

Conference Report

ESITO Staff member name:	Natalie Simmons
Conference Name:	ITF Research Forum 2009
Purpose and theme:	Vocational Education & Training Research
Date of Conference and Venue:	April 22 – 23 2009

DAY ONE

Summary of Keynote Address:	<p><i>Professor David Ashton, SKOPE, Cardiff University & University of Leicester</i> <i>The Global Auction for Skills</i></p> <p>Implications for sector approaches to workforce development.</p> <ul style="list-style-type: none"> • Two main arguments were put forward. <ul style="list-style-type: none"> ○ One that there should be (but is not) a relationship between how much money is put into training & the returns on investment. ○ Secondly, the influence of multinational organisations on training direction which is not in synchrony with national interest. • The study was based on surveys / interviews etc in seven countries & four core sectors. Presentation started with overview on labour markets over the last couple of decades related to changes in the organisation of production due to globalisation. • He presented the idea of 'skill webs' & how they have evolved from low skill (high skilled work remained in home country, dependent on quality of national educational system & rewards determined by national internal revenue) to strategic skill webs (global supply of skills, internationalised skill strategies). • Research was carried out in seven countries - Britain, China, Germany, India, Singapore, South Korea, and United States. There were four core sectors – Automotive, Financial Services, Electronics and Telecommunications. • Recent changes in the global productive system <ul style="list-style-type: none"> • Extension of global markets - WTO • Inclusion of emerging economies - China, Russia, India • Global 'doubling' of tertiary level enrolments: <ul style="list-style-type: none"> 33.4 Million (1995) 62.9 Million (2005) • By 2010, more than 90% of all scientists and engineers in the world will be living in Asia • Changes created conditions for strategic skill webs - Evolution of skill webs Phase 1 low skill webs 1980s/19990s
------------------------------------	---

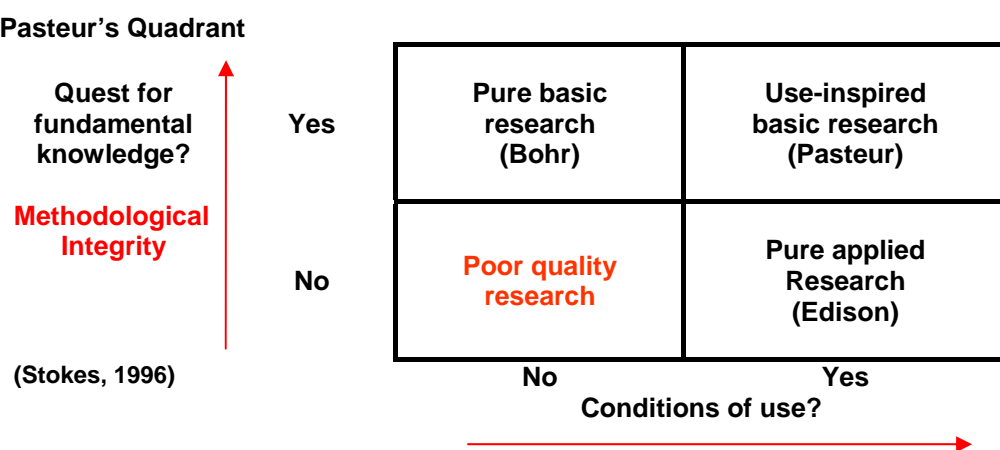
Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<ul style="list-style-type: none"> • High skilled work remained in home country • Dependent on quality of national educational training system <p>Phase 2 strategic skill webs</p> <ul style="list-style-type: none"> • Competitive advantage - 'leverage' global supply of skills, knowledge, talent. etc. • Internationalisation of skill strategies <ul style="list-style-type: none"> • Features of strategic skill webs <p><i>1 Internationalisation of skill formation</i></p> <ul style="list-style-type: none"> • Skill formation increasingly detached from national vocational education and training system • Employers firmly in control as skills part of their competitive advantage • Enables them to rapidly relocate production <p><i>2. Relocation of knowledge production – choice of 'where to think'</i></p> <ul style="list-style-type: none"> • Relocation/dispersion of R&D to emerging societies • Reducing time to innovate • Virtual teams <p><i>3. Standardising knowledge work</i></p> <ul style="list-style-type: none"> • Operates at different levels <ul style="list-style-type: none"> Routine call centres Credit transactions Lawyers offices <p><i>4. Managing knowledge work</i></p> <ul style="list-style-type: none"> • Differentiating the workforce 'A' 'B' and 'C' players • 'War for Talent' - those with permission to think <p><i>5. Delivering competitive advantage</i></p> <ul style="list-style-type: none"> • Employers secure greater control over skill formation – freeing themselves from constraints of national education and training systems • Exploiting low cost high quality labour to reduce costs - High Skills Low Wages <p>Problems for sector skills system - facing in two directions</p> <ul style="list-style-type: none"> • <i>Part facing global internationally traded markets.</i> How to support companies in fragmented niche markets? What kind of support can be given to companies which wish to retain control of their skill formation strategies? • <i>Part facing domestic markets.</i> Less fragmented industrial structure but low value added. Maintain reliance on national VET systems for skills <p>Challenges for NZ sector skills system</p> <ul style="list-style-type: none"> • TNCs transforming demand for upper and middle level skills • ITOs limited to supplying middle and lower skills • To increase skills utilisation requires changes in management practices yet management training may be beyond ITOs reach? • What are new areas where NZ can compete in global markets and how can they be supported?
<p>Summary of Session 1 – Stream A:</p>	<p>Karen Moses – Learning State Motivating Learners to Complete Qualifications through Workplace Learning Carried out National and international research – what are the key factors that affect learner motivation to complete qualifications? (2008). Allows creation of workplace learning models to meet both learner and agency needs.</p> <ul style="list-style-type: none"> • Growth in industry training— approximately 25% of all tertiary education learners • Employees today need to continually up-skill and build on prior knowledge to be

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<p>marketable</p> <ul style="list-style-type: none"> • Employers need to change to meet the current business environment • Funding change— move from learner enrolment to learner qualification achievement <p>Role of Workplace Learning</p> <ul style="list-style-type: none"> • 70-20-10 Model - 70% of learning happens through work and life experiences 20% through coaching and mentoring 10% through training. <p>Barriers to Qualification Completion</p> <ul style="list-style-type: none"> • Study/work/life balance • Lifestyle changes • New job • Lack of support • Non motivational training • Unstructured nature of workplace learning • Employer does not require the complete Qualification <p>Key Motivators</p> <ul style="list-style-type: none"> • Relevance to learner's role • Future career • Learning needs to provide: <ul style="list-style-type: none"> - self improvement - challenge - networking - competitiveness - social opportunities through interaction with others • Industry uses qualifications as form of legal tender • Recognition of prior learning and current competency • Create value— monetary/promotion • Goal— least amount of work to gain best results <p>Key Drivers</p> <ul style="list-style-type: none"> • Readiness to learn emerges from the need to learn • Ongoing acknowledgment of successful performance is key • Learner support is provided as required <p>The Employer</p> <ul style="list-style-type: none"> • Provide an environment to foster effective learning: <ul style="list-style-type: none"> - support - time - structure - coaching • Provide motivational incentives • Show value for the qualification and workplace learning models <p>The Learner</p> <ul style="list-style-type: none"> • Have access to learner support from a education and business perspective • Understand the need to continually up-skill • Identify what motivates their learning • Work to become a successful self-directed learner <p>Industry Training Organisations</p> <ul style="list-style-type: none"> • Design blended models of workplace learning relevant to the current business climate and business context • Encourage training providers to acknowledge prior learning and recognise current competency • Facilitate collaborative partnerships to ensure all providers of workplace learning work
--	--

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<p>together</p> <ul style="list-style-type: none"> • Ensure trainers use motivational training strategies acknowledging different learning styles • Evaluate workplace learning models • Provide learner support beyond the modern apprenticeship programme • Promote the goal of self-directed learning readiness
<p>Summary of Session 2 – Stream A:</p>	<p>Dr Peter Coolbear – AKO Aotearoa Enhancing the value and impact of research into vocational education and training.</p> <p>The Ako Aotearoa Research Register has identified 118 pieces of work in the last three years alone. So, why is there a lack of impact on practice? Problems in educational research relate to the conduct, presentation and focus of the work</p> <p>Pasteur’s Quadrant</p>  <p>(Stokes, 1996)</p> <p>Can recent research into vocational education and training in New Zealand be mapped against Pasteur’s Quadrant?</p> <ul style="list-style-type: none"> • 40 articles selected randomly from 118 pieces in the workplace learning discipline • 21 from the health sector; 19 from other types of workplace • Reviewed and scored on 2 dimensions <p><i>Methodological Integrity</i> includes methodological considerations; contribution to cumulative knowledge; non-partisan approach <i>Potential Impact</i> includes consideration of users/ practitioners; creating synergies and/or relationships; dissemination and accessibility of results</p> <ul style="list-style-type: none"> • Research scored between 0-10 on each axis <p>70% of the sample was in the low MI – Low PI quadrant Only 25% of the sample was in the use-inspired quadrant</p> <ul style="list-style-type: none"> • Implications of results often unclear – much work description of practice and not much more. • Often work does not build off previous literature • Very little triangulation – even in mixed method designs • Most quantitative research measured perceptions rather than the outcome of interest <i>i.e.</i> learning • Lack of generalisable findings <p>Enhance methodological integrity – Develop research questions that have potential to both contribute to current</p>

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<p>knowledge and improve practice – Match robust methodologies to research questions using a range of potential techniques</p> <p>Enhance Potential Impact</p> <p>– Consider potential applications of work in the design stage the study – Develop accessible outputs for each targeted audience – Look for parallels in other forms of tertiary education practice</p>
<p>Summary of Plenary Session 1:</p>	<p>Dr Johnny Sung – University of Leicester Enhancing the value and impact of research into vocational education and training.</p> <p>To briefly explore the meanings and origins of industry led VET training</p> <p>Use of competencies in the UK</p> <p>Frameworks cover on average 78% of labour force Majority developed in house Variably linked to national framework</p> <p>To examine the four broad types of industry-led VET systems examples to illustrate the 'types'</p> <div style="display: flex; flex-wrap: wrap;"> <div style="border: 1px solid black; padding: 5px; width: 50%;"> <p>Employer-involved (2 variants)</p> <p>a) Voluntary engagement of employers, primarily via consultation on skills needs (e.g. UK, Australia and Canada, except Québec)</p> <p>b) Statutory engagement of employers in financing (via levies) sectoral skills delivery and voluntary consultation (e.g. Québec, France and South Africa)</p> </div> <div style="border: 1px solid black; padding: 5px; width: 50%;"> <p>Employer-modelled</p> <p>Use 'best practice' models of skills development to shape training practice within the sector (e.g. the 'Blueprint' model in Singapore)</p> </div> <div style="border: 1px solid black; padding: 5px; width: 50%;"> <p>Employer-owned</p> <p>Employer-funded (via levies) sectoral approach supporting sectoral skills strategies and needs, as identified by employers' associations and representative groups, answerable to industry only (e.g. construction and clothing in Hong Kong)</p> </div> <div style="border: 1px solid black; padding: 5px; width: 50%;"> <p>Employer-driven (2 variants)</p> <p>a) Public VET system 'primarily' determined by employer-demand (e.g. the Netherlands)</p> <p>b) Private partnerships bringing employers, providers and workforce agencies together in order to identify and invest in training (e.g. localised partnerships in some USA states)</p> </div> </div> <p style="text-align: right;">Use</p> <p>Examine the policy implications</p> <p>Results:</p> <p>Industry taking greater control over workplace learning Making demand on national VET to change, e.g. building competencies through standards; building national qualification structures and using the sectoral system to support VET.</p>
<p>Summary of Session 3 – Stream A:</p>	<p>Selena Chan – CPIT Belonging, Becoming & Being – the role of 'proximal participation' in the beginning of an apprenticeship</p>

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

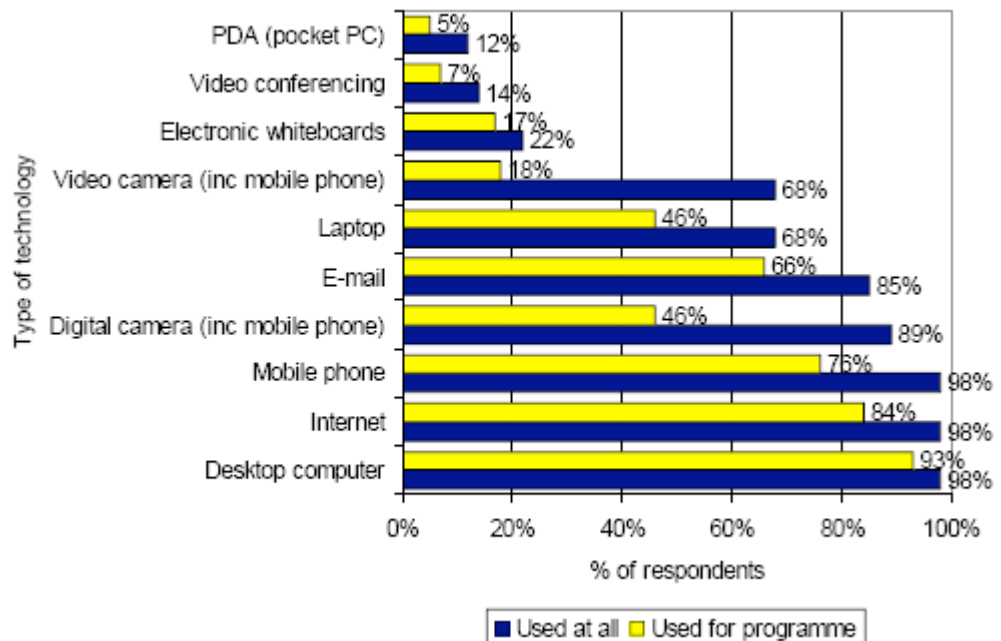
- 13 apprentices (Baking)
- Proximal Participation – participation in support roles, becoming part of the workforce, learning how to ‘do the job’ and behave like an adult.
- Apprentices ‘fell into the trade’ after working in the bakery as cleaners, dishwashers, retail assistants and catering assistants. These support / peripheral jobs provided the opportunity to ‘belong to the workplace’ by building relationships with the other workers in the bakery, trying out the baking lifestyle and viewing the practice bakery work.
- As proximal participants, they could adopt an identity as an observer. In order for proximal participation to be effective, time span of the engagement with the work had to be long enough to allow relationships to build.

Summary of Session 4 – Stream A:

**John Clayton and Richard Elliot – Waikato Institute of Technology
Using e-learning to build workforce capability – an overview**

- The provision, administration and support for ‘off-the-job’ and ‘on-the-job’ training, using
- information and communication technologies such as stand-alone and networked
- computers, Internet-based technologies and mobile devices.

Learner Acceptance



An number of examples were shown

Evaluation

- The evaluation of the effectiveness and impact of e-learning should focus on two levels of analysis:
 - **Individual level:** investigating competency and accomplishment and
 - **Organisational level:** investigating strategic alignment and business impact

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

DAY TWO

<p>Summary of Plenary Session 2:</p>	<p>Dr Karen Vaughn – NZCER</p> <p><i>Conditions and strategies for making the most of workplace learning</i></p> <ul style="list-style-type: none"> • Understanding challenges presented by workplace learning presents the opportunity to work on strategies to improve learning in the workplace. • Workplace learning defined as on the job + off the job + integration with business strategy. • 21st century workplace learning needs are impacted on by speed of adoption of technology, globalisation etc. • Challenges include the tensions between knowledge & skill, hierarchies & roles, and learners & motivation. Others include how workplace interactions are enacted, the complexity of the task, what regulations cover the business, how much technology needs to be introduced or utilised, how market forces impact, the workplace culture, suitable learning strategies, involvement peers, mentors & learners in goal setting, availability of feedback & knowledge sharing (reflection) and opportunities to practice & take some risks. • Changing times mean many workplaces need workers who can keep on learning, adapting, and making good judgements. • Learning is best when integrated and usable. • Learning is only as good as the opportunities to participate. • WPL is not a neat package. It depends on your particular business.
<p>Summary of Session 5 – Stream B:</p>	<p>Dr Micky Murray – ITF, Helena Parsons – Quartz Clarity, Dr Gene Kumekawa – TEC</p> <p><i>ITO Literacy and numeracy good practice</i></p> <p>Main research objective</p> <ul style="list-style-type: none"> • <i>Identify the organisational and capability changes needed to effectively embed literacy and numeracy into industry training</i> <p>What is the ITO Literacy and Numeracy Good Practice project?</p> <ul style="list-style-type: none"> • TEC-funded 12 month project • Aims to develop good practice guidelines, tools and resources for embedding LLN in workplace learning • Key driver – to support ITOs as embedded literacy and numeracy becomes part of the Investment Plan from 2011 <p>Key observations</p> <ul style="list-style-type: none"> • Building understanding and capability in ITOs, providers, literacy experts and employers was a key feature • Embedding LLN is resource (time/cost) intensive • Success in embedded LLN requires an holistic approach and buy-in from all involved • Embedding LLN looks very different across ITOs and the differing industries they serve • The ‘mechanics’ of embedding LLN are challenging <ul style="list-style-type: none"> – Nature of LLN activity – ‘discrete’ or supportive? – Assessment – vocationally or nationally relevant? <p>ITO embedded LLN – leadership</p> <ul style="list-style-type: none"> • Created LLN strategy documents and plans

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<ul style="list-style-type: none"> • Conducted needs analyses in workplaces • Provider used subsidies to employers to encourage uptake of LLN programmes <p>ITO embedded LLN – resources</p> <ul style="list-style-type: none"> • Self-study workbooks for trainees • Discreet and non-discriminatory LLN teaching tools <p>ITO embedded LLN – training delivery</p> <ul style="list-style-type: none"> • Facilitation of LLN assessments • Separate interventions for serious LLN needs • Upskilling of tutors and on-job trainers <p>Where to from here for ITOs?</p> <ul style="list-style-type: none"> • ITOs are now translating these learnings into systems and processes that they can wrap around more of their Level 1-3 qualifications. • Tools/resources collated/formed (April-June). Once completed, each tool will be trialled within ITOs and evaluated (June-November) • Continue to work with the TEC to develop understanding of LLN delivery in industry training.
<p>Summary of Session 6 – Stream B:</p>	<p><i>Dr Ram SriRamarathnam, Richard Manning & Xintao Zhao – Department of Labour Skills in Demand: Past, present and likely in the future</i></p> <ul style="list-style-type: none"> • This covered brief overview of skill concepts (types & measures), employment skills (their mix & content), high level skills categories and skills demand (2003, 2008 & 2013). • Demand also include additional / expansion demand, replacement / retirement demand. • In summary, still a need for ‘skilled workers’ into the future due to forecasted replacement & retirement demands.
<p>Summary of Session 7 – Stream B:</p>	<p><i>Paul Mahoney – Ministry of Education Factors associated with success in industry training and modern apprenticeships – what the data tells us.</i></p> <ul style="list-style-type: none"> • Over 180,000 industry trainees / apprentices in 2008. • Analysis at the moment focuses on completions as a measure of success. • Two reports, one of industry training & one on Modern apprenticeships have been produced (I have copies of each). • In industry training, 35% of students complete their full course within 5 years. • Similar levels of completion to polytechs / private providers & rates in UK (27 – 40%) & Australia (45%). • High density centres = lower probability of completion • Some industries in NZ have higher levels of workplace based training completions for both trainees & modern apprentices. • TRAINEES • The average amount of time spent in industry training by learners is 21 months: for females, it is a little over 17 months; for males, a little under 23 months

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009

	<ul style="list-style-type: none"> • Females more likely to complete as trainees than males. • Older workers more likely to complete. • Programme completion increases with the levels of volume of learning (STMs). • Analysis on the Modern Apprenticeships coordinator dataset shows the opposite result: lower volume programmes are the most likely to be completed. • Limited Credit Programmes (LCPs) account for 13 percent of exits • LCPS most likely programme type to be completed • National Certificate Type - less likely to be completed • MODERN APPENTICES • Males are more likely to complete apprentices than females. • For coordinators with small numbers of apprentices, TEIs are the most effective, with completion rates at close to 50 percent, while ITO coordinators are the least successful at this level <p>www.educationcounts.govt.nz</p>
Summary of Session 8 – Stream B:	<p><i>Kit McMahon – Service Skills Australia</i> <i>New directions for training packages</i></p> <ul style="list-style-type: none"> • Outlined changes in Australian VET systems • Reforms to the delivery of <ul style="list-style-type: none"> – vocational education and training, – at school, – jobseekers and – to current workers
Summary of any additional presentations (if required)	
Website links for keynote and plenary address slides or downloads	http://www.itf.org.nz/research-forum-2009.html

Change control	
Document created:	11/05/2009
Last varied:	11/05/2009
Last reviewed:	11/05/2009