives. | The Otago Polytechnic's CE has laid down the challenge that Capable NZ is to be a leading light in the institution's mission of being the premiere provider of work related education and training. The WBL pilot is viewed as the beginning of a |

			new era in innovative and 21st century education.
9	**Growth**	While this WBL initiative is essentially still in pilot mode, there is growing interest and demand from employer organisations and individuals to engage with WBL. This comes about because the WBL model so closely fits and aligns with the training and development needs of both employers and individuals that it is seen as a far more effective and efficient method of achieving transformational change in behaviour, attitude and performance, than traditional modes of staff training and professional development. This growth both potential and actual makes it imperative that this initiative receive additional resources so that more people can be appointed and trained to undertake the various WBL roles. Failure to do so runs a significant risk that the WBL initiative may collapse through a lack of active support, strategic management or intentional resistance and an important and powerful agent for change, innovation and new opportunities in Otago Polytechnic's portfolio of provision will be lost.	Serious consideration is being given to recruiting a number of skilled contractors who have the requisite skills and background, to provide the necessary capacity and capability to cope with the programme's growth.

| 10. | **Implications for existing qualifications –** | This research has required a number of re-conceptualisations on what constitutes "real" learning and its meaningfulness to those engaged in the learning. What is clearly apparent is that the need for learning and skills in WBL is cross-discipline and blurs the boundaries between the bodies of knowledge that sit within siloed qualifications.

Academic knowledge disciplines are a construct developed to organise knowledge for the purposes and convenience of teaching and learning. The world of work does not organise its knowledge structures in the same way, employing as it does, knowledge from across a range of disciplines as needed. Consequently, experienced adult learners in the workplace have to operate across these knowledge disciplines on a daily basis, and can find difficulty in trying to constrain their interests and WBL project work to fit into the arbitrary knowledge structures represented in the form of academic qualification.

The question this raises is how to recognise the breadth of new knowledge within existing discipline specific qualification. A second dimension of this is that the need for new forms of qualification is likely to emerge. For instance majors within a discipline or across one or more disciplines could well be merged to enable experienced adult learners to present a more comprehensive and complex presentation of their new knowledge and skills | This issue is recognised and it is acknowledged that work must be undertaken by the institution to investigate these concepts and develop policies that can accommodate them.

One step in this development is the work being done to develop the Masters or Professional Practice by WBL, which will take a cross/inter-disciplinary approach. |