

Strengthening Education Employment Linkages in Regions to Remedy Skill Shortages

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Details

This PowerPoint presentation accompanied an invited keynote address by Professor Paul Dalziel to the *Towards Regional Economic Prosperity* conference, hosted by Conferenz Ltd at the Wellington Town Hall, on 22-23 March 2007.

Introduction

- The main focus of my presentation is how regions engage in ensuring their labour force continues to develop skills required by their key industry clusters.
- I start with two diverse stories about “education employment linkages in regions”.
- The first story concerns a recent example of an emerging policy issue in the Canterbury region.
- The second story concerns an example of an innovative programme in Tauranga.

The Canterbury Example

- Over the last four years I have been involved in a series of research reports on the high tech sector in Canterbury.
 - the electronics industry (e.g. Tait Electronics)
 - the software industry (e.g. Jade Software)
- This nationally important industry cluster in the Canterbury region reports ongoing skill shortages in key occupations.
- A recent research report funded by the Tertiary Education Commission estimates employment growth over the next five years of **3.6 per cent** per annum in the electronics sector and **10.7 per cent** per annum in software.

Skill shortages in IT is a national issue

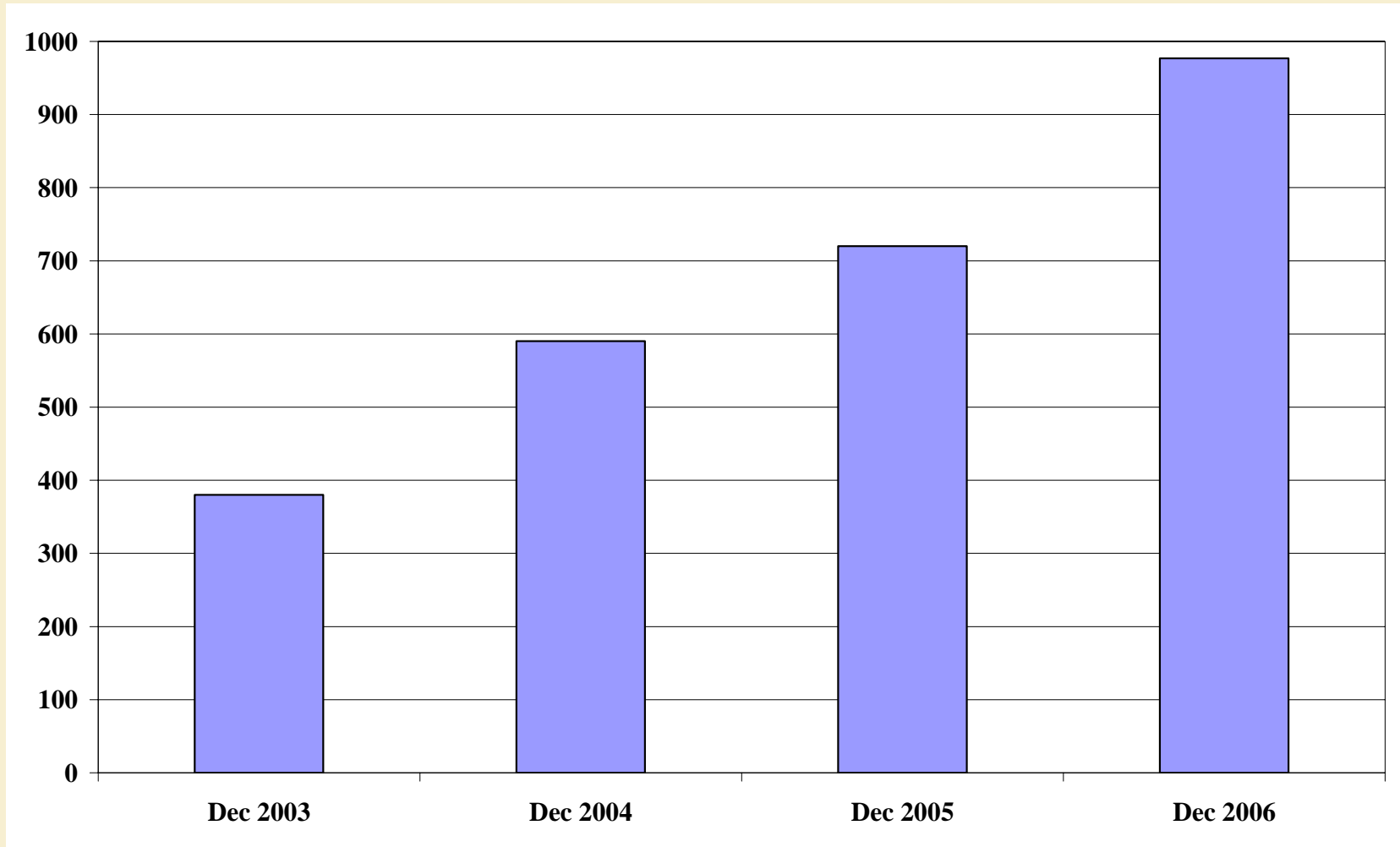
“The number of employed IT professionals has increased from approximately 8,400 in June 2001 to over 28,000 in June 2006. Employment growth of IT professionals of 27.3% per annum was well above 2.8% growth for all occupations.

On average, about 4,000 new IT jobs were created each year between June 2001 and June 2006. ...

The Department of Labour has assessed the IT professional occupation as experiencing genuine skill shortage.”

Source: Department of Labour Job Vacancy Monitoring Programme Report, *IT Professionals*, December 2006.

Number of IT Vacancies (New Zealand)



Source: Department of Labour Job Vacancy Monitor, December 2006.

Technology teacher courses scrapped

Arwen Hann
Education Reporter

The scrapping of technology courses at Canterbury University's College of Education this year will add to the desperate shortage of technology teachers, union leaders say.

The college has stopped running technology options for trainee teachers this year after receiving no applications for the course.

There is a shortage of teachers of home economics, woodwork and metalwork.

Dean of secondary education, Neil Lancaster, said the college was disappointed it had to stop the course.

"We are disappointed, but there was just no demand in this area and it was not viable," he said. "We are all too aware of the shortage of technology teachers, but there are no real pathways for people to follow.

"Providers are not interested in setting up a course which they don't think anyone will sign up for. There

are many reasons why people don't choose technology as a teaching career."

Post-Primary Teachers' Association (PPTA) national executive member, Penney Dunckley, said trainees were put off technology because of pay and status issues.

"There is a problem because without a degree teachers cannot progress far in this area, and those with degrees or in the trades can find better work elsewhere," she said.

An Education Ministry staffing survey last year showed technology vacancies made up nearly 20 per cent of all teaching vacancies in secondary schools.

A PPTA survey released as part of a report into the sector last year found 62% of schools that responded had difficulty recruiting technology teachers.

Technology is recognised by the ministry as an area of teacher shortage, and grants for graduates committed to teaching technology are offered by TeachNZ.

Christchurch *Press*, 29 January 2007, p. A2.

- Whose responsibility is it to think about this issue from a systematic point of view?
 - New Zealand Trade and Enterprise (a regional development issue)?
 - The Department of Labour (a labour market issue)?
 - The Tertiary Education Commission (a skills and training issue)?
 - Ministry of Youth Development (a youth participation issue)?
 - The relevant industry training organisation (ETITO)?
 - The University of Canterbury?
 - The Canterbury Development Corporation?
 - Local Industry Clusters?

The Tauranga Example

- The Economic Development Agency for the Western Bay of Plenty regional partnership is Priority One, which was set up in 2001.
- This is an unusual economic development agency in New Zealand, because it was set up by, and is accountable to, local business.
- It is responsible for implementing the region's economic development strategy, *SmartEconomy*, but I want to focus on a particular programme it operates called INSTEP.

The Priority One Team



**The INSTEP
Manager**



The INSTEP Programme

- The aim of INSTEP is to increase students', teachers', principals' and parents' understanding of “business” and how it relates to economic growth, the value and relevance of education and future employment opportunities within the Western Bay of Plenty.
- It does this by networking participating schools with local businesses, and through a work plan of projects contributing to increased knowledge in schools about local employment trends and opportunities.

Two Initiatives by INSTEP

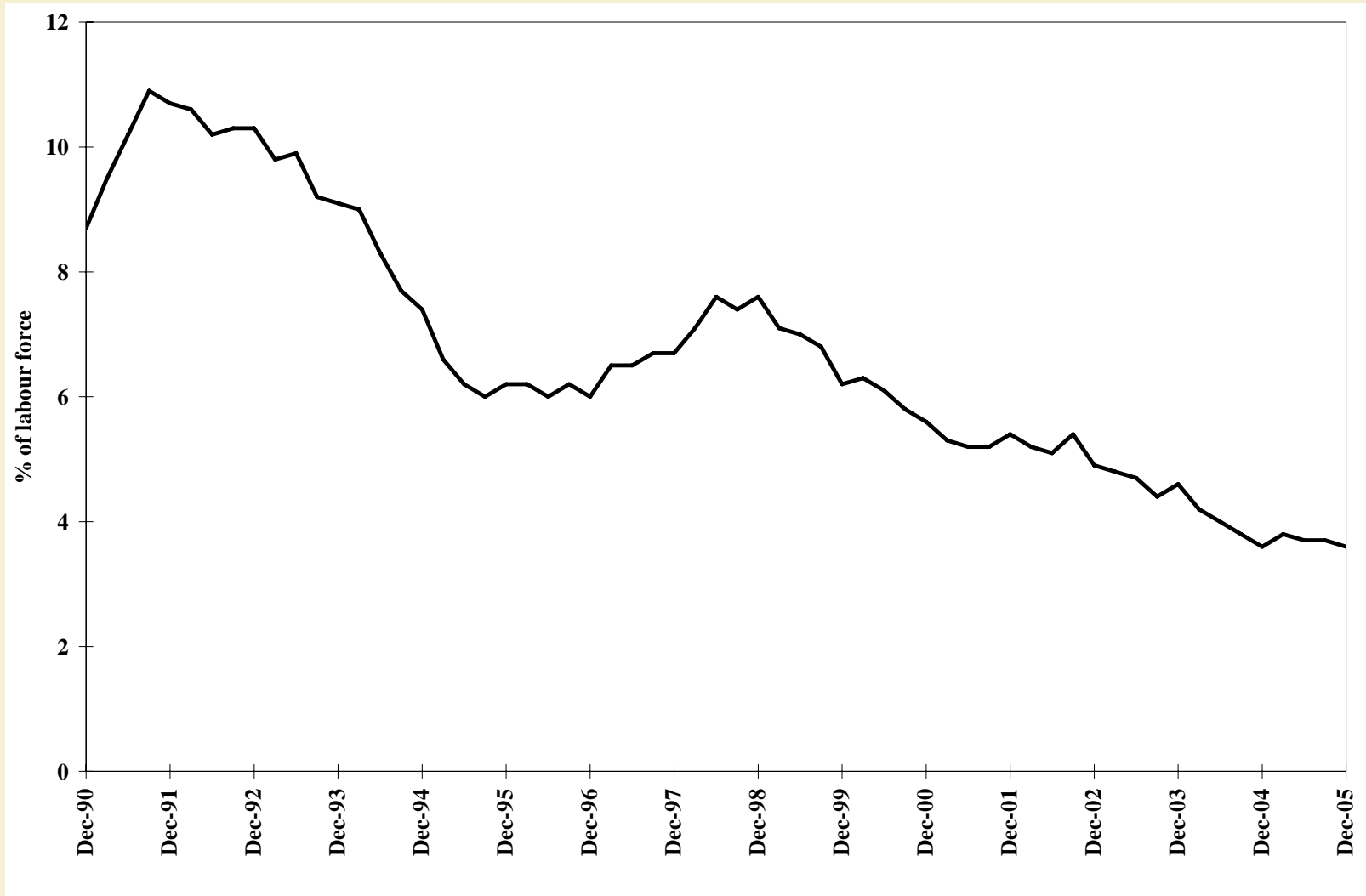
- Principals Big Day Out
 - INSTEP organises each year a day out for school principals, where they are hosted by an important local industry to obtain a hands-on experience of emerging trends.
 - One year, for example, the Principals were taken for helicopter flights so that they could see the significance of the horticulture sector in the region before meeting industry leaders.
- Targeted Teachers into Industry
 - INSTEP organises twice a term visits by teachers of relevant subjects to local industry to discuss skills, attitudes and qualifications.

- The unusual feature of this example is that the programme is being run within the region's economic development agency.
- This is a long-term investment in the region's future by investing in stronger education employment linkages in the schools.
- The programme is supported financially by industry groups, and also by the participating schools who can see its value for improving the learning outcomes of better motivated students.

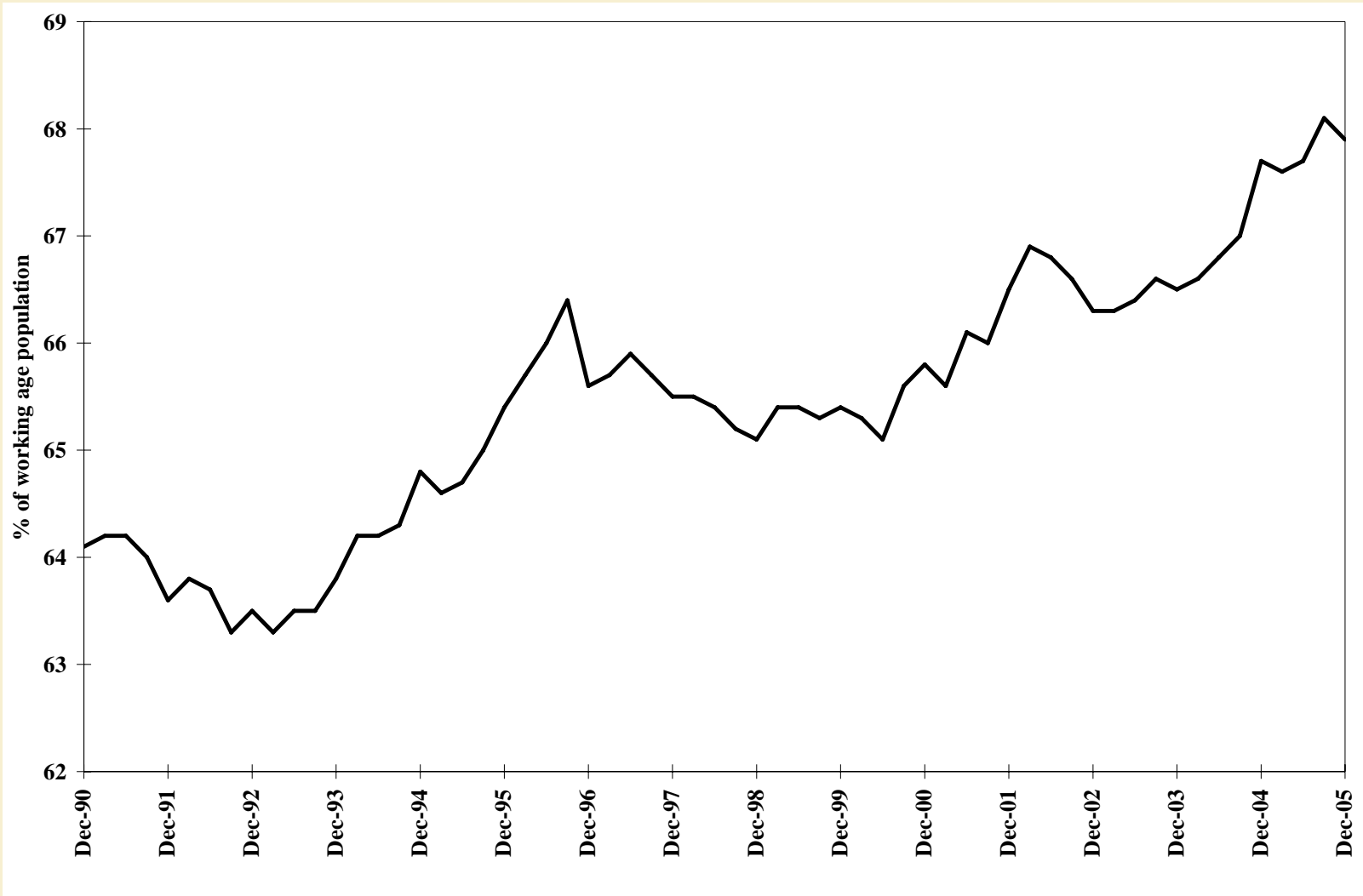
Background to the Policy Issue

- The two stories are good examples of the difficulties and opportunities for regions concerned about the growth of local industry clusters.
- The background to this issue is that the labour market in New Zealand has changed dramatically over the last decade.
- In the early 1990s, policymakers were focused on problems of record post-war unemployment and low participation rates by international standards.
- Now the key problem is skill shortages.

Unemployment Rate in New Zealand



Participation Rate in the Labour Force



Skill and Labour Shortages

Figure 1: Difficulty of finding skilled and unskilled staff, 1986-2006

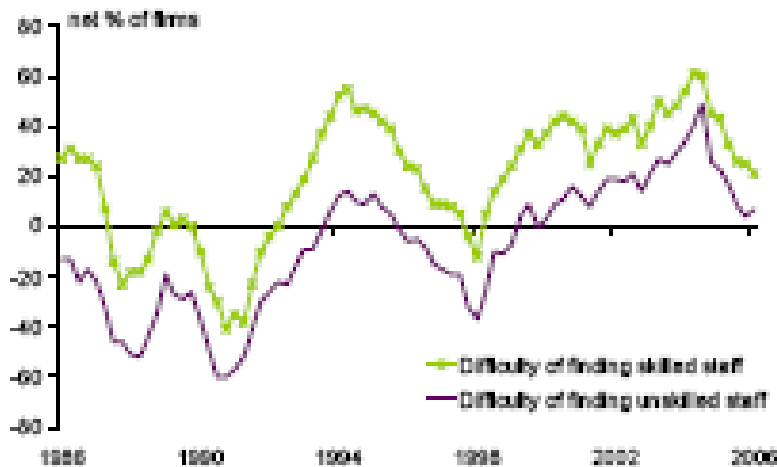


Figure 2: A shortage of labour as main constraint on expansion, 1986-2006

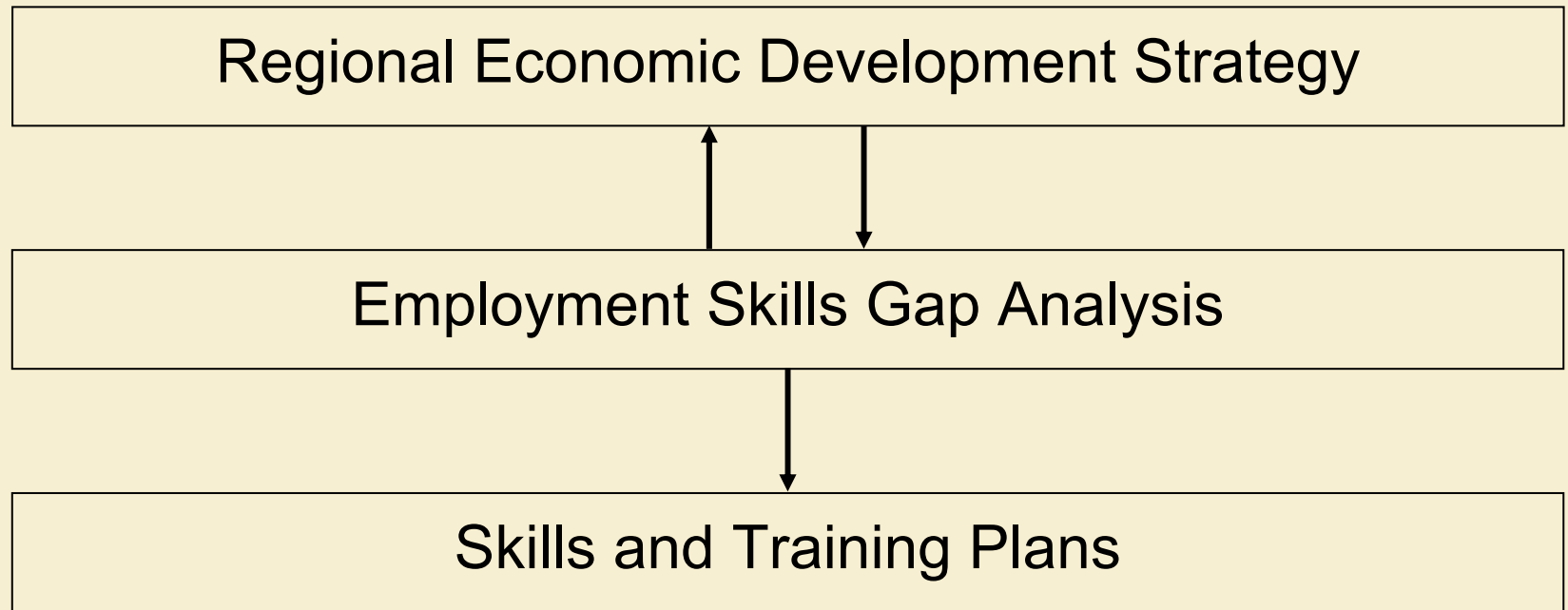


Source: NZIER data, published in the Department of Labour's *Skills in the Labour Market Report*, November 2006, p. 2.

Skill Shortages and Vocational Training

- The emergence of skill shortages has led to lots of initiatives to align vocational training more closely with local labour market analysis:
 - DoL Regional Job Vacancy Monitoring Programme
 - MSD Regional Employment and Skills Forums
 - Regional Skills Gaps Analyses
 - Tertiary Education Strategy, 2007-2012
 - TEC Regional Facilitation programme and ITPs
 - Regional Statement of Tertiary Education Needs

Vocational Training and Regional Development



There are some dangers, however, in developing skills and training plans directly from an employment skills gap analysis without placing it in a regional development context.

Integrating Policy

- It is now generally recognised that we need to integrate three elements of government policy if we want to address emerging skill shortages:
 - Regional economic development
 - Labour market analysis
 - Skills and training
- The OECD is currently undertaking an international project on how countries are integrating policies in these three areas (including New Zealand).
- New Zealand has made good progress in a short time.

Since 1998 ...

- Income Support and the Employment Service have been merged into Work and Income.
- MED, MSD, NZTE, TEC have appeared in their current form.
- The Regional Partnerships Programme has been introduced.
- All regions have produced regional economic development strategies.
- Regional Councils have been given a legal mandate to promote regional economic development.
- Tertiary education reforms are strengthening providers' linkages to industry needs.

So what is next on the agenda?

- One of the implications of ongoing skill shortages is that we need to think about the next generation of workers.
- All western countries are faced with this issue in the face of aging populations.
- “In the next decade, the largest ever group of young New Zealanders will make the transition from secondary schooling into tertiary education and the workforce. ... This is a strategic opportunity to ensure our workforce can compete with the best in the global economy.” (*Developing the Second Tertiary Education Strategy, 2007/12, 2006, p. 11*)

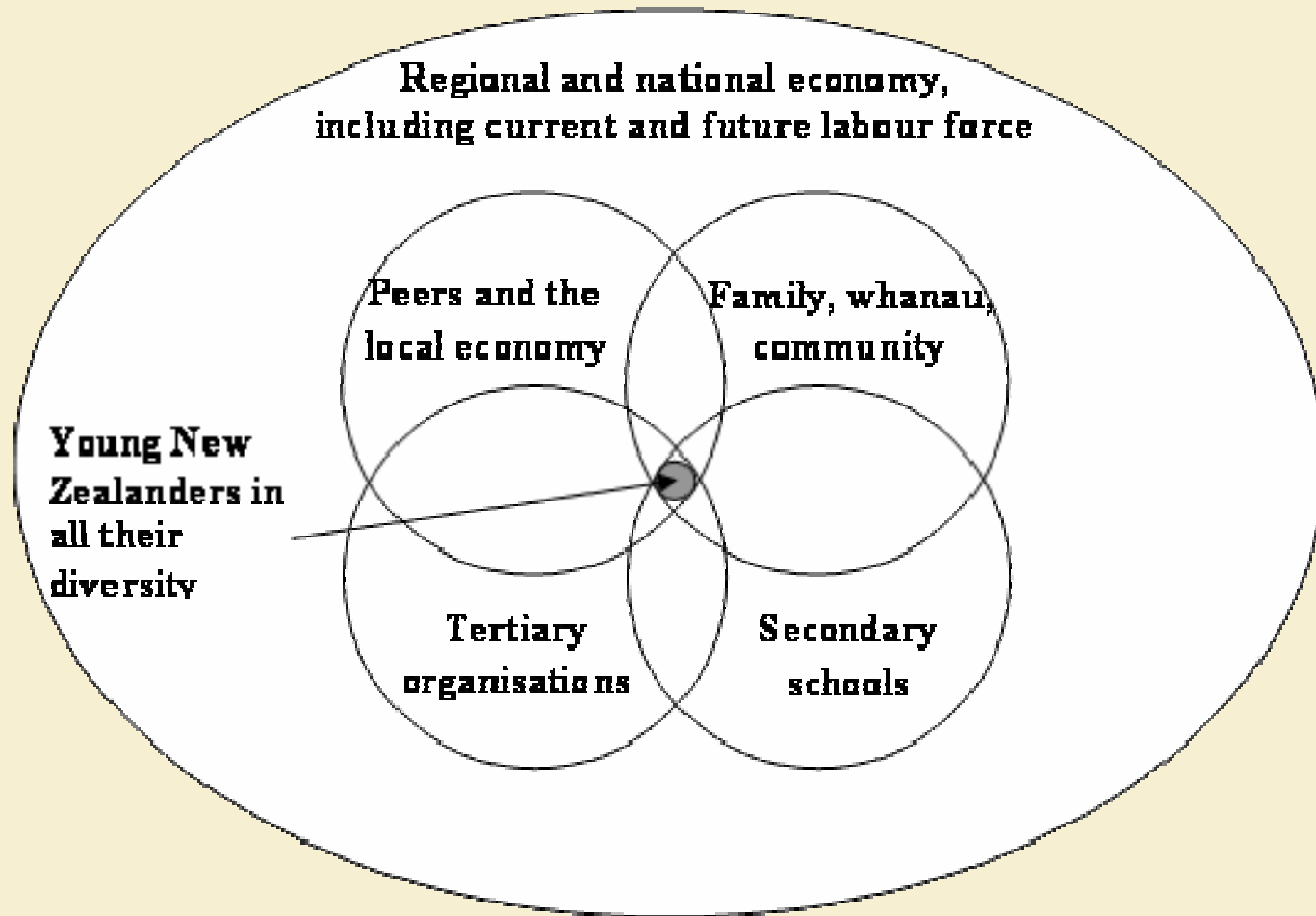
School Leavers in Transition to Work

- Recent OECD work emphasises the importance of public policies to help young people **make good choices** during their transition years from school to work.
 - Education choices while still at school
 - Post-compulsory education and training choices
 - Part-time employment choices while in education
 - Career aspirations and career choices
- This is what the INSTEP programme in Tauranga attempts to do.
- The OECD suggests this assistance needs to be an integral part of a country's *labour* policies (not remedial education).

Career Management

- Internationally, the buzz words now are ‘career management’ rather than ‘career advice’.
- How can we help a student think about how current choices might affect future choices?
- How does further education lead to better jobs, but also how do certain jobs lead to further skills?
 - Life-long learning and on-the-job training are important
- Work-Life Balance.
 - Work is not simply a means for earning income but is important to individual identity, development and well-being.

The Need for a System View



Managing the Information



There is a lot of evidence that many young people feel swamped by the information they are given about career planning.

The problem today is not so much that students lack information – there is lots of information!

Challenges for Career Management

- The challenge is to help students (especially the anxious seekers) learn **how to make choices** that are good for them, not just once but as they grow in their career.
- A large amount of the ‘glossy’ information is produced by tertiary educators (universities, polytechnics, wānanga, PTEs), not by employers or independent analysts – so how do we help students evaluate that information?
- The government has put in place a number of very good ‘In-transit’ policies to assist young people make choices (including Career Services), but there is more to do...

The Education-Employment Linkages Project

- FRST has just announced that it will fund a 5-year research programme on education-employment linkages for young New Zealanders.
- The research team involves four research leaders from the AERU research unit at Lincoln University, the New Zealand Centre for Educational Research and He Pārekereke at Victoria University:
 - Paul Dalziel (regional economic development, AERU)
 - Jane Higgins (sociology of youth in transition, AERU)
 - Karen Vaughan (careers education, NZCER)
 - Hazel Phillips (Māori and Pacific education, He Pārekereke)

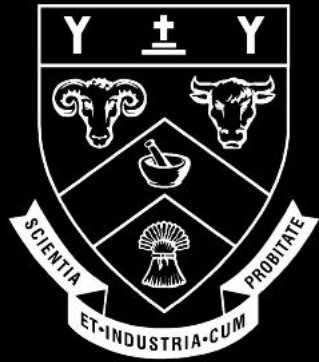
The Aim of the Research Proposal

Our aim is to answer the question: *How can formal support systems best help young New Zealanders make good education-employment linkages to benefit themselves, their communities, and the national economy?*

- Effective systems in *school communities* for helping young New Zealanders make good education-employment linkages.
- Effective systems in *regional communities* for helping young New Zealanders make good education-employment linkages.
- Effective systems in *Māori and Pacific communities* for helping young New Zealanders make good education-employment linkages.
- Effective systems for conveying the needs of *employers* to young New Zealanders, to improve education-employment linkages.

Conclusion

- We think there are other good examples in New Zealand communities, like the Tauranga INSTEP programme, aiming to connect schools and employers. Much is already being done.
- But we also think there are gaps in our systems for helping young people make career management choices that are good for themselves and their communities.
- Strengthening education employment linkages will help reduce skill shortages that constrain individual opportunity and economic growth, and we look forward to working with some of you in this room on this FRST project.



Lincoln University

Te Whare Wānaka o Aoraki



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