



RESEARCH PROGRAMME ON
EDUCATION EMPLOYMENT
LINKAGES

**Education Employment Linkages:
An Introduction to the Research Programme**

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Abstract

In March 2007, the Foundation for Research, Science and Technology in New Zealand announced that it was providing \$2 million of funding for a 5 year research programme on successful education employment matching for youth. This paper describes the structure of the research programme, introduces the research team and explains the ways in which the programme is incorporating Māori research and innovation. The overall aim of the research programme 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?

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Executive Summary

Introduction

1. This report introduces the education employment linkages (EEL) research programme, selected for funding by the Foundation for Research, Science and Technology in 2007 under its *Building an Inclusive Society* portfolio. This is a five-year research programme on successful education employment matching by youth in New Zealand, led by the four authors of this report, which brings together the research strengths of the AERU research unit at Lincoln University, the New Zealand Council for Educational Research and He Pārekereke at Victoria University of Wellington.

Research Programme Overview

2. A significant number of New Zealanders experience lasting constraints in achieving their full potential to participate in society as a result of the particular education and training pathway they follow after leaving school. The government is investing heavily in helping young people make education employment choices during their transition years, but there is currently no research programme devoted to understanding and improving education employment linkages by young New Zealanders.
3. Previous research by the research team and by others has identified serious problems being experienced by young New Zealanders preparing for employment. International evidence is strong that education employment matching is helped by good career development education. The EEL research programme will produce new knowledge about how formal support systems can best help young New Zealanders link education choices and employment outcomes. This new knowledge will be used by policy advisors to design better systems of support, and will be used by practitioners for better implementation of current and future policies.
4. The aim of the research programme 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? To achieve this aim, the programme has four objectives, each headed by an objective leader focusing respectively on school communities, on regional communities, on Māori and Pacific communities, and on employer-led channels.
5. The research programme is built around the ‘individual career management’ paradigm that is the new standard of international best practice in this field. The objective leaders will begin by contributing to an integrated cross-disciplinary literature review to place the research in its international context. This will be followed by collaborations in primary research over three years. The final phase of the project will involved two pilots of best practice systems, assessing the integrated results of the four research streams in each pilot site. The process of integration and assessment over the life of the research programme has come to be called the programme’s ‘fifth objective’.
6. The design of the research programme was guided by Blaikie’s (2000) text. It moves from a literature review (what do we already know?), to exploration and description (what is happening?), to understanding and explanation (why is it happening?), and finally to prediction and change (how can we make it different?).

The Research Programme

7. The design of research methods has paid particular attention to two dimensions: cross-disciplinary collaboration and research validity. Each phase of the research is designed to move beyond co-operation (working together for individual ends) to achieving genuine cross-disciplinary collaboration among the key researchers (working together for a common end). The programme approaches research validity in terms of Cresswell and Miller's (2000) lens of the researcher, lens of the research participants, and lens of people external to the research.
8. The research programme proceeds in five phases: Phase 1 International Literature Review; Phase 2 Mapping Research; Phase 3 Key Informant Research; Phase 4 Case Studies; and Phase 5 Pilot Projects. The pilots will provide a genuine test of the transformational validity of the research; that is, of whether the new knowledge generated by the project can be used to bring about change towards more effective education employment linkages for young people in transition.

The Research Team

9. The research programme draws upon the heritage of three national research centres to create a new and unique capability for cross-disciplinary research into education employment linkages by youth in transition. Through NZCER, the AERU and He Pārekereke, the research team has access to collegial support and other resources necessary to complete the project successfully. The research team is led by four senior social science researchers: Professor Paul Dalziel, Dr Karen Vaughan, Dr Jane Higgins and Dr Hazel Phillips.
10. These four team members have established effective working relations with each other during the 14-month preparation of the research proposal and in other projects. This project will benefit from these capabilities, because cross-disciplinary collaboration encourages innovative ways of conceptualising problems and interpreting findings. The concept of 'choice', for example, is fundamental to the project's intellectual framework. The disciplines of education, sociology, indigenous studies and economics bring different insights to this concept and how institutions can affect choice-making.
11. A high level of international interest in youth transitions has allowed the research team to build linkages with four world-class researchers, all of whom have expressed strong support for the programme: Professor Paul Ryan (University of London), Professor Johanna Wyn (Melbourne University), Professor David Raffe (University of Edinburgh) and Dr Denise Henning (University College of the North). These international linkages will ensure the programme is informed by best-practice conceptual and methodological frameworks.
12. The programme is being supported by an external reference group (ERG) of policy end-users consisting of the following seven government agencies: Ministry of Youth Development, Ministry of Social Development, Ministry of Education, Department of Labour, Te Puni Kōkiri, Tertiary Education Commission and Career Services. Officials from these agencies have agreed to meet with the research team in Wellington twice a year to discuss points of alignment, collaboration and difference with their own work programmes. The research team is building strong links with other end users.

Māori Research and Innovation

13. Objective 3 of the programme is to research and deliver new knowledge about effective systems in Māori and Pacific communities for helping young New Zealanders make good education employment linkages. The impetus for the Māori objective came from recognition of Māori aspirations for rangatahi to have every opportunity to develop to their full potential and for Māori to develop their own strategies for that potential to be realized in order to contribute to Māori economic success.
14. By unlocking the potential of rangatahi, Māori communities are contributing to the benefit of the whole country, as well as providing for greater well-being of whānau, hapū and iwi. Objective 3 of the research programme will map the diversity amongst whānau, hapū and iwi in their development of distinctive innovative approaches to support rangatahi as they move from school to work. It will learn from these initiatives and share them nationally. It will focus on case studies of excellence, and use them to provide new knowledge to Māori policymakers and practitioners. The new knowledge arising out of the objective will be integrated into the development and trialling of two pilot projects in the final phase of the research programme.
15. The research undertaken in Objective 3 will take place within a kaupapa Māori research framework. It will put Māori understandings and experiences at the centre of the research; draw on matauranga Māori and relevant contemporary knowledge to document Māori success and to develop new knowledge; be guided by tikanga Māori for working with and in Māori communities; and have a strong emphasis on accountability to and reciprocal relationships with the Māori communities participating in the research.
16. A critical component of the successful implementation of this project lies in Dr Phillips's membership of He Pārekere. Established in 1995, He Pārekereke is dedicated to academic training and leadership in education for Māori and Pacific Nations peoples. The staff of He Pārekereke have extensive personal networks in Māori communities as a result of their long involvement in Māori education and development. These personal relationships, as well as He Pārekereke's other networks, are essential for the research to take place, and will also be a primary conduit for returning the results of the research to Māori communities.
17. The research team has not sought end-user financial support from Te Puni Kōkiri (TPK) or from Māori communities for the research. To do so would represent double-dipping, since Māori as taxpayers are already contributing to this programme through the support of the Foundation for Research, Science and Technology. The budget recognises the national standing of He Pārekereke in the field of post-graduate education of Māori researchers by setting aside \$30,000 for two Masters scholarships within Objective 3. Mentoring these students at He Pārekereke will contribute to passing on and developing Māori knowledge research capability for future generations from the matauranga Māori of the present community of scholars.

Conclusion

18. Work to produce the EEL research proposal began on 17 August 2005. After nearly two years of preparation, the EEL research team is excited to launch the programme on its starting date of 1 July 2007.

Chapter 1

Introduction

The Foundation for Research, Science and Technology (FRST) is a New Zealand Crown agency responsible for investing approximately NZ\$450 million of public money per annum in science and technology research for the benefit of New Zealand. On 18 April 2006, FRST issued a request for proposals for research funding under its *Building an Inclusive Society* (BIS) portfolio. The purpose of the BIS portfolio is to make investments that ‘support New Zealand’s efforts to build and sustain an inclusive society, through informing decisions, actions, strategies and policies aimed at improving social outcomes for New Zealanders’ (www.frst.govt.nz/research/BIS.cfm). For the 2006/07 BIS funding round, FRST identified three target outcomes:

BIS1 Children and young people participating and succeeding - All children and young people have the opportunity to participate, to succeed and to make contributions that benefit themselves and others.

BIS2 Improving participation in employment - All New Zealanders are able to participate in sustainable, high quality and productive employment.

BIS3 Positive ageing - All New Zealanders are able to age positively, are highly valued and are recognised as an integral part of families and communities.

The Foundation received 31 preliminary concept documents in response to its request for proposals, 14 of which were accepted to be developed into full proposals. On 22 March 2007, FRST announced that 5 of these 14 proposals had been selected for funding, three under the BIS2 heading and two under BIS3. The five selected programmes began their research on 1 July 2007.

This report introduces one of the proposals selected under BIS2 – the education employment linkages (EEL) research programme. This is a five-year research programme on successful education employment matching by youth in New Zealand, led by the four authors of this report, which brings together the research strengths of the AERU research unit at Lincoln University, the New Zealand Council for Educational Research and He Pārekereke at Victoria University of Wellington. The researchers are experienced New Zealand social scientists drawing on the disciplines of education, sociology, indigenous studies and economics. The cross-disciplinary approach adopted by the research team is a feature of this programme.

The report begins in chapter 2 with an overview of the research programme. This sets out the evidence suggesting the need for this research, explains the programme’s research aim and four objectives, and outlines the main elements of the work over five years. Chapter 3 introduces the research team, including their overseas research linkages and the external reference group of policy end-users who will help guide the research as it proceeds. Chapter 4 provides a more detailed description of the research programme and its different phases. One of the programme’s objectives includes a focus on Māori research and innovation; this feature is explained in Chapter 5. The report finishes with a brief conclusion.

Chapter 2

Research Programme Overview

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. (New Zealand Government, 2006, p. 11)

A significant number of New Zealanders experience lasting constraints in achieving their full potential to participate in society as a result of the particular education and training pathway they follow after leaving school. Symptoms of this problem include:

1. *Underinvestment in education*: Some young people find they cannot choose the education they need for a desired career path because their options have been limited by school subject choices and subject choice systems.
2. *Misdirected investment in education*: Some young people incur debt and forgo income to obtain qualifications that they expect to use for work, but which they then find are not required in their subsequent employment.
3. *Unrealised individual potential*: Some young people choose education and employment that are matched, but do not reflect their full individual potential.
4. *Education-employment mismatch*: Some employers end up with staff who are under- or over-qualified for their jobs, both of which reduce labour productivity.
5. *Skill Shortages*: The growth of some industries is constrained because of insufficient New Zealand workers with the right skills, affecting GDP growth.

The New Zealand government is investing heavily in helping young people make education employment choices during their transition years. Schools, for example, must 'provide appropriate career education and guidance for all students in year 7 and above' (NAG, 2006, No. 1 vi); in 2006 they received \$4.2 million for this purpose. Relatively recent policy initiatives include the www.in-transit.govt.nz website, the Gateway programme, Designing Careers, the Secondary-Tertiary Alignment Resource (STAR), Youth Transitions Services, He Ara Rangatahi, a \$12.7 million boost to Career Services in the 2006 Budget and the CPaBL programme. Policy is overseen by a Youth Transitions Senior Officials Group and a Youth Transitions Working Group, both of which are comprised of representatives from Career Services, the Department of Labour, the Ministry of Education, the Tertiary Education Commission, the Ministry of Social Development and the Ministry of Youth Development.

Despite the number of agencies involved, despite the scale of public investment in these policies, and despite the policies' strategic importance for both individual well-being and New Zealand's national goals, there is currently no research programme devoted to understanding and improving education employment linkages by young New Zealanders. The EEL research team brings together four of the country's best researchers in their respective fields to create a new, world-class programme for research on this vital social issue, including an in-built capability to address specific needs of Māori and Pacific communities.

The Need for the Research

Previous research by the research team has identified serious problems being experienced by young New Zealanders preparing for employment.

- Dr Vaughan leads the New Zealand Council for Educational Research (NZCER) *Pathways and Prospects* study, which is following over 100 young people in their first four years after leaving school (Vaughan, 2005; Vaughan et al, 2006). This study has found that, in the first months of choosing a post-school pathway, many young people feel they have not received enough good guidance at school to make their decisions. A year later, many remained confused about how to get help.
- Dr Higgins co-led the Marsden Fund *In Transition* project, which identified similar concerns among another group of over 100 young people as they leave school (Higgins and Nairn, 2006). Apart from a minority who had made an early career choice, these young people did not find the careers information provided for them helpful in their choice-making. The majority found it confusing to be faced with so much information and so many apparent choices; few were able to make judgements about the quality of the material they encountered.
- Dr Phillips's PhD thesis at the University of Canterbury highlighted the particular difficulties young Māori students experience after leaving school (Phillips, 2003), a finding that is confirmed in the polytechnic sector by a PhD student under her supervision. Her research is consistent with the call made at the Hui Taumata (2005, p. 13 and p. 14) for Māori and educationalists to take responsibility for factors that are currently holding back rangatahi, with 'improving career advice to support lifelong employment and employability' identified as a key component.
- Professor Dalziel leads the AERU Regional Development programme at Lincoln University. Two studies within that programme have identified specific difficulties that high-tech industries report in raising their profile among secondary school pupils, leading to lost high productivity employment opportunities for local young people (Saunders and Dalziel, 2003 and 2006).

International evidence is clear that education employment matching is helped by good career development education (Bysshe et al, 2002; Hughes et al, 2002; Bowes et al, 2005; DEST, 2005; Smith et al, 2005; Bimrose, 2006; Department for Education and Skills, 2006). Previous research has identified problems with careers education systems in New Zealand (Wilson and Young, 1998; Vaughan and Kenneally, 2003; Family, Child, Youth and Community Unit, 2005; ERO, 2006). Correction of these systemic problems is hampered by the absence of a solid research base on young people's education employment linkages in this country.

The Labour Market Dynamics Research Programme reports that 43 per cent of people aged 15-34, and 46 per cent of Māori in this group, feel their current job is not very closely related or not related at all to their educational qualifications (Dupuis et al, 2005; Cunningham et al, 2005). These figures imply a high social cost, since international studies reveal that successful education employment matching raises individual earnings for many years. A British study of graduates reported an earnings premium of between 8 and 20 per cent six years after graduation (Battu et al, 1999). An Israeli study of vocational education found that successful matching can increase annual earnings by up to 10 per cent (Neuman and Ziderman, 1990). A

more recent Australian study reported returns to required education, if correctly matched to employment, of 18.2 per cent for men and 14.9 per cent for women (Voon and Miller, 2005). Extrapolation of these data to New Zealand suggests it is entirely feasible that income and productivity benefits from implementing the research results could exceed \$500 million over a 15-year period.

The EEL research programme will produce new knowledge about how formal support systems can best help young New Zealanders link education choices and employment outcomes. This new knowledge will be used by policy advisors to design better systems of support, and will be used by practitioners for better implementation of current and future policies. This will lead to improved education and training choices by young people, equipping them more fully to participate in sustainable, high quality and productive employment. Thus the programme will make a strong contribution to the BIS 2 Target Outcome.

Research Aim and Objectives

The aim of the research programme 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? To achieve this aim, the programme has four core objectives, each headed by an objective leader:

1. To research and deliver new knowledge about effective systems in school communities for helping young New Zealanders make good education employment linkages (Karen Vaughan).
2. To research and deliver new knowledge about effective systems in regional communities for helping young New Zealanders make good education employment linkages (Jane Higgins).
3. To research and deliver new knowledge about effective systems in Māori and Pacific communities for helping young New Zealanders make good education employment linkages (Hazel Phillips).
4. To research and deliver new knowledge about systems for conveying the needs of employers to young New Zealanders, in order to improve education employment linkages (Paul Dalziel).

Outline of the Research Programme

The research programme is built around the ‘individual career management’ paradigm that has emerged as the new standard of international best practice in this field (Jarvis, 2003, 2006; Bezanson, 2005; OECD, 2004a, 2004b, 2006; ISCDPP, 2006). This paradigm places the individual choice-maker at the centre of career management systems, and aims to understand how these systems can best help young people in their education employment choices. The research will also make a significant contribution internationally, because of its originality in integrating cultural, economic, educational and sociological perspectives into every phase of the programme (see chapter 3 below), building on New Zealand’s global leadership in promoting cultural well-being as an integral part of sustainable community development (Dalziel, Matunga and Saunders, 2006).

Table 1 below presents the major elements of the programme. The four core objectives focus respectively on secondary school communities, regional communities, Māori and Pacific communities, and employer-led channels. The programme is fully integrated across the four objectives. The objective leaders will begin by contributing to an integrated cross-disciplinary literature review to place the research in its international context. This will be followed by collaborations in primary research over three years. The final phase of the project will involved two pilots of best practice systems, assessing the integrated results of the four research streams in each pilot site. The process of integration and assessment over the life of the research programme has come to be called the programme’s ‘fifth objective’.

Table 1: The Elements of the Research Programme

		Objective 1 (K. Vaughan)	Objective 2 (J. Higgins)	Objective 3 (H. Phillips)	Objective 4 (P. Dalziel)
<i>1. International Context</i>		Integrated international literature review drawing on: Education Sociology Indigenous Studies Economics			
<i>Primary Research</i>	<i>2. What is happening?</i>	Mapping of current education employment systems in: School Communities Regional Communities Māori & Pacific Communities Employer-Led Channels			
	<i>3. Why is it happening?</i>	Interviews, surveys and focus groups of key informants in: School Communities Regional Communities Māori & Pacific Communities Employer-Led Channels			
	<i>4. How can we make it different?</i>	Case studies of how positive outcomes occur in: School Communities Regional Communities Māori & Pacific Communities Employer-Led Channels			
<i>5. Integration and Assessment</i>		Two pilots of best practice systems, assessing in each pilot site the integrated results of the four research streams.			

Phase 1 will adopt the ‘systematic literature review’ method (Smith et al, 2005) to determine what is already known internationally about youth education employment linkages. Conceptual frameworks identified in the review will inform analysis in each subsequent stage. Phases 2 and 3 will include content analysis of documents, population and sample surveys, semi-structured interviews, and focus groups. Phase 4 will involve three case studies in each Objective, using intensive qualitative research tools to explore how positive outcomes are being achieved. In the final stage of the programme, Phase 5, the research team will choose two diverse sites where key stakeholders in local secondary school communities, in the wider local community, in local Māori and Pacific communities, and in local employer organisations, are willing to trial improved systems for better education employment linkages by young people. These pilots will integrate, apply and disseminate the new knowledge produced in the programme, thus meeting the overall research aim.

The design of the research programme was guided by Blaikie's (2000) text. It moves from a literature review (what do we already know?), to exploration and description (what is happening?), to understanding and explanation (why is it happening?), and finally to prediction and change (how can we make it different?). Suitable research methods are adopted for each question (see Chapter 3 below). The approach taken to address the last two questions, for example, combines abductive and retroductive strategies (Blaikie, 2000, Chapter 4). Abductive strategies are important for understanding the choice-making of the young people at the centre of the research (Higgins and Nairn, 2006; Vaughan et al, 2006), while retroductive strategies aid understanding of how systems can influence those choices (Dalziel, 2001).

Chapter 3

The Research Programme

The key research question is: How can formal support systems best help young New Zealanders make good education employment linkages to benefit themselves, their communities, and the national economy? The support systems are conceptualised as ‘human activity systems’ (Checkland, 1981) with four primary sites of engagement: school communities; regional communities; Māori and Pacific communities; and employer-led channels. The design of research methods has paid particular attention to two dimensions that the research team thinks are particularly important for social scientists embarking on a new programme of policy oriented research:

1. *Cross-disciplinary collaboration.* Each phase of the research is designed to move beyond co-operation (working together for individual ends) to achieving genuine cross-disciplinary collaboration among the key researchers (working together for a common end). Jeffrey (2003) notes that collaboration requires explicit planning and resources, and identifies four tools for collaboration: the development of a common vocabulary, the use of metaphor as an aid to understanding, the contribution of each discipline to the creation of common narratives within the project, and awareness of the forms of dialogue being utilised within the team. The budget provides for four meetings of the research team each year. Integration of disciplinary perspectives will be achieved at these meetings, using tools such as those listed above, to achieve what Jeffrey calls the products of collaboration: process, understanding, utility, and knowledge integration. This reflective process will culminate in year 5 with an article analysing how the team’s education, sociology, indigenous studies and economics perspectives were integrated in the programme’s cross-disciplinary collaboration.

2. *Research validity.* The programme approaches research validity in terms of Cresswell and Miller’s (2000) lens of the researcher, lens of the research participants, and lens of people external to the research. Each lens represents a viewpoint from which validity may be established. Different lenses of validity can be relevant at different stages of the research. In Phase 2, for example, the research will produce system maps to which no individual currently has access, and so the lens of the researcher is appropriate to identify when the maps are adequately drawn. In this case, validity will be achieved by using population surveys and expert informant interviews. A combination of researcher and participant lenses will be used in later phases, adding the tools of member checking (taking data and its interpretation back to research participants), prolonged engagement in the field by the researchers (particularly in the case study and pilot stages) and collaboration in the analysis of data with participants (with CATE, for example). Validity of the overall project will be addressed through the lens of people external to the study, made possible by our collaboration with the external reference group and through our links with international experts.

Phase 1. International Literature Review

The research begins with an integrated cross-disciplinary literature review drawing on economics, education, indigenous studies and sociology. Each objective leader will review the literature in their own discipline, and the results will then be integrated into a single paper. Validity will be achieved by adopting the five-stage approach of the ‘systematic review’

method (Hughes et al, 2005, Smith et al, 2005). The five stages are searching, screening, data-extraction, synthesis, and reporting/dissemination. The research team will identify and follow up key differences discovered in the cross-disciplinary discussions after the individual reviews.

Phase 2. Mapping Research

The mapping research is designed to answer what is happening in current education employment systems in the four primary sites of engagement. In Objective 1, validity is addressed by undertaking a population survey (rather than a sample survey) of all schools who are not already being surveyed under the CPaBL programme by the Education Review Office (ERO). Dr Vaughan has liaised with the Education Review Office to allow comparisons between the two surveys. The surveys will be analysed to create a typology of approaches taken to careers education in secondary schools. Co-funding from the Ministry of Education allowed this research to begin in the first half of 2007.

In Objective 2, the research method will be a web-based and paper questionnaire requesting respondents to describe and explain community initiatives for education employment linkages. Validity will be addressed by approaching large numbers of potential respondents through a range of networks including the Mayors Taskforce for Jobs and the Ministry of Social Development. Analysis of the responses by Dr Higgins will involve identifying patterns in education employment initiatives across regions, e.g. modes of communication among key actors, relationships between institutions, access by different groups of young people, particularly those experiencing significant levels of disadvantage.

In Objective 3, the research method will be a series of semi-structured interviews and focus groups with key individuals and groups working in Māori and Pacific communities to improve education employment linkages among young people. Validity will be addressed by using the extensive network of relationships with community leaders built up within He Pārekereke, and by covering a wide range of initiatives in different parts of the country. Information gathered at the meetings will allow Dr Phillips to create a map of the terrain showing the diversity of initiatives.

In Objective 4, the research method will be to use interviews with senior managers of relevant organisations to trace out the architecture of current employer-led channels of information to young people in transition. Validity will be addressed by Professor Dalziel beginning with the primary peak organisation for employers, Business New Zealand. This will lead to organisations in other parts of the system (the Industry Training Federation, for example, and the New Zealand Vice-Chancellors Committee), which will in turn lead to further steps in the channels to young people themselves. The interviews will be analysed to determine incomplete as well as complete channels.

Phase 3. Key Informant Research

The key informant research is designed to answer why the current education employment systems are operating as they are. In depth data will be gathered and analysed using knowledge gained from the literature review and mapping research. In each objective, research will take place in 10 sites. Choice of sites will be informed by the mapping research, in consultation with the external reference group, to provide a purposive sample. In each case, the validity of the results and interpretations of the research team will be addressed by taking them back to participants for further discussion.

In Objective 1, the ten schools will be stratified by decile grouping and school size (Hipkins with Hodgen, 2004), and will ensure a reasonable representation of urban and rural schools, and of schools with a single careers educator or a team. In each school, Dr Vaughan will undertake semi-structured interviews and focus groups with careers educators, students, parents and others closely linked with the school. The analysis of this research material will reveal new knowledge about what makes for effective systems of supporting education employment linkages within a school community. This research will take place in 2008, so that it can feed into the research in the other three objectives.

In Objective 2, the ten sites will be chosen so that there is one from each of the regional labour markets defined by the Department of Labour (Northland, Auckland, Waikato, Bay of Plenty, Gisborne/Hawkes Bay, Taranaki/Manawatu/Wanganui, Wellington, Nelson/West Coast, Canterbury and Otago/Southland). Semi-structured interviews will be held with a range of key informants in the regions about the operation of the identified initiatives in their setting (district or city). Dr Higgins's analysis will seek to identify barriers to, and supports for, effective initiatives in varied regional contexts.

In Objective 3, the ten sites will be chosen in consultation with end-users to produce a purposive sample of programmes by Māori and Pacific communities for assisting their youth in their education employment choices. A memorandum of understanding will be developed between Dr Phillips and each community, detailing how research will be carried out and the results reported back. The research will be designed within a kaupapa Māori framework, working with each community to identify barriers to, and supports for, effective initiatives in helping their young people unlock their potential (see the Māori Research and Innovation section for further explanation).

In Objective 4, the ten sites will again match the regional labour markets defined by the Department of Labour. Census data will be analysed to identify a nationally important occupation (or groups of occupations) in each region. Professor Dalziel will conduct semi-structured interviews with significant employers of those occupations to determine how they perceive their expectations could be channelled to young people. He will also interview the local Regional Labour Market Knowledge Managers about the role they could play, and explore suggested channels with key informants in the tertiary education sector. The analysis of this research material will reveal new knowledge about what makes for effective channels of communication from employers to young people about occupation requirements.

Phase 4. Case Studies

The case studies research is designed to answer how changes can transform what is happening in current education employment systems. Each case study will 'drill down' even further, focusing on the operation of the system as it unfolds in practice (Flyvbjerg, 2006). The cases will be chosen using the analysis in Phase 3 to focus on exemplars with strategic importance to education employment linkages that allow the team to explore relationships identified as critical to effective practice. Specific research questions will be determined collaboratively using the team's four disciplines. This process of 'casing' cannot be specified in advance, since it will take place through the interplay of theory and evidence produced in earlier stages, but will enable the team 'to produce theoretically structured descriptions of the empirical world that are both meaningful and useful' (Ragin, 1992).

Each objective leader will be involved in at least three case studies. Data collection will be multi-method, including document analysis, interviews, hui, focus groups and participant

observation. Analysis will focus on understanding how each case ‘works’ in terms of successful education employment linkages across sites.

Phase 5. Pilot Projects

Phase 5 involves two pilots. In each, new knowledge gained from the previous phases will be integrated to create or improve formal systems to help young people make good education employment linkages. All four objective leaders will collaborate in the design and trial of the systems in these pilots, which will include specific components for assisting Māori students and whānau. Choice of sites will be informed by the previous phases, and will be made in consultation with the external reference group and key individuals at potential sites. They will not be sites where ‘best practice’ is currently taking place. The research will test key aspects such as information management by school communities, teaching and guidance processes used by career educators, and channels of communication between key institutions. Following Cho and Trent (2006), the pilots will provide a genuine test of the transformational validity of the research; that is, of whether the new knowledge generated by the project can be used to bring about change towards more effective education employment linkages for young people in transition.

Chapter 4

The Research Team

The research programme draws upon the heritage of three national research centres to create a new and unique capability for cross-disciplinary research into education employment linkages by youth in transition. Since its foundation in 1962, the AERU research unit at Lincoln University has been a major source of independent business and economic research expertise in New Zealand. The New Zealand Council for Educational Research is the prime independent educational research organisation in New Zealand, with extensive networks among schools nationwide. He Pārekereke at Victoria University of Wellington works closely with Māori and Pacific communities, providing support for grassroots organisations and international bodies who seek advice on educational leadership for Māori and indigenous peoples. The high quality of its work is evidenced by its status as a member entity of Ngā Pae o te Māramatanga, the National Institute of Research Excellence for Māori Development and Advancement.

Through NZCER, the AERU and He Pārekereke, the research team has access to collegial support and other resources necessary to complete the project successfully. The research team is led by four senior social science researchers:

Professor Paul Dalziel is Professor of Economics at Lincoln University. He is the author of several books and a large number of academic papers on New Zealand economic policy. He is a former Vice-President of the New Zealand Association of Economists, and is currently on the Australian and New Zealand Regional Science Association International Council. He has recently participated in several AERU research projects related to the needs of high growth sectors for skilled workers.

Dr Karen Vaughan is a Senior Researcher at NZCER. She has published locally and internationally on youth transition and careers development, alternative education, training in SMEs and research methodology. She was a member of the Operational Advisory Group for the Creating Pathways and Building Lives initiative. She is the leader of the NZCER *Pathways and Prospects* research programme (a 5-year longitudinal study of how young people negotiate and make sense of life and career choices after leaving school).

Dr Jane Higgins is a Senior Researcher at the AERU. She has published locally and internationally on social policy, youth employment and young people in transition from school to post-school lives. She was a co-leader of the Marsden Fund *In Transition* project at Auckland, Lincoln and Otago Universities, which has reported that many young people struggle to make sense of the vast range of training, education and employment opportunities presented to them as they leave secondary school.

Dr Hazel Phillips is Senior Lecturer, He Pārekereke, at the School of Education Studies, College of Education at Victoria University. Her PhD thesis submitted in 2003 was *Te Reo Karanga o Ngā Tauria Māori – Māori Students: Their Voices, Their Stories* at the University of Canterbury, 1996-1998. She was awarded a National Māori Academic Excellence Award in 2004. She is a member of the Foundation for Research Science and Technology's Te Tipu o te Wānanga Advisory Group, 2006/07.

These four researchers have established effective working relations with each other during the preparation of the research proposal and in other projects. This has built on their ability to work across disciplines, demonstrated in successful collaborations such as *Connectedness in Youth*, *Kōrero Whakaaetanga: Constructive Conversations, In Transition* (Marsden Fund) and Dalziel and Higgins (2006). This project will benefit from these capabilities, because cross-disciplinary collaboration encourages innovative ways of conceptualising problems and interpreting findings (Jeffrey, 2003). The concept of ‘choice’, for example, is fundamental to the project’s intellectual framework. The disciplines of education, sociology, indigenous studies and economics bring different insights to the concept of choice and how institutions can affect choice-making. In collaborating to integrate these approaches, each researcher will gain valuable new skills as well as contribute to the production of new knowledge.

International Linkages

A high level of international interest in youth transitions has allowed the research team to build linkages with four world-class researchers, all of whom have expressed strong support for the programme:

- Professor Paul Ryan, Professor of Labour Economics and Training, Department of Management, Kings College, University of London.
- Professor Johanna Wyn, Director of the Youth Research Centre and Head of the Education Department at Melbourne University.
- Professor David Raffe, Professor of Sociology of Education and Director of Research at the Centre for Educational Sociology, University of Edinburgh.
- Dr Denise Henning, President and Vice-Chancellor, University College of the North, Canada.

Professor Ryan is *the* economics expert in transition policies adopted by different countries (Ryan, 2001). Professor Wyn is a research leader of international standing in the field of post-compulsory education and training, and young people’s experiences of education and work (White and Wyn, 2002). Professor Raffe is a world expert in education and youth transitions, having led a three-year ESRC research programme on this subject in the United Kingdom (Raffe, 2007; Raffe and Spours, 2007). Dr Henning is the first Aboriginal President and Vice Chancellor of a mainstream University; as a Cherokee/Choctaw originating from Oklahoma, and a strong advocate for underrepresented students, Dr Henning is deeply committed to inclusive and equitable education for all learners (Henning, 2007).

Through Dr Vaughan’s participation in ISCDPP (2006), the research team also has a linkage with Ms Deidre Hughes, the Director of the Centre for Guidance Studies (CeGS) at the University of Derby. CeGS is the premier research institution for careers education in the United Kingdom. These international linkages will ensure the programme is informed by best-practice conceptual and methodological frameworks.

External Reference Group

The programme is being supported by an external reference group (ERG) of policy end-users consisting of the following seven government agencies:

- Ministry of Youth Development
- Ministry of Social Development
- Ministry of Education
- Department of Labour
- Te Puni Kōkiri
- Tertiary Education Commission
- Career Services

Officials from these agencies have agreed to meet with the research team in Wellington twice a year to discuss points of alignment, collaboration and difference with their own work programmes. The first meeting each year will concentrate on research design and the second on research uptake. The proposal includes four research seminars in Wellington over the five years of the programme. Two research staff of each member of the ERG will be invited to attend these seminars to learn about the research being produced in the research programme.

Communication with Other End-Users

The research team are strongly committed to ensuring their work is relevant to policy advisors and practitioners helping young people make good choices during their transition years from school to work. Six high level practitioner end-users agreed during the design of the research programme to collaborate with the researchers: the Careers and Transition Education Association (CATE), the President of the Careers Practitioners' Association of New Zealand, the Mayors' Taskforce for Jobs, Business New Zealand, the Industry Training Federation and Regional Labour Market Knowledge Managers. Dissemination of research results to these practitioners will lead to direct uptake and improved services.

Towards the end of the programme, two events will communicate the results to the widest possible audience. The first event is a national hui, organised and operated according to tikanga Māori. The second is an international conference in Wellington on education employment linkages. The budget includes provision for the overseas research associates mentioned above to give keynote addresses at the conference. Both events will be key mechanisms for helping to deliver positive changes in policy and practice that will contribute to the BIS 2 Target Outcome.

Chapter 5

Māori Research and Innovation

Objective 3 of the programme is to research and deliver new knowledge about effective systems in Māori and Pacific communities for helping young New Zealanders make good education employment linkages. The impetus for the Māori objective came from recognition of Māori aspirations for rangatahi to have every opportunity to develop to their full potential and for Māori to develop their own strategies for that potential to be realized in order to contribute to Māori economic success (for example, see www.tpk.govt.nz and MoRST, 2006). There are many examples where investments are being made by hapū, iwi and Māori organisations in the education and development of their rangatahi, such as the development of kohanga reo, whare kura and whare wānanga, and more recently the establishment of iwi educational authorities (Ministry of Education, 2005).

At the Hui Taumata (2005), however, Māori also identified gaps between education, training and occupational choices for rangatahi. The challenge for realizing economic prosperity and cultural integrity is in providing an education that best contributes to both these goals. Not only are linkages between curriculum options and work place of crucial importance if rangatahi Māori are to be successful, so too is having a future focus to the kind of education, training and skills required given the projection that 65% of the jobs available to today's ten year olds are yet to be invented (Mikaere, 2005). Considering the youthfulness of the Māori population it is vital that the best choices are available to ensure rangatahi, and Māori, potential is realised. The importance of this was expressed in the mihi and message from Sir Paul Reeves as the convenor of the Hui Taumata (2005, pp. 2 and 3):

Our future holds great potential. Wherever we turn Māori are succeeding in business, both locally and globally. Over half of us are under 23 years of age. We will make up a greater part of the population of New Zealand in future generations: there will be more of our mokopuna in schools, more of our rangatahi in the workforce, and greater numbers of kuia and koroua. ...

Our rangatahi showed us that they were ready to meet the challenge at Hui Taumata, standing up to be counted and making it clear that they have the will, spirit and the ability to help take control of our future. This up-and-coming generation has new skills that they will bring to bear on the challenges we face, underpinned by the inherited core beliefs of our cultural values. In their own words, they are our best resource and our living legacy, dedicating their energy to future-proofing whānau, hapū and iwi.

By unlocking the potential of rangatahi, Māori communities are contributing to the benefit of the whole country, as well as providing for greater well-being of whānau, hapū and iwi. Objective 3 of the research will map the diversity amongst whānau, hapū and iwi in their development of distinctive innovative approaches to support rangatahi as they move from school to work. It will learn from these initiatives and share them nationally. It will focus on case studies of excellence, and use them to provide new knowledge to Māori policymakers and practitioners. The knowledge arising out of the objective will be integrated into the development and trialling of two pilot projects in the final phase of the programme. By developing and returning relevant and reliable Māori knowledge to these communities, Objective 3 will help build a more inclusive society for generations to come.

The New Zealand Government's (2002, p. 10) Youth Strategy notes: 'Too many young people are arriving at adulthood unprepared to contribute productively as citizens and employees. This group continues to be disproportionately made up of Māori and Pacific young people. The trend has doubled the associated costs through negative investments in the justice and health systems and lost returns from non-involvement in the labour force.' A feature of the EEL research programme is that, rather than implying a deficit model of individuals, it focuses specifically on how formal systems of support can address this issue. This is consistent with the MoRST (2006, p. 17) theme, 'to increase understanding of the determinants of health and well-being by exploring distinctive challenges to health and social well-being arising in Māori communities'.

The research undertaken in Objective 3 will be within a kaupapa Māori research framework. It will place Māori understandings and experiences at the centre of the research; draw on matauranga Māori and relevant contemporary knowledge to document Māori success and to develop new knowledge; be guided by tikanga Māori for working with and in Māori communities; and have a strong emphasis on accountability to and reciprocal relationships with the Māori communities participating in the research. This is reflected in the budget, which includes funding for hui and other mechanisms for returning the results to participants, the most important pathway to implementation of the Māori innovation knowledge produced in this objective. The knowledge developed will also be integrated into two pilots in the final year of the research programme, and trialled within targeted Māori communities.

A critical component of the successful implementation of this project lies in Dr Phillips's membership of He Pārekereke. Established in 1995, He Pārekereke is dedicated to academic training and leadership in education for Māori and Pacific Nations peoples. It became a member-entity of Ngā Pae o te Māramatanga, the National Institute of Research Excellence in Māori Development and Advancement, in 2002. He Pārekereke staff are responsible for the delivery of undergraduate and postgraduate courses in Māori Education and Pacific Nations Education in Te Pūtahitanga o te Mātauranga (School of Education at Victoria University of Wellington). Currently He Pārekereke has the highest number of Māori and Pacific postgraduate students in the University. Most of its research is in the area of educational leadership amongst Māori and the peoples of the Pacific, and it works closely with Māori and Pacific communities within the University, nationally, and internationally, providing advice and support for grassroots organisations and international bodies who seek advice on educational leadership for Māori and indigenous peoples.

The staff of He Pārekereke have extensive personal networks in Māori communities as a result of their long involvement in Māori education and development. Dr Wally Penetito, a longstanding educationist at the forefront of kura kaupapa schooling, has extensive policy and school community knowledge and experience, while Dr Joanna Kidman's current research focus and expertise is in the area of rangatahi Māori. Dr Kabini Sanga and Cherie Chu, the Pacific Island members of He Pārekereke, bring their extensive networks in Pacific communities and their particular expertise in leadership and youth development to the research. The objective leader, Hazel Phillips, has considerable experience of involvement in Māori community initiatives to support rangatahi in education and other pathways into employment. This experience has allowed Dr Phillips to build up a large number of relationships with Māori communities. These personal relationships, as well as He Pārekereke's other networks, are essential for the research to take place, and will also be a primary conduit for returning the results of the research to Māori communities.

The capability of Dr Phillips for Māori knowledge research is reflected in her receiving a National Māori Academic Excellence Award in 2004. Dr Phillips is involved in the Māori objective of the *Constructive Conversations* (UOCX0221) programme. Based on the principle of ‘parallel process’ for kaupapa Māori research (Cram et al, 2006), the budget includes the same FTE of 0.3 for Dr Phillips as for each of the other three researchers. Each objective leader will have autonomy in their respective research programmes and will be equal partners in offering each other support, collaboration, suggestions and feedback as all four objectives proceed to the final research aim.

The research team has not sought end-user financial support from Te Puni Kōkiri (TPK) or from Māori communities for the research. To do so would represent double-dipping, since Māori as taxpayers are already contributing to this programme through the support of the Foundation for Research, Science and Technology. Consequently, the kaupapa Māori research will be funded out of the generic budget, rather than seeking additional resources. The budget recognises the national standing of He Pārekereke in the field of post-graduate education of Māori researchers by setting aside \$30,000 for two Masters scholarships within Objective 3. These scholarships will be available to students at He Pārekereke. Mentoring these students will be an important contribution to passing on and developing Māori knowledge research capability for future generations from the matauranga Māori of the present community of scholars (MoRST, 2006).

Chapter 6

Conclusion

This report has introduced the education employment linkages (EEL) research programme, selected for funding by the Foundation for Research, Science and Technology in 2007 under its *Building an Inclusive Society* portfolio. The aim of the research 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?

Previous research by members of the research team (and by others) has identified serious problems experienced by young New Zealanders preparing for employment. The government is investing heavily in helping young people make education-employment choices. Despite the scale of that investment, and despite its strategic importance for individual well-being and the country's national goals, there is currently no research programme in New Zealand devoted to understanding and improving education-employment linkages by young New Zealanders. New knowledge produced in this research programme will be used by policy advisors to design better systems of support, and will be used by practitioners for better implementation of current and future policies. This will lead to improved education and training choices by young people, equipping them more fully to participate in sustainable, high quality and productive employment.

The multi-disciplinary research team comprises four outstanding New Zealand policy researchers: Professor Paul Dalziel (economics), Dr Karen Vaughan (education), Dr Jane Higgins (sociology) and Dr Hazel Phillips (indigenous studies). The project also brings together the expertise and networks of three national research centres: the AERU at Lincoln University, the New Zealand Council for Educational Research and He Pārekereke (Institute for Research and Development in Māori and Pacific Education) at Victoria University of Wellington. Programme linkages have been formed with four world-class researchers in youth transitions.

The programme's research approach is to conceptualise current support systems as 'human activity systems' with four primary sites of engagement: school communities; regional communities; Māori and Pacific communities; and employer-led channels. The design of research methods has paid particular attention to cross-disciplinary collaboration and research validity. The programme moves over five years from a cross-disciplinary international literature review, to exploration and description, to understanding and explanation, and finally to prediction and change.

Considering the youthfulness of the Māori population it is vital that the best choices are available to ensure that rangatahi potential, and Māori potential more generally, are realized. One of the programme's four objectives will focus specifically on this issue within a kaupapa Māori research framework. This objective will place Māori understandings and experiences at the centre of its research; draw on matauranga Māori and relevant contemporary knowledge to document Māori success and to develop new knowledge; be guided by tikanga Māori for working with and in Māori communities; and have a strong emphasis on accountability to and reciprocal relationships with the Māori communities participating in the research.

Uptake will be ensured by the wide range of policy and practitioner end-users who are committed to this programme. Seven government agencies have agreed to form an external reference group that will meet twice a year during the research. The seven agencies are the Ministry of Youth Development, the Ministry of Social Development, the Ministry of Education, the Department of Labour, Te Puni Kōkiri, the Tertiary Education Commission and Career Services. Six high level practitioner end-users have also agreed to collaborate: the Careers and Transition Education Association (CATE), the President of the Careers Practitioners' Association of New Zealand, the Mayors' Taskforce for Jobs, Business New Zealand, the Industry Training Federation and Regional Labour Market Knowledge Managers.

Work on preparing the EEL research proposal began with a meeting at the NZCER in Wellington on 17 August 2005, followed by expressions of interest by the end of that week from the Ministry of Education, the Department of Labour and Career Services. After nearly two years of preparation, the EEL research team is excited to launch the programme on its formal starting date of 1 July 2007.

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