Developing a quality workforce: Linking a strategic research agenda to industry training

and

Higher level skill needs and worker voice: Exploring new ground in skills analysis

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Overview

- Presentation pivots around the relationship between industry training, workplace productivity, ‘worker voice’, and the role of unions.
- Two, linked mini-papers; the second by an expanded team of authors (includes A (Dharma) Dharmalingam and Paul Harris).
Skill forecasting

- First paper: A summary template developed in response to approaches from ITOs.
- Focus is labour market skills forecasting.
- Identifies two problems:
  - gaps in basic statistical data, and
  - lack of knowledge about future skills needs.
- Advocates active involvement of all stakeholders in order to build a bottom-up picture of industry.
The template

- Adopt an inclusive, collaborative research approach.
- Identify and evaluate perspectives of all stakeholders, including workers and unions.
Method

- Focus on:
  - Labour market information;
  - Industry mapping;
  - Future employment and skills needs analysis:
    - Employment projections;
    - Future skills needs.
  - Strategic analysis.
Labour market information

- Purpose is to provide an industry (employers, unions, and ITO) with more comprehensive information about the sector’s labour force.

- Analysis would consist not only of a more rigorous and expansive interrogation of the official data but would also incorporate the unique knowledge held by the sector: employers, unions and CTU, relevant ITOs, training organizations etc.
Industry mapping

- Seeks to identify the location, size (in terms of employment), function and relationship to other workplaces of the various workplaces that make up the enterprises that comprise a sector.
- Also provides the sampling frame for any survey work that might be carried out.
Future employment and skills needs analysis
(Two main elements)

Employment Projections
- To be based on existing official data sources, supplemented by the key sector stakeholders’ own data.

Future Skills Needs
- Projection work can tell us little about:
  - The skills composition of current jobs;
  - The perceptions of workers and employers as to current and future skills needs; and
  - Employee intentions regarding retirement, training, career shifts, etc.

Employ a survey approach to explore these issues.
Strategic analysis

This would provide qualitative, and, where possible, quantitative assessments of factors that could influence the demand for labour within a sector.

Such factors might include broad demographic trends such as population aging, specific eventualities such as trade liberalisation, or the impact of new technologies.
Conclusion

- This model is outlined in a copyright document: Appendix 2 of our report on the Food and beverage industry (Cochrane, Law, and Piercy, 2005).

- Attached to the paper is Appendix 1 from that report which gives some further insights into our approach.
High performance workplace systems in unionised enterprises

- This paper builds on work presented last year.
- Involves an expanded team of CLTUST researchers (Cochrane, Dharmalingam, Harris, Law, and Piercy).
- Team has been awarded DoL *Future of Work* funding to examine the skill dimensions of HPWS.
Overview

- Provide some insights from the literature.

- Identify and discuss, in the context of the Tertiary Education Strategy, the nature of the higher level skills needed to participate actively and effectively in hpws.

- Sketch the research project.
HPWS, workers, and unions: Insights from the literature

- A broad body of work holds that HPWS could pay dividends for:
  - **Workers** in terms of higher levels of job satisfaction, employment security, remuneration and better quality employment;
  - **Employers** through high productivity, better quality production and ultimately enhanced profitability and competitiveness (Applebaum et al., 2000).
Insights from the literature

- **Union involvement**: Also some evidence that it can be positive for both workers and employers.

- Black & Lynch (2001, 2004) point to the productivity enhancing effects of production systems that emphasise stronger worker voice, especially when articulated through unions.

- Small & Yasin (2000) report that in the implementation of advanced manufacturing technology the human aspect of technology adoption, principally worker involvement, is critical and that unions can have a significant positive effect.

- But there are some sceptics. These tend not to question productivity gains, but the claimed benefits for workers and unions.
HPWS, higher level skills, and the Tertiary Education Strategy 2002/07

HPWS is situated at one of the cutting edges of the future of work.

Specifically, our research is concerned with the nature, acquisition, and applications of skills, in a holistic sense, in HPWS environments.

The data, insights and understandings we develop should have the potential to contribute directly to the achievement of aspects of the Tertiary Education Strategy 2002/07 (TES), in particular Strategy Four: “Develop the skills New Zealanders need for our knowledge society.”
Both the TES and related inquiries, such as the Industry Training Review, explicitly reflect widespread acceptance in New Zealand of “the importance of workplace learning as a means of enhancing both work performance and the quality of working life” (Ashton and Sung, 2002, p. 1).

But perhaps what distinguishes New Zealand most from many similar countries is the explicit link that is being made in policy documents between the economic and the social.
HPWS, higher level skills, and the TES cont.

- The holistic sense of lifelong learning that permeates key, contemporary policy documents and the relationships that are being established between skill development and enhanced productivity and economic growth are very consistent with much of the HPWS literature.

- They are also very consistent with the powerful notions of inclusiveness and partnership that are currently so central to almost every aspect of economic and social policy, including employment relations.
The *Future of Work* project

- Underpinning our research is a central focus on the ways in which on-the-job union activity, the redesign of work, workers’ education and training, and employee involvement at the workplace can come together in order to provide workers with a ‘voice’ both in their work and in the wider society.

- Our research approach reflects our commitment to an inclusive, stakeholder model:
  - The Department of Labour,
  - The New Zealand Industry Training Organisation (NZITO),
  - The New Zealand Dairy Workers’ Union (NZDWU), and
  - The principal industry employer, Fonterra.
The study: Background

Concerned with skill development, skill utilisation and future skill needs in the context of the introduction and utilisation of HPWS in the dairy manufacturing.

Fonterra has a HPWS programme known as ‘Manufacturing Excellence’ (ME).

DWU initiated the adoption of programme.

ME is a lean production system. It differs from many in that it places considerable emphasis on worker/union involvement.

We have been studying aspects of dairy manufacturing for some time (see Bibliography).
Research Objectives

A. *Identify and evaluate* from the perspectives of *all* stakeholders:

- the nature of the skills required by workers, including workplace union representatives, in order to participate effectively in HPWS in the above context;
- mismatches between skills required to participate effectively in HPWS and skills workers currently possess;
- workplace and other factors (e.g., home/out-of-work; life/workplace biography; previous educational experiences etc) that may facilitate and/or impede the formation, development, and sustained application of the required skills;
Research objectives II

- the extent to which gender, ethnicity, or other similar factors may affect the formation, development, and sustained application of the required skills;
- the distinctive contribution that union representatives (both paid officials and workplace delegates) can make to the formation, development, and sustained application by workers of the required skills; and,
- how skills acquired primarily for HPWS purposes may be applied beyond the workplace in ways that are consistent with the objectives of the Tertiary Education Strategy, in particular those under Strategy Four: Develop the skills New Zealanders need for our knowledge society.

B. To discuss the possible implications of the findings with stakeholders.
Research approach

The study will be conducted in four phases:

- A literature review of skills needs in high performance manufacturing to identify key skills requirements and related adult learning issues;
- In conjunction with focus groups comprising representatives of the key stakeholders, initiate the development of the survey instruments;
- Complete survey development so that we produce a survey aimed at operator/ supervisors and a schedule of questions for semi-structured interviews aimed at more ‘strategic’ union, employer, and industry training players;
- The implementation and analysis of the survey instruments.
Summary conclusion

This research explores new territory and will provide insights into the higher level, more subjective skills that are required if workers are to co-operate with each other and with management in HPWS environments.

Specifically it will provide:
- Comparative data on the skill levels and the types of skills found in the dairy industry HPWS;
- Expected skill requirements and possible mismatches in the above workplaces;
- An evaluation of HPWS as it currently operates.
- Insights into the extent to which the skills involved in HPWS can make a more general contribution to the promotion of New Zealand as a knowledge economy with a high skilled workforce.

Findings will be presented in a final report for the DoL and in papers to academic and to applied research fora, such as this.