



Regional Facilitation:

WAIKATO TERTIARY EDUCATION

2008

Waikato Regional Statement

Tertiary Needs and Priorities

Preface

The 2008 Regional Statement signals the Waikato's tertiary education and training needs and priorities as a snapshot in time. Regional Statements complement information in the Tertiary Education Strategy / Statement of Tertiary Education Priorities (TEC / STEP), the TEC's Investment Guidance and Industry Training Organisation skills statements.

The needs and priorities highlighted last year have been reviewed and updated by a series of stakeholder workshops and as in 2007; the process has been overseen by a multi-party steering committee. As a result this 2008 statement reflects a high-level of collaboration between tertiary education organisations, industry, private training establishments, secondary schools, community groups and iwi. It outlines the major needs, gaps and priorities in the Waikato as identified by regional stakeholders. As a high-level regional statement it does not capture all the issues relevant to national provision, nor does it cover the finer details which individual stakeholders or sub regions may prefer.

This statement reflects the region's 2008-2009 tertiary needs and is intended by TEC to be used by:

- TEOs developing a one year Plan in 2008,
- TEOs moving on to a Plan for the first time in 2009,
- TEOs currently on two or three year Plans undertaking medium term mix of provision planning
- the Tertiary Education Commission for investment decision-making, and
- stakeholders, such as economic development agencies and local authorities, for planning purposes.

The statement is a continuation of the dialogue which was started last year. On behalf of the steering committee Wintec would like to thank the many community people across the region who took the time to attend the workshop sessions and give freely their advice on how to progress the region's tertiary education and training needs.

Wintec would also like to acknowledge the effort of staff from the major agencies, and businesses for their contributions, and especially Brendon Gardner from the Department of Labour who provided much statistical information to help inform this statement. Wintec would like to give its heartfelt gratitude to the steering committee members who provided at times rigorous debate and discussion in the best interests of progressing the Waikato region, and most importantly their professional expertise to the critical area of tertiary training and education.

Lastly this process of regional facilitation has highlighted the need to link this dialogue with many other forums and processes within the region that are developing and strengthening the regional economy. This is work that remains to be done – and work Wintec intends to lead over coming months and years.

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Chief Executive

Wintec

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Executive Summary

Tertiary provision in the Waikato must respond to the many complex characteristics of the metropolitan, urban and rural parts of the region. Migration across the Waikato region has changed. More people are remaining in their area of origin with fewer people moving out of the region, and from sub-regions into the city. The Waikato continues to reflect three significant age groupings of 0-19, 20-54 and 55-74 years which brings with it specific challenges for both employers and tertiary provision. In addition the Waikato is also home to people of over 80 different ethnicities and 24% of the population are Maori.

The Waikato has continued to experience economic growth over the last year. Agriculture is still the greatest influence on the region's economy. During the last year most industries experienced growth and this continues to create high demand for workers across the labour market. As a result skills shortages are forecast to continue in most if not all, sectors – even as the economy begins to slow.

The Waikato is still seeing too many youth leaving school without any formal qualifications, and fewer school leavers are participating in activity that would link them to further education and employment. The Waikato's workforce, and wider working-age population, remains less qualified than the national average. There remains a need for upskilling in general including foundational work in literacy, numeracy and language. At the same time, the consistent push for improved efficiency and productivity, coupled with the increased use of technology, continues to drive demand for upskilling – even at the skilled end of the workforce. This in turn reinforces the need for improved delivery to those in the workforce already – a fact also clearly identified in the Government's recent Skills Strategy paper.

The synthesis of feedback from stakeholders identified five major needs for tertiary provision.

1. Maori achievement (youth and adult)
2. Flexibility of the tertiary sector to enable life long learning
3. Improving the literary, numeracy and language needs of those entering tertiary education as well as those of people in the workforce
4. Managing transitions from secondary school, tertiary education and into work
5. Meeting business need through real collaboration and partnerships.

These areas of need highlight the importance of meaningful collaborations between tertiary providers, social service agencies, communities, business and industry. Overall it is important for the Waikato region's communities to remain adaptable and flexible in responding to the changing needs of the economy and markets.

A detail précis of each of these major areas follows.

2008 Regional Needs

Maori Achievement (for youth and adults)

Consultation last year highlighted the need for all Tertiary Education Organisations (TEO's) in the region to work together with Maori and with the Tertiary Education Commission to design and deliver education that meets the needs of Maori in terms of cultural concepts, aspirations, and styles of learning. The region needs to provide the necessary structures and support to ensure that the increased participation of recent years continues and is developed into higher level study and improved outcomes. More importantly, stakeholders want more focus on developing literacy, numeracy and language levels to better enable Maori to enter, participate in, and achieve at higher levels of education and the workforce. This priority will improve both Maori achievement overall and assist the region in meeting its needs for increased productivity.

Flexibility of the Tertiary Sector to Enable Life Long Learning

Flexibility in educational provision is needed to achieve the goal of lifelong learning. People in the region want the ability to move in and out of the various levels of tertiary education (from Adult and Community-based Education (ACE) to high-level formal training) at different times in their lives and to have their prior learning recognised. They need to have the ability to cross-credit learning to achieve qualifications as their individual pathway evolves. They want to be able to learn while they are working. Flexibility of time and length of course, location, completion criteria, and the use of on-line and distance delivery are all important. Flexibility is also needed to facilitate partnership models and innovations around funding non-traditional delivery. Stakeholders from the urban and rural areas emphasised the need for tertiary provision to be flexible to adapt to rural communities by supporting, for example: youth apprenticeships, older rurally isolated learners, and rural mothers who are willing to learn at home.

Literacy, Numeracy and Language

Literacy, numeracy and language must be a priority. The gaps in the region's literacy, numeracy and language provisions need recognition and the resources then applied to create a more holistic system of educational and social service delivery to meet these needs. Supporting work-based literacy and numeracy needs requires tertiary provision to be developed and delivered in ways that suit those in work. In addition some school leavers are leaving secondary school without the prerequisite levels to enter the workforce or formal tertiary study. Therefore tertiary providers need to address these learning deficits to ensure our youth are successful. The Literacy Language and Numeracy Strategy aims to build the capability of providers to ensure both value and quality of provision. The Waikato's tertiary sector will tap into these resources to enable relevance and effectiveness of service.

Managing Transitions from Secondary, to Tertiary and into Work

There needs to be better connectivity between the secondary and tertiary sectors and work places to enable a transition that caters for individual need. Improved access to information is important, particularly for options that allow students to stay in their home town. Pathways or models that combine practical, work-based, and theoretical learning are needed. The Waikato needs improved partnership and communication models to improve the pathways. The stakeholders of the Waikato highlighted the large number of ethnic communities in the region which need support to manage these transitions. There is a "drop out" group pre and post-tertiary

education that requires special attention, a combination of educational and social service responses, and perhaps a choice of delivery modalities which will support this group to succeed.

Meeting Business Need through real Collaboration and Partnerships

At the strategic level, industry is looking for on-going and productive relationships with TEOs. Employer groups recognise the need for close collaboration with the sector to achieve alignment between training and the jobs available, and advocate for work experience and sponsorship to further support learners transitioning into the work place. At the business level stakeholders are clear; they need short, focused and up-to-date courses for their workforce at a time and place that suits. Stakeholders want qualifications that are relevant and applicable to the work place, while building learning that can gain recognition in a wider framework. They want a focus on generic skills in literacy, numeracy and work readiness as well as sector specific courses. Flexibility of delivery, as described above, is important. They want to increase productivity by educating their workers and they recognise that a mix of theoretical and practical learning suits many of their staff. Many stakeholders highlighted the need for the ethnic diversity of our workforce to be supported with language, literacy and numeracy to allow them to fully participate in the economy and the communities. The tertiary education sector needs to be flexible to allow for recognition of qualified immigrants who can contribute productively in the areas of skill shortages. Community providers are seen as being a vital resource for assisting youth and the adult community to engage with learning and tertiary education.

Section 1. Overview

Introduction

The Tertiary Education Strategy outlines a new tertiary education system, the expected contribution of tertiary education, and the priority outcomes that the Government expects from the sector. The connected elements of the new system are being progressively introduced by the Tertiary Education Commission (TEC). The new system of tertiary education will promote a much stronger focus on the quality and relevance of education and research outcomes.

Critical to the success of the tertiary reforms is a shared understanding of stakeholder needs, on a national and regional basis. This statement of regional tertiary education needs and priorities is an ongoing process of engagement with stakeholders in the Waikato.

Stakeholders in tertiary education include: learners, iwi, ethnic groups and communities, employers, business, industry bodies, unions, professional bodies, other government agencies, regional economic development agencies, local councils, Industry Training Organisations, and Tertiary Education Organisations (TEOs).

In the tertiary education reforms all TEOs have a set of distinctive contributions to make. Institutes of Technology and Polytechnics (ITPs) have been mandated a new role as a regional facilitator.

The objectives of regional facilitation are:

- Building a shared understanding of regional tertiary education needs, gaps and priorities;
- Developing system capability at regional level through collaborative relationships;
- Better outcomes for learners and other stakeholders; and
- Efficiency benefits and capability development for TEOs and stakeholders.

The output of regional facilitation is a greater understanding of the tertiary education needs of the region:

- Captured in an agreed, short, high-level statement of regional tertiary education needs and priorities; and
- Reflected in individual TEO plans for discussion and negotiation with the TEC.

It is important to understand that regional facilitation as a part of the wider tertiary reforms is about culture change in the tertiary sector:

- Building collaboration
- Focusing on areas of expertise; and
- Recognising quality educational outcomes as well as financial outcomes.

Goals of Tertiary Education

The regional statement must be seen in the context of national goals and priorities. In the December 2006 Tertiary Education Strategy the Government set the policy for tertiary education in New Zealand. The policy can be summarised as below:

Governments Goals For New Zealand			
Economic Transformation		Families Young and Old	National Identity
<i>Expected Contribution of Tertiary Education</i>	Success for all New Zealanders through lifelong learning	Creating and applying knowledge to drive innovation	Strong connections between tertiary institutions and the communities they serve
<i>Areas for Focus</i>	<ul style="list-style-type: none"> • Ensuring maximum educational opportunity for all New Zealanders • Strong foundations in literacy, numeracy, and language • Successful transitions from school to tertiary education and work • Building relevant skills and competencies for productivity and innovation • Building skills and competencies for social and cultural development 	<ul style="list-style-type: none"> • Strengthening research-led teaching • Focusing resources for greatest effect • Improving the transfer and application of knowledge 	<ul style="list-style-type: none"> • Connections to improve quality and relevance of education and knowledge • Connections to support economic transformation • Connections to support social and cultural outcomes
<i>Distinctive Contributions</i>	Ensure each tertiary education organisation contributes according to their strengths. Expectations and priorities “interpreted” through distinctive contributions		
<i>Priority Outcomes for Tertiary Education</i>	<ul style="list-style-type: none"> • Increasing educational success for young New Zealanders – more achieving qualifications at level four and above by age 25 • Increasing literacy and numeracy levels for the workforce • Increase the achievement of advanced trade, technical and professional qualifications to meet regional and national industry needs • Improving research connections linkages to create economic opportunities. 		
<i>Strategy Achieved Through</i>	<ul style="list-style-type: none"> • Support for Students • New approach to planning, funding, quality assurance and monitoring for tertiary education organisations • Informed contribution of stakeholders 		

Section 2. Population and Social Factors

Geographic Characteristics

For the purposes of this statement the breadth of the Waikato region broadly reflects the boundaries for the Environment Waikato region. The Waikato region¹ approximately includes the following local authorities:

- Thames Coromandel
- Waikato
- Hamilton City
- Hauraki
- Matamata-Piako
- Waipa
- Otorohanga
- South Waikato
- Waitomo
- Franklin (part)

These areas are within a wider geographical area relevant to the Tainui waka: Ko Mokau ki runga, Ko Tamaki ki raro, Ko Mangatoatoa ki waenganui, Pare Hauraki, Pare Waikato.

The district comprises approximately 8-9 % of New Zealand's land area.

Where people live

In 2006, just fewer than 383,000 people lived in the Waikato region. The regional population is concentrated in Hamilton with 129,249 residents. The next largest district was Waikato District with 43,959 residents, followed by Waipa District with 42,501 residents, Taupo District with 32,418 residents, Matamata-Piako District with 30,480 residents, Thames Coromandel District with 25,941 residents, South Waikato District with 22,641 residents, Hauraki District with 17,193 residents, Waitomo District with 9,441 residents, and Otorohanga District with 9,078 residents.²

Population Growth Rates – Waikato Region

The internal migration patterns for the Waikato region's population continue to challenge delivery for tertiary providers. Table 2.1 shows how the shifts and changes are projected to occur over the next few years.

Table 2.1: Population Growth Rates by Territorial Local Authority (excluding Franklin)

	Growth rates				Share of population	
	1991 - 96	1996 - 01	2001 - 06	2006 - 31	2006	2031
New Zealand	7%	3%	8%			
Waikato Region	6%	2%	7%	20%	10%	20%
Thames-Coromandel District	14%	1%	3%	12%	7%	6%
Hauraki District	2%	-3%	3%	-10%	5%	3%
Waikato District	5%	2%	10%	31%	12%	13%

¹ The region, as it relates to the generally agreed boundaries for the ITP sector varies slightly from the boundaries underpinning many of the various data sources used. In general the differences this leads to across key data sets are considered immaterial for the purposes of the statement and have been ignored.

² Department of Labour 2007 Waikato Annual In-depth Regional Report

Matamata-Piako District	-1%	-1%	3%	1%	8%	7%
Hamilton City	9%	6%	12%	37%	36%	39%
Waipa District	6%	4%	5%	22%	12%	11%
Otorohanga District	6%	-4%	-2%	-7%	3%	2%
South Waikato District	-5%	-6%	-4%	-19%	6%	4%
Waitomo District	-4%	-3%	0%	-9%	3%	2%
Taupo District	10%	3%	3%	7%	9%	8%

Source: Statistics NZ

The implications of this are that the decline in population in a number of rural areas may slow while the population in Hamilton City, Waikato District, Waipa, and Thames-Coromandel will increase. These changes will put pressure on tertiary education provision in the out-lying areas and require the further development of flexible and online delivery to ensure tertiary education is more accessible across the region.

Ethnicity³

The ethnicity information is grouped by Maori and Non-Maori, with Non-Maori comprising all other ethnicities.

Non-Maori Overview

In 2004 approximately 78% of the population was non-Maori compared with the national average of 85%. This equates to approximately 264,000 or 11.2% of the total New Zealand non-Maori population⁴. European is the single largest grouping in the region. In addition there are clear and growing minority groups – reflecting the increasingly diverse regional population. The Pasifika population in the region is relatively small at 3.2%, but fast growing. Similarly the Asian population, at 5% has also been growing rapidly in recent years. In addition there are a growing number of smaller groups, including a diverse range of migrant and refugee communities. All of these latter groups are, individually, markedly smaller than the second largest ethnic grouping in the region – Maori.

Maori Overview

In 2004 approximately 22% of the population was Maori compared with the national average of 15%. With 73,240 people who identify as Maori, the Waikato Maori population comprises 12% of the total NZ Maori population⁵.

The Maori population in New Zealand is heavily skewed towards being in areas of higher deprivation with more than half of Maori living in areas represented by the three most deprived deciles of 1-3. In the Waikato, 39,648 or 54% of Maori live in deciles 1-3. Maori are over-represented in negative socio-economic statistics including education, health, and justice⁶.

³ The classification of ethnicity is based on individuals' self-identification with particular group/s. People can belong to more than one ethnicity, and change their classification over time. These limitations are inherent in all ethnicity information that is based on Census data.

⁴ Source: NZ Statistics, 30 June 2004 Population Projections

⁵ Source: NZ Statistics, 30 June 2004 Population Projections

⁶ Source: Waikato DHB Health Needs Assessment and Analysis 2005

A relatively large proportion of Maori leave school with no formal qualifications. In 2001, 39.2% of Maori aged 15 years and over said they had no qualifications and only 3.6% had a university degree. At the same time only 26% of Europeans had no qualification and 9% had a university degree.

Population Projections – Ageing, Ethnicity

Population projections are based on history and assume that the same factors that influenced history will continue into the future.

The Waikato population is ageing. In 2026 there will be 76,410 people aged over 65 years compared to 35,179 in 1996. This is an increase of 117% (41,231 people).

Between 1996 and 2026 the number of people aged between 0-15 will decrease by 14% (11,022 people). The proportion of Maori 0-15 years of age will increase from 30% to 41%.

In 2004 the approximate working age population (15-64 years) represents 64.7% of the total population. This is projected to fall to 60.5% by 2026 and will be made up of increasing numbers of Maori. This population will form the tax base for increasing numbers of older people who are projected to live longer.

A key to increasing economic development will be increasing the rate of inclusion of Māori in the workforce. The New Zealand Skills Strategy is a pivotal strategy to effect this change.

Table 2.2 below gives the population projections for the total population and for Maori and illustrates the increasing numbers of Maori. This shows the general growth patterns and the shift in the composition of the population. Both are important considerations for the future workforce of the region and consequentially have important implications for the provision of tertiary education within the region.

Table 2.2: Total Population Projections & Maori Population Projections

Year	0-15 years					15-64 years					65+				
	Total Population	% change from 1996 Tot Pop	Maori	% change from 1996 Maori Tot Pop	% of Tot. Pop.	Total Population	% change from 1996 Tot Pop	Maori	% change from 1996 Maori Tot Pop	% of Tot. Pop.	Total Population	% change from 1996 Tot Pop	Maori	% change from 1996 Maori Tot Pop	% of Tot. Pop.
1996	79402	0%	24088	0%	30%	206467	0%	37483	0%	18%	35179	0%	1863	0%	5%
2001	79500	0%	26440	10%	33%	210590	2%	41810	12%	20%	38460	9%	2420	30%	6%
2006	76260	-4%	26080	8%	34%	221440	7%	45840	22%	21%	42810	22%	3020	62%	7%
2011	71570	-10%	25910	8%	36%	228010	10%	49640	32%	22%	48360	37%	3740	101%	8%
2016	68230	-14%	25980	8%	38%	229460	11%	53030	41%	23%	56910	62%	4840	160%	9%
2021	67730	-15%	26930	12%	40%	227140	10%	55170	47%	24%	66050	88%	6400	244%	10%
2026	68380	-14%	27980	16%	41%	221410	7%	56820	52%	26%	76410	117%	8390	350%	11%

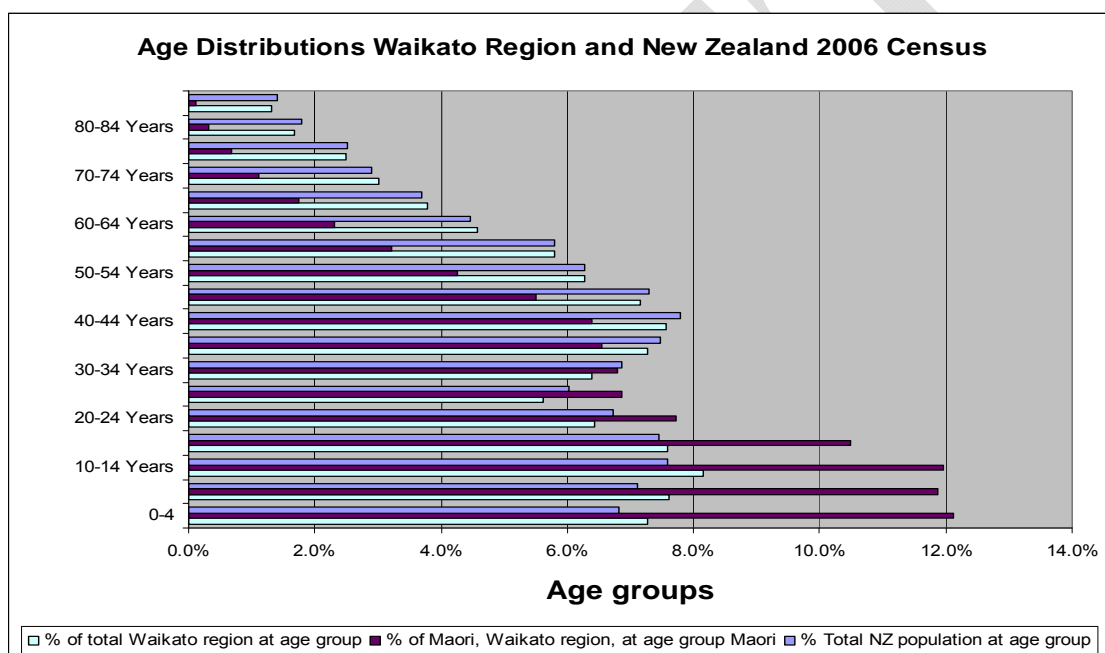
Source: Waikato DHB Health Needs Analysis

Importantly, Table 2.2 also illustrates the minimal growth expected in the regional population of working age (15-64 years), with a projected total increase of only around 8000 people between 2006 and 2016 - and in general only around 65-70% of that total population engage in the workforce at any one time – meaning;

Total workforce growth could be as low as 5,000 additional workers over the period from 2006-2016.

The figure below shows the composition by age of the population and highlights the bulge of baby boomers in both Waikato and New Zealand moving to retirement age and also the increasing predominance of Waikato Maori in the younger age groups which is driving higher than average birth rates within the region.

Figure 2.1 Age distribution Waikato region and New Zealand Source: 2006 Census



Source: Department of Labour

Social & Cultural Issues

As noted earlier, Maori make up 22% of the population which is high in comparison to the national figure of 15%. Of significance is the existence of the Kīngitanga which celebrates 150 years in 2008 and also Tainui Waka with contributing iwi of Waikato, Maniapoto, Raukawa and Hauraki and the many Marae. Maori remain an under recognised and understated economic and political force in the region.

Mason Durie's ⁷ landmark goals for Maori continue to hold relevance, these are:

- To live as Maori.
- To actively participate as citizens of the world.
- To enjoy good health and enjoy a high standard of living.

⁷ Māori Tertiary Education Framework 2003

Maori have long recognised that education is the key means for achieving economic prosperity and therefore achieving the social, political and cultural goals of Maori.

This report highlights that in the Waikato Māori attainment continues to reflect a gap in educational achievement.

Maori make a much younger population who will potentially make up a large proportion of those coming through the tertiary system and the workforce in 2020.

Maori aspirations in Waikato have seen a strong drive towards self determination and empowerment through setting up initiatives by and for Maori. This includes Maori pedagogical practices and inclusion of mātauranga (knowledge) Maori. Te Wānanga o Aotearoa is of significance in meeting educational gaps and inclusiveness of Maori pedagogy and knowledge. Also as mentioned, iwi and hapū groups of Tainui have responded in setting up economic development priorities as well as educational strategies to meet their needs. On another level there has been a huge development in Maori health provision and training including Maori mental health and also Maori housing initiatives. The number of Maori Private Training Establishments has decreased, nevertheless their focus is important for improving educational outcomes for Maori. Tainui are developing an Education Strategy to be completed late in 2008.

The challenge therefore is how the mainstream education organisations can work collaboratively with Maori, iwi and community groups to achieve better outcomes for Maori. All the TEOs need to collaborate so that the increase in participation is reinforced and moved through to higher levels of attainment. The challenge requires leadership and genuine effort to support Maori aspirations particularly in education and economic development.

The region needs to provide the necessary structures and support to ensure that the increased participation in recent years is developed into higher level study and completions.

There is a challenge for all providers in utilising those success factors that lead to better outcomes at the various levels, to engage positively with Maori youth, in particular males, during the transition period from school to further education and to have better access to further training.

The other ethnic communities are comparatively smaller than the European and Maori populations, but they are growing rapidly and each of them face their own challenges and present the tertiary system with their own needs. Much of the growth in these groups is fuelled by migration, some via refugee migration. The transitions of these groups into study and work present important demands on tertiary provision in terms of social, cultural and language-based challenges. The successful integration of these groups requires a wide range of delivery responses from the tertiary system including community-based delivery, Recognition of Prior Learning, workplace-based support, and support for participation at higher levels of study. The recognition of the needs of these diverse communities must be addressed by the tertiary system within the broader context of the fundamental relationships established by the Treaty of Waitangi.

Lifelong Learning

Lifelong learning is a concept that encompasses all purposeful learning activity undertaken on an ongoing basis with the aim of improving knowledge, skills and experience (European Commission, 2000 cited in Duke and Tobias, 2001).

The Tertiary Education Strategy expects that tertiary education will contribute to the Government's goals through the provision of lifelong learning.

Lifelong learning challenges funders and providers to collaborate with learners and employers, and vice versa, to develop appropriate ways to support ongoing learning in Aotearoa. This includes:

- Relevant, specific and updated content
- Evolving learning mediums to meet changing needs and technology
- Responsive and appropriate, transferable and transparent assessment of learning outside of traditional degree programmes to enable all learners to acquire 'portfolios' to inform a CV
- New frameworks and funding models to support learning mediums
- Improving access to ongoing learning
- Supporting research and innovation (Duke and Tobias, 2001).

Generational Factors

In the past, employment was based on a hierarchical structure. Older people were managers who made most of the decisions while younger generations were more likely to be in the lower ranks. Because of this the younger population had little spending power and influence. The expectations of generations are changing.

Market research indicates that the most significant divide is not the gender, cultural, income or technology divide, rather it is the generational divide (McCrinkle, 2006).

There are currently four generations with different expectations, preferences and priorities. These are those born before 1946 (Builders), those born between 1946 and 1964 (Baby Boomers), those born between 1965 and 1979 (Generation X), and those born after 1979 (Generation Y). The impact of each of these on the economy over the next few years, as the first of the Baby Boomers retires will be significant (Rodriguez et al., 2003).

Generation X are more likely to change jobs more frequently, are relationship oriented, are more team-based, technologically oriented and educated, like having fun, prefer flexibility, expect money and benefits, want harmonious work environments, and fulfilment (Rodriguez et al., 2003).

Generation Y are more optimistic, not easily swayed, sophisticated, technologically savvy and adaptable, altruistic, and image conscious. There are three times more of them than Generation X (Featherstone, 2007). They are too young to have established a career transition pattern.

The generational factors will impact on how tertiary education is structured in the future to meet the needs of learners and employers alike.

Career Transition

The tertiary education sector has a key role to play in providing access to ongoing learning regardless of the current literacy, numeracy or language skills of people. There are two significant national strategies currently under development that will affect career transitions -

Tertiary education needs to permit people to transition across careers to encourage lifelong learning and align with generational factors. Frameworks will need to be redrafted to enable learning to be assessed in transparent ways that will enable lifelong learning, and to meet the demands of employers, and successive generations' future needs.

Schools Plus and the New Zealand Skills Strategy. It is important that the Waikato uses the opportunities that these strategies can potentially provide.

Section 3. Regional Economy

Regional Economic Growth

The Waikato region⁸ is the fourth largest in New Zealand, with about 9% of the land area, and 9.6% of the population in 2006. The Waikato economy comprises approximately 9% of the New Zealand economy, and about 8.6% of full-time equivalent employment (see Table 3.1).

During the 1990s the regional economy grew more slowly than the New Zealand economy as a whole. However, this trend has reversed since 2001, with the Waikato region experiencing average nominal GDP growth of over 8% over the five years since 2001.⁹ Excluding inflation this represents real economic growth over this period of approximately 5% per annum for the region.

Table 3.1: Waikato Gross Regional Product estimates 1991-2006

Year	Waikato Gross Regional Product, \$bn	New Zealand Gross Domestic Product, \$bn	Waikato GRP as a % of NZ GDP
1991	6.9	73.2	9.4%
1995	8.1	87.1	9.3%
2001	9.2	114.7	8.0%
2002	10.8	123.5	8.7%
2003	11.2	128.9	8.7%
2006	14.4	160.1	9.0%
Period	Nominal GRP Growth	Nominal GDP Growth	
1991 - 1995	4.1%	4.4%	
1995 - 2001	2.1%	4.7%	
2001 - 2006	8.1%	6.0%	

Source: www.treasury.govt.nz

Economic Profile

The Waikato economy has a number of drivers, both within and outside the region:

1. As the agriculture sector is the largest sector by sales volume in the Waikato regional economy, the international business cycle, and in particular international commodity prices, are key driver of the regional economy.
2. The domestic business cycle, represented in changes in relative property values, is also a driver of the Waikato regional economy.
3. The education and health sectors are important components of the Waikato regional economy. Changes in public sector spending in health, education and research therefore have a significant impact on the regional economy.

⁸ As defined by Regional Council boundaries

⁹ Years end vary (March, September, and December), so we can only approximate equivalent annual growth rates for GRP.

Regional Employment

Over the period 2000-2004, the national and Auckland regional economies experienced employment growth of around 3% annually, while Waikato employment actually fell slightly over that period (see Table 3.2). However, since 2004 the reverse is true and over the last two years while New Zealand employment has grown just 1.6% annually, Waikato employment has shown an exceptional 6.7% annual growth. To some extent this turnaround probably reflects a 'catch-up' from previous sub-par performance, but it may also indicate a realignment of production and employment away from Auckland to Waikato.

Table 3.2: Employment and growth rates for New Zealand and regional economies 2000-2006

Region	December Years (000s)					Annual Growth Rate 2000-04	Dec Yrs (000s)		Annual Growth Rate 2004-06
	2000	2001	2002	2003	2004		2005	2006	
NZ	1,830	1,877	1,916	1,972	2,048	2.9%	2,091	2,114	1.6%
Auckland	561	585	588	606	631	3.0%	649	654	1.8%
Waikato	173	173	181	179	172	-0.1%	182	196	6.7%

Table 3.3 summarises the largest employing sectors of the Waikato regional economy by sales volume. Unsurprisingly, in terms of sales volume dairy farming is by far the largest sector in the Waikato region, directly contributing 8.4% of sales.

Table 3.3: Largest sectors in the Waikato region by sales, year ended December 2006.

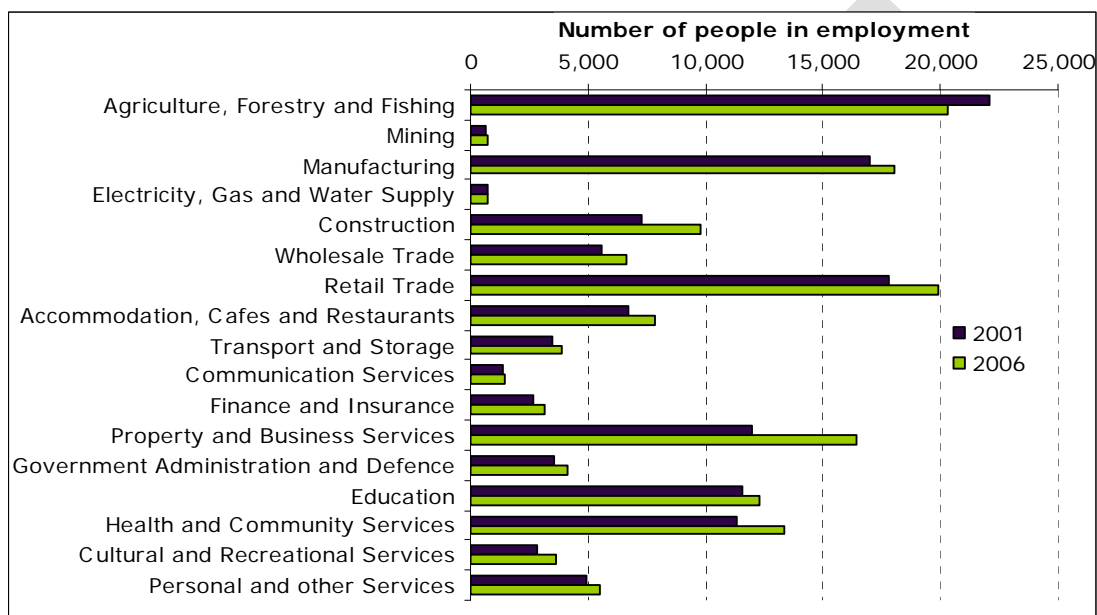
Sector	Sales, \$m
Dairy farming	2,346 (8.4%)
Dairy processing	2,153 (7.7%)
Wholesale trade	1,725 (6.2%)
Retail trade	1,372 (4.9%)
Electricity generation	1,083 (3.9%)
Ancillary services construction	877 (3.1%)
Meat processing	841 (3.0%)
Property services	757 (2.7%)
Forestry	653 (2.3%)
Residential building	596 (2.1%)
Total Waikato Sales	27,868

Employment by Industry in the Waikato:

At a macro-level, the Waikato is heavily influenced by the primary industries, particularly agriculture. Other significant industries in the regional economy are:

- Manufacturing
- Retail
- Property and business services
- Education and Research sector
- Health and community services
- Construction
- Tourism.

Figure 3.4: Employment in industries in Waikato from 2001 to 2006

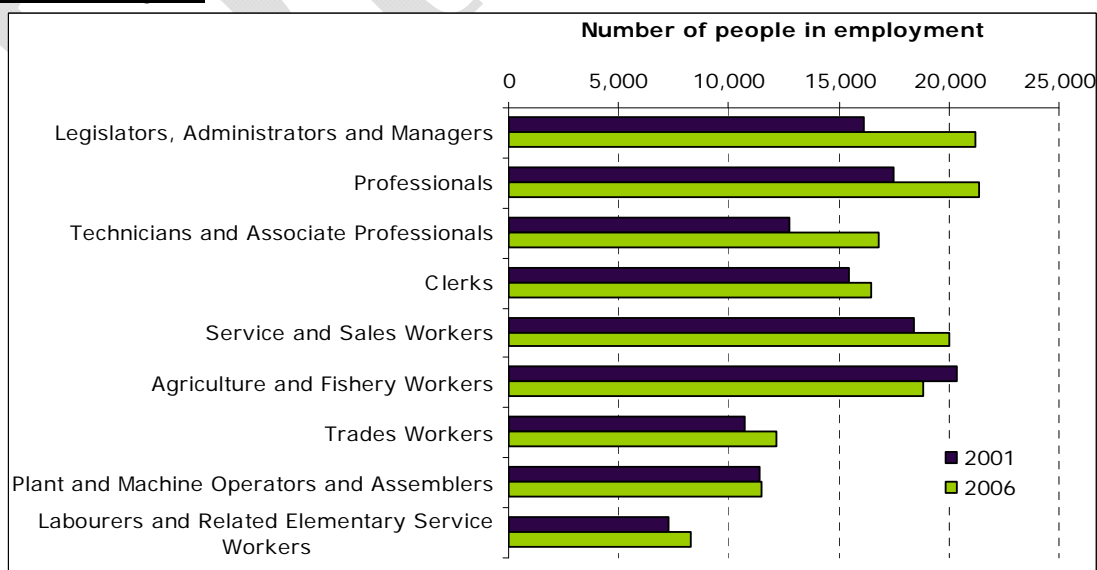


Source: 2001 & 2006 Census – Based on people with workplace addresses in the Waikato

Employment by Occupation

The major occupational groupings within the region, a significant proportion of total employment is covered as follows (Figure 3.5):

Figure 3.5: Occupation employment levels in Waikato from 2001 to 2006 (people whose workplace address in is the region)



Source: 2001 & 2006 Census

Key Factors in the Regional Economy

Several key factors in the regional economy deserve to be emphasised.

- The forward and backward linkages of agriculture and related land based activity dominate the regional economy
- Manufacturing is also a major regional industry, often closely related to primary processing
- Waikato is the leading export region in the country
- Exports are dominated by a relatively small number of major export companies however, in common with the New Zealand economy as a whole, more industries and companies need to develop and realise their export potential
- While exporting is seen as a vital means by which the region (and New Zealand) must grow its economy, it also inextricably links the region into the wider global economy and related economic and social change
- Increased appreciation of international opportunities, and the means by which they can be realised is required, including the internationalisation of the tertiary sector, the wider workforce, and management
- Waikato has a relative competitive advantage in land-based production, but improved value added activities, productivity improvements and product innovation are required to maintain and develop this advantage
- Continued development of research-led innovation in key industries is required to underpin such future developments (value add, productivity, innovation) in an increasingly knowledge-led economy
- Strengthening of the considerable tertiary sector, crown research institutes, and private (including private-public) led research activity is vital to underpinning ongoing developments in the region
- The Hamilton City Council (HCC) has a strategy to generate economic wealth by leveraging industry strengths to build clusters in such areas of ag/bio technology, aviation and transport logistics as well as light engineering
- In addition it is important to acknowledge the importance that education itself has for the economy, particularly in Hamilton, where a quarter of the population are tertiary students.

Implications for Regional Development and Tertiary Education

Growing regional wealth depends on creating more economic opportunities and better utilising the existing workforce. Much of the Waikato regional economy is largely driven by factors outside its own control. Therefore it is important to develop strategies which capitalise on export orientation without locking in an economy driven by fluctuations in the terms of trade.

There are at least five complementary approaches that the region can pursue to address this challenge. They include:

- Developing new industries and moving existing industries from the production of commodities to more value-added products and services.
- Developing international businesses with a combination of domestic and offshore activities but with ownership tightly linked to the Waikato.
- Leveraging the public expenditures in the region through exploiting economies of scope and scale as well as associated network effects.
- Enhancing the quality and capability of the Waikato workforce.
- Enhancing the speed and quality of infrastructure investment.

Addressing these issues is the key to sustaining the long-term growth rate of the region. In the context of the region's economic development strategy it is important to acknowledge the engagement and partnership of business, local government, public sector organisations, and the tertiary sector to ensure the alignment of educational outputs with the economic needs of the region. It is too early in the regional facilitation process to identify precisely what, if any, material shifts in tertiary provision (by discipline and level) are required to more closely align provision with the macro-drivers in the economy. This picture must be built up in coming years through intensive engagement between the sector and industry, based on emerging regional development strategies and through close collaboration with regional and territorial authorities. The regional development agency Katolyst is currently involved in facilitating the completion of a regional economic development strategy with a primary focus on improving business activities and outcomes. This, with ongoing regional facilitation, can begin to inform more closely the further changes required in the tertiary sector so that it can maximise its role in driving improved regional outcomes.

The skills strategy 2008 (draft) highlights four priorities areas:

1. Increasing the literacy, language and numeracy skills of the workforce
2. Building the capability of firms to support managers and workers to better develop and use skills
3. Enhancing the relationship between the supply of skills and the demand for them, including a focus on measuring skill acquisition and retention
4. Increasing the skills of young people in the workforce.

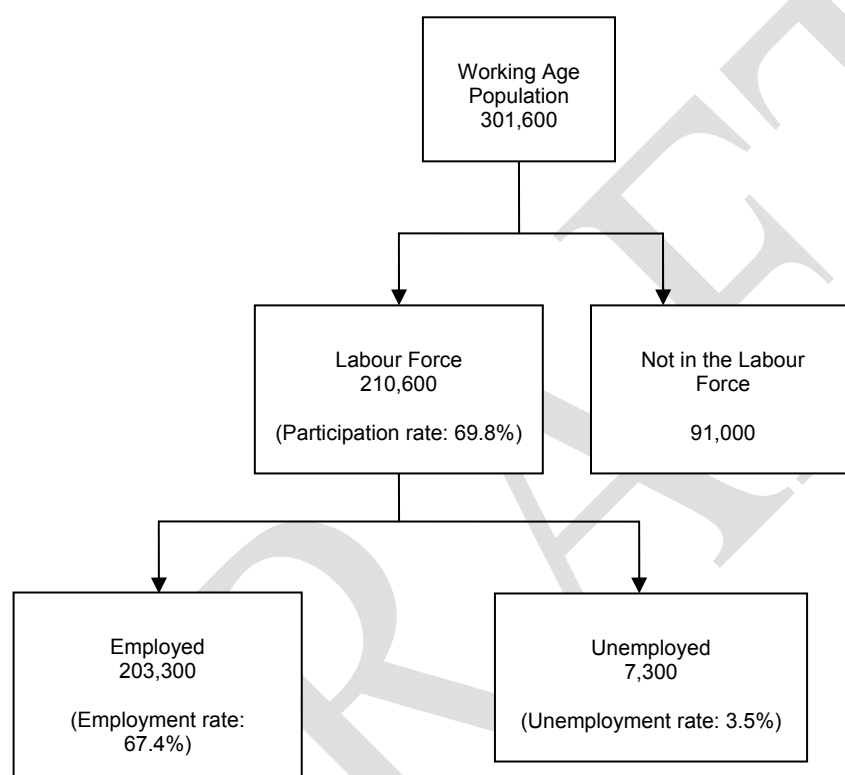
The goals for the strategy are to:

- Enable the effective use and retention of skills to transform work and workplaces
- Increase the quality of demand from employers and workers
- Influence the supply of skills and create a more responsive education and training system and
- Create a unified approach to defining, valuing and measuring skills (source: *New Zealand Skills Strategy 2008*).

Section 4: Skill & Labour Force

The total working-age population for the Waikato Regional Council region is estimated at around 301,600 (Department of Labour, March 2008 Quarterly Regional Labour Market Update). This is comprised of the following major components (Figure 4.1):

Figure 4.1: Waikato Regional Labour Force 2008.



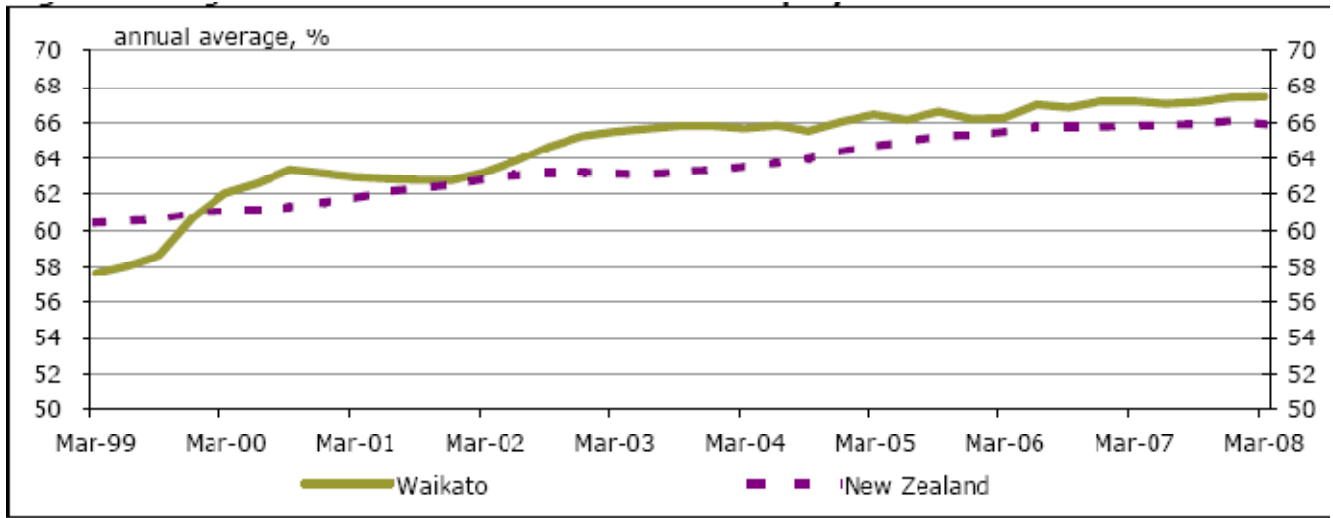
Source: Department of Labour, Waikato Regional Quarterly Labour Market Update, March 2008
(Note: Figures are the annual average for the year to March 2008)

Overall the Waikato region's participation and employment rates are even higher than the national average and unemployment conversely lower (table 4.2). Although the differences do not appear great this is significant given that New Zealand's over-all participation and employment rates are at record levels (see figure 4.3 below), and unemployment is extremely low on both an historical basis and on a comparative basis across the OECD.

Figure 4.2: Summary of main labour market indicators, Waikato & New Zealand March 2008

Indicator	Waikato	New Zealand
Participation rate	69.8%	68.4%
Employment rate	67.4%	65.9%
Unemployment rate	3.5%	3.6%

Figure 4.3: Waikato and New Zealand Employment rates 1999-2008



Source:

Unemployment by Sub-group

Although relatively small by historical standards, the impact of unemployment tends to fall differentially across various age, ethnicity and gender groupings. Although those receiving unemployment benefits are only a portion of those officially unemployed, it is clear that within the Waikato those unemployed are more typically male and disproportionately Maori (table 4.4). The spread by age tends to be much more even. This data tends to correlate with regional figures on qualification attainment.

Table 4.4: Working Aged Unemployment Benefit Recipients (aged 18-24) in the Waikato Region & Nationally at the end of March 2008

	Region		New Zealand		Region's share of New Zealand (%)
	Share (%)	Number	Share (%)	Number	
Male	66.1	1,313	66.6	12,677	10.4
Female	33.9	673	33.4	6,357	10.6
Maori	48.5	963	38.1	7,252	13.3
Pacific People	3.8	75	9.2	1,751	4.3
18-24 years	28.7	570	21.1	4,016	14.2
25-39 years	36.4	723	33.7	6,414	11.3
40-54 years	20.9	415	25.0	4,759	8.7
55-64 years	13.9	276	20.2	3,845	7.2
Total		1,986		19,034	10.4

Source: Ministry of Social Development

Labour Supply Growth

As noted earlier in section two, several key features dominate likely labour supply growth changes:

- Relatively strong growth in Hamilton and its immediate environs
- Much more modest growth in the outlying regions, including possible decreases in some districts
- Overall regional population growth therefore is modest
- The proportion of the total regional population that is of working age will decline
- Without considerable additional inward migration (domestic and/or international) the actual workforce will only grow modestly over the next ten years
- An increasing proportion of new entrants into the workforce will be Maori
- Overall the vast majority of the region's workforce in 2020 are already in the workforce today
- The region currently faces major constraints on overall labour supply and demographic factors will not lead to this improving over time.

Growing the Economy (in times of relative skill and workforce constraints)

Given the landscape of relatively high labour participation, generally low levels of productivity compared to the OECD, and forecast low levels of natural population growth (and a declining proportion of the total population being of working age) future economic growth could continue to be severely constrained.

The Department of Labour proposes a three-way solution to future economic growth – if such growth is to be at even a modest level. The solutions consist of Buy, Make or Fix:

- Buy – immigration into New Zealand to grow the workforce
- Make – 'Make' the workers (with requisite necessary skills) through education and training
- Fix – improve overall workforce output through productivity improvements.

Of these the latter two in particular and especially the 'make' option, have direct relevance for the tertiary education sector.

Both the 'make' and 'fix' options will require strong cooperation within the tertiary sector and between the tertiary sector and industry and business.

As the economy continues to grow, the productivity driver will become even more important over time.

Productivity can be achieved through a number of ways, among them:

- Utilisation of new technologies and processes – usually accompanied with reductions in staffing for given production processes, in turn leading to displaced staff requiring reallocation within the region's workforce, and also often requiring additional training/up-skilling for those staff remaining.
- Research led innovation - some of the innovation underlying these new processes and technologies will need to come from within New Zealand and in particular the region. They will be in part underpinned by research based activity. Waikato is a world leader in a number of relevant research led areas e.g. agriculture, ag-biotechnology, computer science. The competitive advantage and innovation that accrues from this activity is fundamentally important to the regional economy.
- General productivity improvements arising from an overall up-skilling of the workforce, including improvements in foundation literacy and numeracy in some instances, or more

general up-skilling components of the workforce, for example management and leadership training.

Utilisation of new technologies, research and innovation, and upskilling the existing workforce will be drivers of changing work practice and will typically be associated with changes to the skill and knowledge base of the workforce.

In reality this will likely be met through a combination of TEO provision, ITO-mediated provision, and on-job workplace training provided by individual companies/organisations directly. Aspects of what is required to be delivered, how it ought to be delivered, and where and when it is required are all likely to continue to change over time. This will place an ever-higher premium on close links between industry and tertiary education providers.

Section 5: Regional Provision¹⁰

A descriptive analysis of broad-level provision data provides a good start in looking at how tertiary education provision might broadly align with tertiary education need within a region. However, care should be taken in interpreting the data to avoid drawing conclusions that are potentially misleading.

This is principally because:

- The relationship between tertiary education need and tertiary education provision is complex and affected by many factors that are difficult to quantify
- The data used has been collected for administrative and funding purposes and not for the purpose of specifying tertiary education need
- A regional-level analysis exacerbates the limitations above because of the smaller numbers involved and the lack of a national-level context
- Regional boundaries for the ITP sector do not match the boundaries for the University sector
- Data on inward and outward migration related to tertiary study are not known
- It is difficult to align provision data closely to industry and occupation data for the region to draw any detailed and meaningful conclusions about possible mis-alignment or under or over supply.

Notwithstanding all of the above however, some useful insights into general provision within the region can and should be drawn at a suitable level.

The analysis that follows has taken these factors into account. The data has been used to describe some general characteristics of tertiary education provision in recent years and, where possible, make some preliminary observations on its relevance. Further examination of the data would be required before more definitive observations can be made.

Overall Provision

Total provision in the region appears slightly down against the region's share of the national population (see table 5.1 below).

¹⁰ The data that provides the basis for this section was derived by TEC from Single Data Return (SDR) information provided to TEC by individual Tertiary Organisations from across the country.

By sub-sector, the Wānanga has a strong regional delivery presence, while the remaining sub-sectors' provision appears to be below proportional national share. A broadly similar pattern emerges for both enrolment counts (individual students) and Equivalent Full Time Students (EFTS). To note the University of Waikato catchment area is also broader than the TLA region used for this report, which may influence underlying regional participation (while the counter-flow of out-migration of students from the region is unknown).

In 2006 the regional provision landscape was dominated by the University (over 9000 EFTS) followed by Te Whare Wānanga o Aotearoa (TWOA) and Wintec (ITP sector) at around 5,000 EFTS each. Combined, these three providers account for approximately 90% of total EFTS in the region. On an enrolment basis, Wintec, TWOA and University of Waikato each have between 15,000-20,000 students, or over 90% of total regional provision.

Table 5.1: Overall Provision by Provider Type 2006, Waikato Region and New Zealand Total

Provider Type	Regional provision		National provision		Region as % of National sub-sector provision	
	Student Count 2006	EFTS 2006	Student Count 2006	EFTS 2006	Student Count 2006	EFTS 2006
University	16,809	9,259	199,707	128,563	8.4%	7.2%
ITP	20,865	5,026	337,586	83,232	6.2%	6.0%
PTE	3,596	1,949	75,367	39,269	4.8%	5.0%
Wananga	14,484	5,611	51,731	24,070	28.0%	23.3%
OTEP¹¹	123	24	11,099	2,905	1.1%	0.8%
Total	55,877	21,869	675,490	278,040	8.3%	7.9%

Source:

The total level of provision in the region dropped considerably between 2004 and 2006, with approximately 7,000 fewer EFTS enrolled in 2006 - equating to approximately 17,000 fewer students (see table 5.2). Further analysis shows that this decline is primarily due to a sharp decline in TWOA provision within the region.

The vast majority of provision is funded through Student Component Funding (approximately 82% in 2006).

All together there were about 580 EFTS delivered regionally via various targeted funds for special purposes (Skill NZ, Skill Enhancement, Migrant delivery, STAR for example). This delivery is aimed at those with little or no successful secondary school education, other foundation needs as in the case of English for Migrants, or in the case of STAR those who are ready to move on to tertiary education while still at secondary school.

ITO-related provision has two major components- on-job training and off-job provision, the latter typically by ITPs or Private Training Establishments (PTEs). TEC data suggest that over 12,000 individuals were engaged with some form of ITO provision in 2006 in the Waikato region (as ITO enrollees or modern apprentices) – a significant number of individuals. At around 10% of the national total this would suggest that overall engagement in this type of training is broadly in line with the region's share of New Zealand's overall population.

¹¹ OTEP, Other Tertiary Education Providers

Table 5.2: Regional Provision 2004-2006 by Funding Type

	Domestic Full Fee Paying Student	English for Migrants (Skill NZ)	Full Fee Paying Foreign Student	ITO Off Job	MFAT sponsored student	Other Contracts	STAR	Skill Enhancement	Student Component Funding	TOPS Skill NZ	Youth Training Skill NZ	All
2004												
Students	316	8	5,488	1,945	110	143	1,115	32	62,329	422	341	72,263
EFTS	95	3	3,597	302	56	47	44	31	24,162	218	200	28,759
2006												
Students	888	23	4,566	1,349	65	219	1,197	16	46,646	285	287	55,584
EFTS	200	9	2,861	196	43	53	42	16	17,925	277	243	21,868

Source:

Table 5.2 suggests about 200 EFTS were completed in off-job provision in the region in 2006. This figure is much lower than the level of delivery that actually occurred. Wintec, for example estimates that it provided over 800 EFTS for ITO-related off-job delivery in 2006. The discrepancy in the data is unknown, but may relate to SDR-related details on location – possibly reflecting the out-of-region location of many ITO head offices. This also reflects, in turn, that ITO provision occurring in the region draws students from a much wider area, in some cases from across the North Island. It is therefore very difficult to draw any real conclusions about the relative level of off-job ITO provision, although clearly it is significant.

International Student Provision

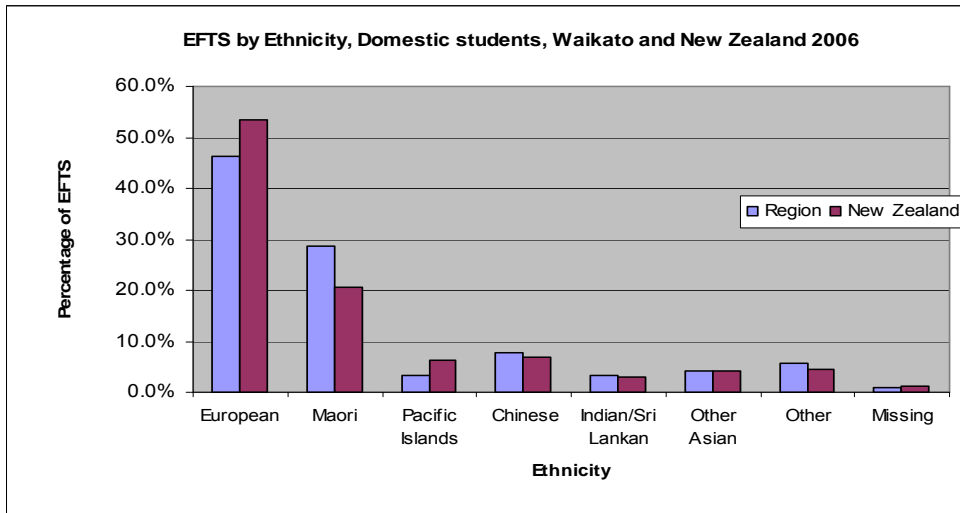
There were approximately 2,900 international full-fee paying students in the region in 2006. This was down approximately 20% on the levels experienced in 2004. Nonetheless it represents a significant component of total delivery (approximately 13%) and a significant revenue source for many of those institutions involved. Some of these students remain in the country and/or region at the conclusion of their studies and become a source of inward migration. The extent to which this occurs is unknown at this stage and the analysis of this remains an outstanding task. International study further impacts on domestic students' experience of study by changing their overall student experience – through adding to the range of cultures, real-world examples and the overall diversity of education they experience. In an increasingly globalised world this internationalisation of education is an important and positive feature, and complements the growing diversity of the regional (and national) population.

Provision to selected Sub-groups

Ethnicity

Overall provision, when analysed by ethnicity, broadly follows the national pattern with Europeans as the single largest users of Tertiary Education. In the Waikato, Maori have a high rate of overall participation of an EFTS basis and their overall participation is higher than their proportion of the regional population. Conversely Pasifika have a lower than national average rate of participation in the region, reflecting the relatively small regional population.

Figure 5.1 Provision by Ethnicity

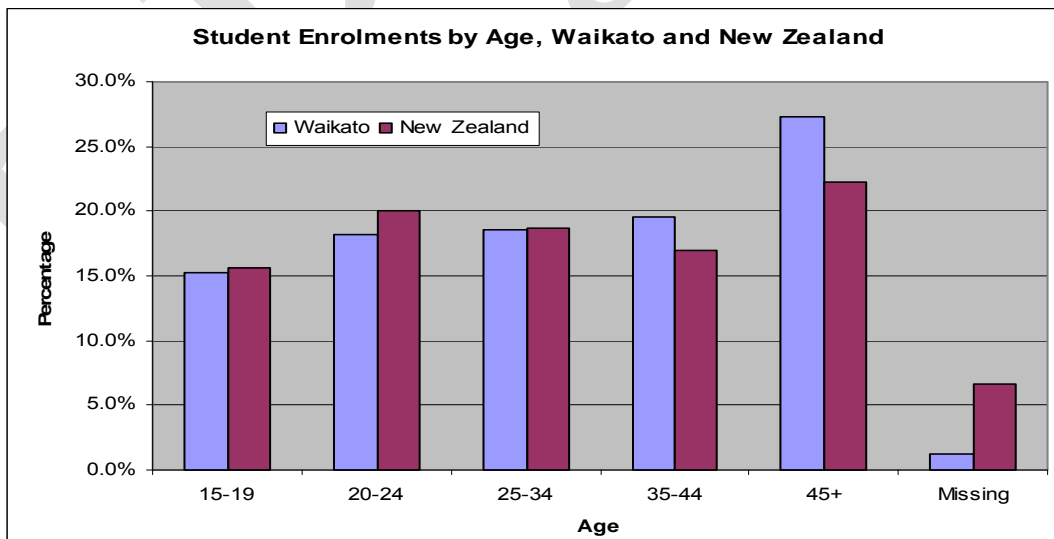


Source:

Age

Overall, enrolments by age-group indicate that the Waikato has a higher level of participation in the older age groups (35+) than the national average. While some of that may reflect the numbers “missing” in the New Zealand-wide data, that is unlikely to reverse the overall picture of lower levels of delivery at younger ages, and greater levels at an older age.

Figure 5.2 Provision by Age



Source:

Further analysis tended to indicate that patterns of provision by age tended to be even across the various ethnic groups. There is a slight ‘hollowing out’ of delivery to Europeans in the 25-44 age range. Maori however, tend to have very even provision across the age groups meaning that they have relative under-provision at the younger ages and over-provision at the older ages compared to their overall regional population profile which is heavily youth-biased.

Provision by Sub-Region.

Demographically and economically, Hamilton and its immediate surrounding districts tend to comprise approximately 55% of the region's population. Delivery to the wider outlying region therefore raises itself as a real issue with the potential to impact on access and sub-regional (district) development. By taking Hamilton in isolation and comparing it to the remainder of the region, it is clear that a predominant amount of delivery occurs in the Hamilton area. This is far from surprising given the presence of the main campuses of both the University and ITP. Overall, it appears that a little less than 30% of all delivery occurs outside of Hamilton. This amount will reflect first, the operations of TWOA's main campus at Te Awamutu and second, the combined operations of the various satellite campuses, particularly those of TWOA and Wintec.

There is a clear pattern by which the vast majority of delivery to the core 15-24 age groups presently occurs in Hamilton.

Provision by Qualification Level

Although the Waikato region follows the broad pattern of national delivery by qualification level, it is equally apparent that the region has a tendency to be over-represented at the lower levels of the qualifications framework (below level 4), and under-represented at the higher levels of degree and post-graduate study.

Nearly 46% of all delivery by enrolment (rather than EFTS) basis in the region is at level 4 or below on the National framework, while approximately 45% is at degree or postgraduate level.

Analysis shows that the region has a clear trend of relative under-delivery at levels 5-7 and beyond compared to national average provision. Conversely there is higher than average participation at levels 1-3 of the framework. This is important given the TES-based policy thrust for more provision to occur at the higher levels of the framework.

Within this pattern, there is an equally clear trend of Maori, in particular, being over-represented at the lower NQF levels (although this also extends up to level 5-7 diplomas) and under-represented at degree-level and beyond.

Table 5.3 Waikato Region Provision by Level and Ethnicity, 2006

	Community Education	Level 1-3 Certificates	Level 4 Certificates	Level 5-7 Diplomas	Level 7 Bachelors	Level 8 Honours/Postgrad Certificates or Diplomas	Level 9 Masters	Level 10 Doctorates
European	2.0%	27.2%	10.1%	7.6%	46.0%	3.4%	2.2%	1.5%
Maori	1.1%	37.0%	19.7%	12.8%	26.2%	1.5%	1.2%	0.4%
Pasifika	0.7%	37.7%	6.7%	7.7%	42.2%	2.5%	1.7%	1.0%
Region	2.2%	33.4%	10.8%	8.7%	38.9%	2.7%	2.1%	1.3%
New Zealand	2.3%	26.3%	9.5%	13.3%	41.2%	3.4%	2.5%	1.5%

The region's ability to increase its overall proportion of delivery at the higher levels of the framework will depend, in part, on its success in generating higher levels of participation by Māori, at the higher qualification levels.

Provision by Subject Area

There are, overall two major forms of provision that will be occurring within the region – TEO provision (as noted earlier predominantly via student component funding) and ITO provision funded through the standard training measure (STM) system. Together these two parts form the backbone of the region's total provision.

TEO Provision by Subject Area

The three major categories of provision (from the New Zealand Standard Classification of Education Delivery - NZSCED) within the region (see table 5.4 below) are:

- Society and Culture (27.5% of provision)
- Management and Commerce (20%, predominantly in business and management)
- Mixed Field (19% predominantly in social skills programmes)

Together these account for nearly two-thirds of all TEO provision in the region.

Society and culture is a very broad field (roughly aligning to part of the Humanities and Social Sciences disciplines), and it is difficult to comment on the typical employment destinations of this category.

The field 'mixed skills' is predominantly comprised of social skills, employment skills and related provision – and is generally delivered at level 3 or below on the framework.

Management and Commerce provision is also a particularly broad field, especially given graduates in this category could end up working across the full range of businesses and industries.

Areas that might be seen to involve relatively low levels of provision compared to the underlying major drivers of the regional economy, in terms of employment, GDP, or value added, are:

- Agriculture (less than 1%)
- Engineering and related technologies (3.3%)
- Health (3.3%)
- Food, hospitality and personal services (2.5%).

There is much more required in future analyses to complete a sound picture of provision as it might align to regional need or the regional economy. For example:

- Further agriculture provision may be occurring outside the region via established national providers (for example Lincoln University)
- Engineering and Health both have elements of regional provision but also there is clearly out-of-region provision via other specialist schools of medicine and engineering.
- Much of the food and hospitality sector typically has a lot of industry based provision for much of its workforce development particularly at the lower levels – similarly retail, a major employer, also has typically industry-based and on-job development.

Table 5.4 Waikato Region Provision by Level and NZSCED Category, 2006

Society and Culture	Behavioural Science	0.20%	Creative Arts	Communication and Media Studies	1.60%	
	Economics and Econometrics	0.00%		Graphic and Design Studies	0.60%	
	Human Welfare Studies and Services	2.50%		Other Creative Arts	2.00%	
	Language and Literature	7.50%		Performing Arts	0.50%	
	Law	2.30%		Visual Arts and Crafts	1.00%	
	Other Society and Culture	0.40%		Sub-total	5.70%	
	Philosophy and Religious Studies	2.20%		Natural and Physical Sciences	Mathematical Sciences	0.00%
	Political Science and Policy Studies	0.00%			Other Natural and Physical Sciences	4.60%
	Sport and Recreation	2.70%			Unknown	0.10%
	Studies in Human Society	4.10%			Sub-total	4.70%
	Unknown	5.70%		Health	Complementary Therapies	0.20%
Sub-total	27.50%	Nursing	2.00%			
Management and Commerce	Accountancy	0.10%	Other Health		0.90%	
	Banking, Finance and Related Fields	0.10%	Public Health		0.10%	
	Business and Management	13.70%	Veterinary Studies		0.00%	
	Office Studies	4.00%	Sub-total	3.30%		
	Other Management and Commerce	0.00%	Engineering and Related Technologies	Automotive Engineering and Technology	1.40%	
	Sales and Marketing	0.20%		Civil Engineering	0.10%	
	Tourism	1.90%		Electrical and Electronic Engineering and Technology	0.50%	
	Unknown	0.00%		Engineering and Technology	0.10%	
	Sub-total	20.10%		Maritime Engineering and Technology	0.10%	
Mixed Field Programmes	Employment Skills Programmes	1.40%		Mechanical and Industrial Engineering and Technology	0.10%	
	General Education Programmes	1.50%		Engineering and Technology	0.10%	
	Other Mixed Field Programmes	5.10%		Other Engineering and Related Technologies	0.10%	
	Social Skills Programmes	10.30%	Unknown	0.80%		
	Unknown	0.90%	Sub-total	3.30%		
	Sub-total	19.30%	Food, Hospitality and Personal Services	Food and Hospitality	1.10%	
Information Technology	Computer Science	3.10%		Personal Services	1.30%	
	Information Systems	1.00%		Sub-total	2.50%	
	Other Information Technology	2.30%	Agriculture, Environmental and Related Studies	Agriculture	0.40%	
Sub-total	6.40%	Environmental Studies		0.10%		
Education	Curriculum and Education Studies	0.10%		Forestry Studies	0.20%	
	Other Education	0.10%		Horticulture and Viticulture	0.20%	
	Teacher Education	5.50%		Sub-total	0.80%	
	Unknown	0.10%	Architecture and Building	Architecture and Urban Environment	0.00%	
	Sub-total	5.80%		Building	0.40%	
Sub-total	0.40%	Sub-total		0.40%		
All	All	100.00%	All	100.00%		

Source:

ITO-Based Provision

Complementing the above off job TEO-based provision is a significant tier of ITO-based training. This is primarily on-job based training, but many of the trainees included here will be completing some portion of the off-job TEO based provision described earlier. In 2006 significant ITO activity was undertaken in the following groupings:

- Primary industries and related processing (NZITO, Agriculture ITO)
- Other land-based industries (Extractive industries, Forestry)
- Trades (Building, Plumbing, Motor industry)
- Electricity
- Hospitality
- Infrastructure
- Community health, sport and fitness

Table 5.5 Waikato and New Zealand ITO trainees (major regional provision only), 2006

ITO Trainees Active, Waikato Region	Trainees Waikato	Trainees NZ	Waikato as % of national total
NZITO	1,992	9,892	20%
Forestry (FITEC)	1,568	11,559	14%
COMPETENZ	1,340	12,976	10%
Building and construction (BCITO)	927	8,452	11%
Agriculture ITO	908	6,085	15%
Electrotechnology (ETITO)	885	8,586	10%
Extractives (EXITO)	781	4,005	20%
Hospitality Standards Institute	702	9,504	7%
Motor (MITO)	449	4,143	11%
Electricity supply (ESITO)	447	3,550	13%
Community support services (CSSITO)	437	7,143	6%
Sport, Fitness and Rec ITO	233	2,561	9%
Public sector (PSTO)	209	3,198	7%
Infratrains New Zealand	204	2,094	10%
Plumbers ITO	182	1,685	11%
Other ITO/industries (n=22)	1,526	27,816	5.4%
Grand Total	12,790	123,249	10%

Source: TEC 2007

Together, both ITO and TEO provision paints a picture of a broad range of provision taking place within the region.

Much more work remains to be done to more closely examine this aspect and identify significant gaps or mis-alignment between provision and regional need. This is particularly so with respect to those industries that will be the strongest drivers of the regional economy, if the region is to maintain its recent strong growth and development. Greater engagement between the ITO sector, regional providers, industry, and regional development agents is required to clarify more precisely the regional requirements for industry and help inform the identification of regional priorities and possible shifts in overall tertiary provision to align it to regional needs that will add most value to regional economic development.

Section 6. Tertiary Needs and Priorities

The 2008 Waikato Regional Statement process used a workshop approach to generate stakeholder-driven determination of the region's needs and priorities. Over 300 invitations were sent to employers and industry groups, schools, community groups, and iwi. Three workshops were held in which participants were asked to evaluate the 2007 needs and priorities and identify any new and emerging areas of need.

The synthesis of the feedback showed there was little change overall, although the established needs and priorities were able to be clarified. The feedback is now summarised below.

6.1 Maori Achievement

Stakeholders saw the priority of Maori achievement as still being critical to the Waikato although there was a clarification of how to address those needs. Last year the most important areas were:

- creating structures of support
- considering curriculum design and delivery
- creating a network of provision
- curriculum that's culturally aligned for working Maori, and
- improving participation and continuation into higher study and improving completion rates.

This year stakeholders have been more specific by highlighting issues for: Maori youth and adults, including: issues of disengagement with learning, and literacy and numeracy needs.

Maori Youth

Much emphasis was placed on getting Maori youth engaged with learning that is, relevant and inspirational – learning that would 'light the fires in their eyes' for further learning. The groups commented on the raft of social issues (for both Maori and non-Maori) that impact on youth. In particular the lack of Maori role models in their immediate surroundings was highlighted as an issue. Tertiary providers could make better use of positive Maori role models to encourage the love for, and value of, learning. Much of the concern was that Maori youth were losing their 'love' for learning as early as primary and secondary school due to other social issues. Stakeholders highlighted the need for education providers, including tertiary provision, to connect with social service agencies.

Adult Maori

The workshop groups believe that tertiary provision for older Maori could benefit by drawing on the traditional knowledge bases from Maoridom (i.e. science, physics, horticulture, archaeology astrology) to improve curriculum documents that would improve Maori engagement in higher education. By using whanau and Marae specialists as a knowledge base would further extend the promotion and benefits of learning - via their own people.

Literacy and numeracy

The final issue relating to Maori achievement was that of literacy and numeracy. Many stakeholders were concerned that still too many rangatahi (Maori youth) are leaving school without the required skills to enter tertiary education. Adult literacy and numeracy levels are low, which means older whanau members themselves struggle with supporting the current and future generations learning needs. In addition the link with low decile schools was also raised, as was the importance of the secondary sector itself focussing on improving this area.

In summary tertiary providers need to:

1. use Maori role models to engage youth in learning
2. create strong links with primary, secondary schools and social services
3. adapt curriculum documents to improve relevance for Maori and
4. implement literacy and numeracy programmes at pre-tertiary provision *and* as a form of adult education in the community.

6.2 Flexibility of Life Long Learning

Many stakeholders raised the issue of the region's aging skilled population as the impetus for promoting flexibility for life long learning. Last year consultation highlighted five key solutions to improving flexibility in life long learning:

- flexibility to enter, leave and re-enter learning
- linking community and academic based education to higher formal training
- responding to ethnic and community diversity
- learning while people work
- flexibility of timing, duration, location, online, distance etc.

This year the feedback highlighted similar issues.

Firstly stakeholders thought that given the aging workforce that tertiary provision needed to acknowledge the transferability of knowledge and skills, to allow people to transition into higher income brackets or across into other industry areas.

Secondly stakeholders commented on the need for employers to allow more flexibility for workplace learning (in literacy, numeracy, language), and in enabling the development of higher levels of technical skills within the workforce. This means tertiary providers need to work more closely and flexibly with employers, to encourage employers to be more open to workforce training.

Thirdly the link between tertiary and community education needed to be clearer to allow learners to transition from: 1) community education into formal tertiary education; 2) from secondary schooling into work and tertiary education; and 3) to continue learning while in work. In addition it was raised that recently the Waikato has been experiencing an economic boom, and yet we need to build a workforce that is adaptable with transferable skills to respond to future economic changes. The NZTE and Katolyst Group are working in conjunction with Department of Labour, and key tertiary providers, to conduct research on the future labour force needs and the requirement for tertiary provision. This work is expected to start late 2008.

6.3 Literacy, Numeracy and Language

Last year feedback highlighted the importance of building the foundations of literacy and numeracy. This included:

- creating opportunities for community delivery
- delivering to business and employer needs
- linking education with social service delivery
- improving levels of literacy, numeracy and digital literacy of the workforce.

This year there appeared three main themes from the consultation.

Youth literacy and numeracy

An issue raised time and time again by workshop attendees was that of youth low literacy and numeracy rates. Participants felt too many youth were 'dropping out' of formal education with little or no literacy or numeracy skills.

Literacy and numeracy of the workforce

Literacy and numeracy of the workforce was seen as critical; people felt employers needed to recognise the value of having workplace literacy and numeracy programmes to better improve the current workforce. This highlighted the need for tertiary providers to offer more flexible options for developing their workforce.

Acknowledging the link with social service agencies

Many felt there was a strong correlation to other social issues that need to be recognised and linked before literacy and numeracy could be improved in the long-term. Participants emphasised the need for tertiary providers to work with other social services to make this link. People also felt that community based literacy and numeracy programmes needed increased recognition and support as this plays a vital role in improving the literacy and numeracy of the community overall and will assist with transitioning people into tertiary education. In addition participants raised the issue of the needs of migrants and refugees to improve literacy, numeracy and language to allow them to participate in the workforce and economy overall.

6.4 Managing Transitions from Secondary and Tertiary Education into Work

The main concerns from last year's consultation highlighted the potential risk of 'drop outs' or those who had already left education. There needed to be better access to information to support decision-making on study and career decisions.

This need and priority has not changed. Feedback from the 2008 workshops identified that this continues to be a concern among stakeholders. The numbers of youth leaving secondary school underprepared and uninformed about their study and career options show a need for:

1. improving the link between tertiary providers, schools and employers, and
2. creating a 'one-stop information shop' for community, parents and employers to help support youth to make better decisions.

In addition the loss of 'love for learning' of students while in the compulsory sector, even before they reach the eligible age for tertiary education and training, was a significant issue for the future workforce and Waikato population overall. The region's stakeholders noted the importance of the developing *Schools Plus Strategy* to help support this critical issue.

6.5 Meeting Business Needs

This priority (last year) was considered by stakeholders to be critical to supporting the regional economy. Participants this year felt there were tensions for employers between responding to the regional, national and international markets (developing and maintaining a competitive edge) and allowing release time for employees to up skill. There was also concern regarding the relevancy of programmes offered by the sector. Critical factors included the need to provide flexible content, and delivery modes to better meet business and employer's needs.

This year feedback highlighted the need for proactive course design, and the opportunity for employees to train in work time. There were concerns raised with the requirement for general management skills of HR, budgetary management and leadership. Tertiary providers need to work more closely in partnership with Tainui, industry, and employers to ensure course relevancy and full benefits of tertiary provision are achieved. Overall the feedback expressed a concern that the TEI sector needs to continue to improve at: 1) communicating with industry the provision it has or can easily provide, or 2) identifying and creating the links between industry and tertiary provision.

6.6 Partnership with Industry

Last year the region's participants identified four critical issues beneath this priority:

- forming and maintaining productive relationships
- continual collaboration throughout the process

- aligning training and education programmes to industry direction, and
- providing responsive and flexible learning solutions to industry needs.

This year much of the feedback from stakeholders was whether qualifications reflected 'real' need. Much of the concern surrounded that of modern apprenticeships. Firstly, whether with the training apprenticeship programme was able to meet the training needs of employers, and there was some concern expressed about the lack of confidence in the training materials and/or assessment processes. Stakeholders thought it was vital for tertiary providers (including ITOs) to engage in 'real' collaboration with employers and industry to ensure win-win situations for both parties.

The Waikato economic development group of Katolyst and New Zealand Trade and Enterprise (Waikato) are leading the development of a Waikato-wide economic strategy in partnership with Hamilton City Council, Department of Labour, The University of Waikato and Wintec to identify the links between economic growth, shifts and changes and the needs of the workforce shortages. This joint series of strategies and research projects are expected to be started later in 2008.

6.7 Reflecting the Range of Needs

Last year the feedback highlighted needs associated with the diversity of the region including: age demographics (the three age bubbles), range of ethnicities (over 80 different ethnicities), the increased pressure on migration and immigration, and the growing Maori and Pasifika population. The priority focussed on:

- the diversity of educational needs
- the need for responsiveness to the range of industries, localities, social and cultural needs
- acknowledging the diversity of needs, and
- partnering with the community.

This year people's comments can be grouped into two main areas, the first highlighting that tertiary providers need to use the extensive range of technology, and skills the community has to offer. This included applying teleconferencing to upskilling in remote locations, and partnering with communities to develop cadetship schemes.

The second set of issues was associated with supporting the 'range of needs' through other social areas i.e. English as a second language learners, parenting, and supporting aged and people with disabilities to access education. Again the participants thought that tertiary providers needed to partner with community and government agencies, and to utilise the range of technologies to help to solve the pressures of delivering to more remote locations.

Participants at the workshops were asked to add any new emerging priorities that impacted on tertiary provision. For the most part people thought focus was needed on specific demographic groupings i.e. refugee teenagers, single parents, youth caring for their siblings, and those linked to high-risk factors of succeeding in education i.e. poor school experiences, low decile communities, and no family background in the tertiary education. This priority aligned closely with the many concerns of linking tertiary providers with social service agencies.

Conclusion

In summary the 2008 consultation process highlighted five priorities which included:

1. maori achievement (youth and adult)
2. flexibility for Life Long Learning
3. literacy, Numeracy and Language of School Leavers and of those in the Workforce
4. managing Transitions from Primary, Secondary, and Tertiary Education and into Work
5. meeting Business Need through Real Collaboration and Partnerships.

These highlight the importance of meaningful collaborations with: social services agencies and communities, compulsory schooling sector, business, and industry to ensure business remains conversant and flexible to the changing needs in the economy and markets.

7.0 Next Steps

The Waikato region is in an exciting phase of strategic development from both the economic and tertiary provision perspectives. For example:

- The Waikato is now being supported by second generation Long-Term Council Community Plans led by Territorial Local Authorities.
- The NZTE are developing a Waikato Economic Strategy.
- The Katolyst Group are working on research projects linking specific industries to workforce development.
- The University of Waikato, Wintec, NZTE, Department of Labour, and Katolyst are collaborating to develop a joint research project on identifying workforce needs for the economic development of the region.

This regional statement will continue to be informed and developed over the forthcoming year as these key initiatives evolve and ongoing dialogue occurs.

In addition there are plans to continue further detailed work (including research projects) on a number of the key industries within the regional economy in conjunction with the above processes and groups.

Acknowledgements

We wish to acknowledge the important contribution that the following individuals and organisations have made to the production of this document. Members of the Waikato regional facilitation steering group:

Moana Andrew	Student Association of Wintec
Jack Ninnes	Employers and Manufacturers Association Waikato
Graham Smith	Katolyst
Brendon Gardner	Department of Labour
Ruth Ross	Waikato District Health Board
George Brown	Te Puni Kokiri
Jenny Robbins	TEC
Julie Dolan	Ministry of Social Development
Michelle Jordan- Tong	University of Waikato
Tui Kaa	Ministry of Social Development
Steve Tritt	New Zealand Trade and Enterprise
Michael Noonan	Coromandel Independent Living Trust
Mary Jensen	Katolyst
Alex Irving	Hamilton City Council
Gary Knighton	Hamilton City Council
Edgar Wilson	WINTEC

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