

# **Ngā Haeata Mātauranga**

**Annual Report on Māori Education 2005**

**Appendices – Part 1**

## Appendices

### Appendix 1 – Government outcomes for Māori education

#### Reducing Inequalities in education outcomes in 2004–05

##### *Introduction*

Reducing Inequalities is about ensuring that no group, whether based on socio-economic status, ethnicity, disability, or gender, systematically underachieves in the education system. All groups should succeed and be positively engaged in effective and meaningful learning, having the opportunity to reach their potential across a broad curriculum (academic, social, cultural outcomes) – recognising that outcomes will be variable and that individuals have different levels of ability. Reducing Inequalities must focus on ensuring that all learners achieve foundation competencies (which include competencies of communication and interaction with others). At the same time, learners at higher levels should have the same distribution of outcomes, irrespective of socio-economic status, ethnicity, or gender.

Reducing Inequalities is about ensuring all students are provided with high-quality learning opportunities.

The year has seen tighter scrutiny of the underlying basis for, and effectiveness of, policies and programmes that target reducing inequalities, in particular, among ethnic populations. This has led to a strengthening of the rationale for intervention in many programmes, especially where it was clearer that need was associated with socio-economic factors rather than ethnicity per se. Programmes were refocused to provide support and services through forms of delivery designed to enhance engagement and effectiveness.

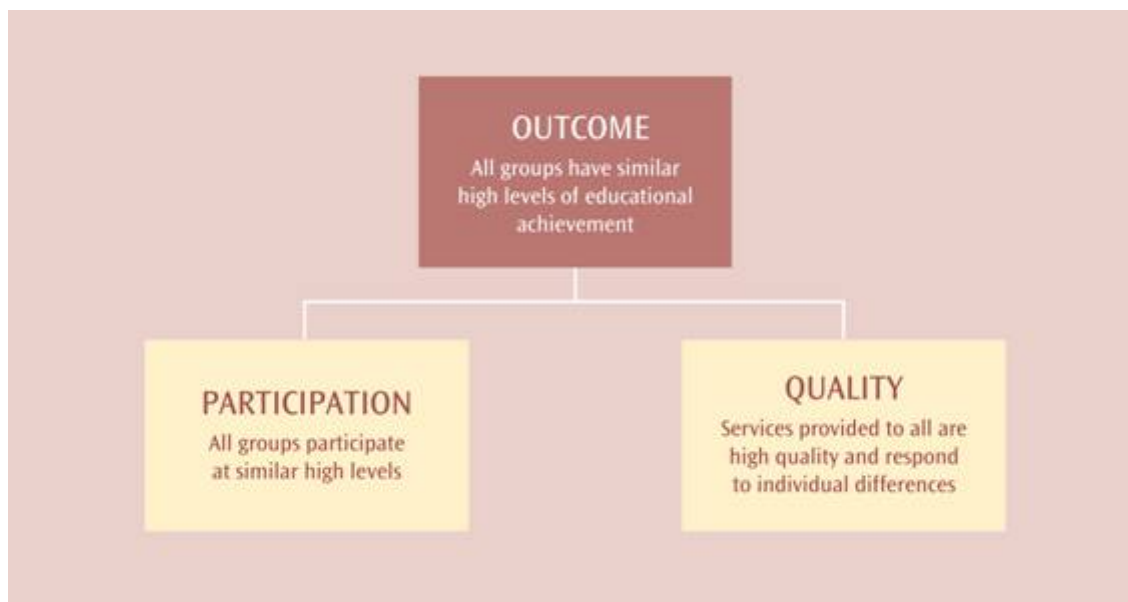
The Ministry recognises the growing diversity of New Zealand in ethnic make up, social background, and ability. It also recognises that the proportion of the population who are Māori and Pasifika is increasing – a factor which means that any underachievement by these groups must be addressed if New Zealand overall is to succeed. What we do in education today will influence the social and economic wellbeing of New Zealand society in the future.

Analysis of the range of Reducing Inequalities initiatives highlights that:

- activity to address disparities among socio-economic groups takes place largely through major funding streams
- addressing special education needs' disparities takes place through a combination of major funding streams and direct service provision
- ethnic disparities are addressed through multiple initiatives
- there are few specific initiatives addressing disparities between genders
- reporting of activity aimed specifically at reducing inequalities is therefore focused at very different scales of resource allocation.

### ***Reducing Inequalities outcomes***

While the framework recognises this broad range of influences, it is focused on those factors that the education sector can influence. This information allows us to make strategic and informed decisions about the allocation of resources and effort. The outcomes are as follows.



### ***Key outcomes for 2004–05***

Progress has been made on a number of the measures but there are still significant disparities in key areas. The areas of progress are noted below.

#### ***Achievement***

- There are continuing signs of improved achievement by Māori and Pasifika students overall, particularly from school-leaver achievement results. The proportion of Māori and Pasifika students leaving school with only low-level or no qualifications has declined markedly since 2002.
- There has been a continuation in the decline in the percentage of students overall leaving schools with little or no formal qualification attainment, and boys have improved to a greater extent than girls.
- The performance of students at lower-decile schools has improved relative to higher-decile schools in regard to the proportion of students leaving with low-level or no qualifications.

## *Participation*

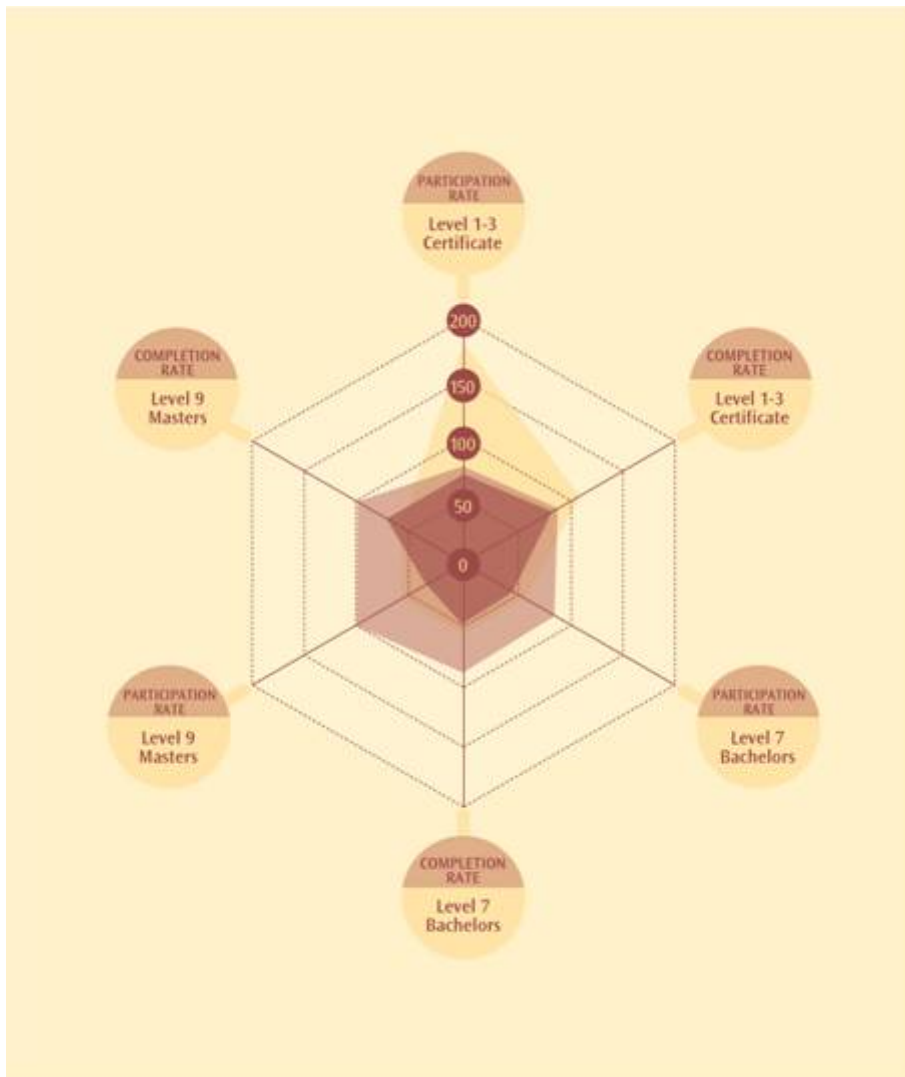
- There has been an increase in participation of Māori and Pasifika in early childhood education, fewer suspensions from school, an increase in 16- to 18-year-olds in school, and higher tertiary participation, all of which are likely to feed into achievement over the long term.
- Tertiary enrolments by Māori students in 2004 were up 250 percent on 1994. Māori have the highest rate of participation of any ethnic group.
- Almost 16 percent of all women in New Zealand aged 15 and over participated in tertiary education in 2004, compared with 12 percent of men.
- The proportion of students in formal tertiary education with a reported disability remained similar to 2002, at five percent. (These numbers are based on students who reported having a disability to their provider as part of the enrolment process. The recommended question for providers is: “Do you live with the effects of significant injury, long-term illness, or disability?” However, the actual questions used may vary among providers.)

## Key Reducing Inequalities outcomes for 2004–05

	School leavers with little or no formal attainment (fewer than 14 credits)			All school leavers			% of school leavers with little or no formal attainment		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Decile 1–3	3,143	2,657	2,305	10,032	10,335	11,042	31.3%	25.7%	20.9%
Decile 4–7	4,361	3,723	2,945	23,138	23,214	23,797	18.8%	16.0%	12.4%
Decile 8–10	1,710	1,349	1,175	17,289	17,614	18,389	9.9%	7.7%	6.4%
No decile	371	466	669	2,087	2,308	2,406	17.8%	20.2%	27.8%
Male	5,509	4,760	3,981	26,625	27,206	28,168	20.7%	17.5%	14.1%
Female	4,076	3,435	3,113	25,921	26,265	27,466	15.7%	13.1%	11.3%
Māori	3,301	2,923	2,685	9,445	9,688	10,583	34.9%	30.2%	25.4%
European	4,769	3,953	3,379	34,596	34,451	35,213	13.8%	11.5%	9.6%
Pasifika	962	817	647	3,654	3,822	4,080	26.3%	21.4%	15.9%
Asian	366	339	245	4,006	4,557	4,730	9.1%	7.4%	5.2%
Other	187	163	138	845	953	1,028	22.1%	17.1%	13.4%
Total	9,585	8,195	7,094	52,546	53,471	55,634	18.2%	15.3%	12.8%

	School leavers with UE or higher (42 or more credits at level 3, UE, level 3 or higher qual)			All school leavers			% of school leavers with UE or higher		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Decile 1–3	1,006	1,168	1,626	10,032	10,335	11,042	10.0%	11.3%	14.7%
Decile 4–7	5,104	5,430	6,461	23,138	23,214	23,797	22.1%	23.4%	27.2%
Decile 8–10	7,034	7,658	8,575	17,289	17,614	18,389	40.7%	43.5%	46.6%
No decile	1,018	1,112	1,188	2,087	2,308	2,406	48.8%	48.2%	49.4%
Male	6,271	6,863	7,604	26,625	27,206	28,168	23.6%	25.2%	27.0%
Female	7,891	8,505	10,246	25,921	26,265	27,466	30.4%	32.4%	37.3%
Māori	724	859	1,241	9,445	9,688	10,583	7.7%	8.9%	11.7%
European	10,782	11,422	13,070	34,596	34,451	35,213	31.2%	33.2%	37.1%
Pasifika	312	359	573	3,654	3,822	4,080	8.5%	9.4%	14.0%
Asian	2,090	2,464	2,656	4,006	4,557	4,730	52.2%	54.1%	56.2%
Other	254	264	310	845	953	1,028	30.1%	27.7%	30.2%
Total	14,162	15,368	17,850	52,546	53,471	55,634	27.0%	28.7%	32.1%

## Tertiary qualifications participation and completion data showing trends by gender and ethnicity



### Notes:

- Rates are represented on an index for comparison, where the rate for all students is set at 100.
- Participation rates are age-standardised for 2003.
- Completion rates are five-year completion rates for those starting a qualification in 1999.

Māori participation, retention, and completion remains strong at certificate level. While gains are being made at higher levels, retention and completion rates of Māori in degree qualifications and above are still below those of non-Māori.

While Pasifika participation is increasing at all levels, rates of participation at higher levels are still lower than for the rest of the population. Pasifika retention and completion rates at all levels are lower than for other students.

## **Strategies for reducing inequalities**

Most of the effort and expenditure in the education sector for both raising achievement and reducing inequalities occurs in mainstream settings – in early childhood education centres, schools, and tertiary education institutions. The Ministry’s mainstream focus in 2004–05 has been to make improvements across the system by increasing participation, ensuring effectiveness in teaching, enabling quality community engagement in education, and facilitating quality providers. These are all factors that are likely to reduce disparities.

Improvements have been sought through the following system-wide strategies.

*Pathways to the Future* – This is a ten-year strategic plan for early childhood education, which is focused on participation, quality, and collaboration. The strategy will help increase the proportion of Māori and Pasifika children participating in early childhood education and in improving quality.

*The National Administration Guidelines* – These require schools to identify students and groups of students who are not achieving, or are at risk of not achieving, and to develop and implement teaching and learning strategies to address the needs of the students that have been identified. In this context, assessment processes that are specifically designed to promote learning are powerful tools for raising achievement and reducing disparities.

*The schools planning and reporting system* – This is a requirement introduced in the Education Standards Act 2001, which aims to strengthen the use of student achievement data to inform schools’ strategic planning. Improving student outcomes in practice requires schools to identify the students who have particular needs, to analyse those needs and the professional response that is required, and ensure that the resources of the school are allocated in such a way as to support those students and their teachers. Schools planning and reporting supports schools in this process.

*The Tertiary Education Strategy 2002–07* – This is focused on ensuring excellence and a tertiary sector that is responsive to economic needs and is connected to the community. It should reduce inequalities by increasing the proportion of Māori and Pasifika students who attend and succeed in tertiary education at all levels.

*The Statement of Tertiary Education Priorities (STEP)* – This sets out the government’s immediate priorities for the performance of the tertiary system, aligned with the main strategies and objectives of the Tertiary Education Strategy. STEP 2005–07 focuses on four interconnected themes: excellence in teaching; increasing the relevance of skills and knowledge to national goals; enabling students to access excellent and relevant tertiary study and progress to higher levels of study and achievement; and enhancing capability and information quality to support learning, teaching, and research.

*The Māori Education Strategy* – This strategy, in which the Ministry works alongside Māori to raise expectations, assists the system to respond more effectively and recognises and values the contribution of the wider community. The core themes are authority and partnerships as a way of ensuring Māori can be more actively involved and responsible for education, high-quality teaching, and the growth and development of kaupapa Māori education.

*The Pasifika Education Plan (PEP)* – This aims to increase Pasifika achievement in all areas of education through increasing participation, improving retention, and focusing on effective teaching strategies. Across the education sector, the focus is on increasing the quality of information available to Pasifika communities and strengthening networks supporting Pasifika education. The Pasifika Education Plan outlines the government’s commitment to Pasifika education, noting that education alone cannot meet the Pasifika education goals, and that social and economic policies contribute to ensuring that Pasifika people enjoy increased participation and achievement in education.

*A review of local service provision for students with special education needs* – This highlighted that parents and educators want the same things for children with special education needs as for any children, that parents want to have an active part in deciding what happens to their children, and that they want their knowledge recognised. A vital area for action will be to develop welcoming, valuing attitudes and the building of skills within the whole of the education system to better support learning outcomes for students with special education needs.

### ***Programmes for targeting inequalities***

While there is evidence of reducing inequalities in some areas, indicators show that there is a need to continue to increase educational achievement, and at a faster rate than has been achieved to date. To achieve this, we have to continue to increase participation at all levels. There is a need to ensure high-quality services, including effective teaching of all students and effective links among schools, whānau, and communities, including ensuring services and teaching are responsive to the cultures of all students.

In many programmes targeted at particular ethnic groups, the focus of policy has shifted to factors associated with socio-economic need, while still recognising the importance of tailoring programmes to better suit cultural or ethnic expectations for delivery and thereby ensuring optimal effectiveness.

Programmes formally reviewed in 2004–05 are listed below.

*Promoting Early Childhood Education Participation Project* – This targeted communities with a high proportion of Māori and Pasifika children and low early childhood education participation rates. Other children in those communities are not excluded from the services provided under the programmes. The outcome of the review was to target the promotion of the project primarily to low-decile school catchments with low early childhood education participation rates, with a secondary focus on contracting providers who can be effective with the populations of those areas.

*Decile funding* – This review changed the way that school deciles are calculated, by removing from the underlying index a component based on the percentage of Māori, Pasifika, and English for Speakers of Other Languages (ESOL)-eligible refugee students on each school's roll. Decile ratings are used in allocating a variety of funding and support programmes to schools. Since the introduction of the decile system, a range of other, more precisely designed and targeted policy responses have been developed that more effectively target areas of need and have greater potential to reduce ethnic disparities in achievement. A similar change was made to the equity funding system for early childhood education services.

*Mapihi Pounamu* – A financial assistance scheme designed to assist Māori secondary students who are required to board away from home because they face barriers to learning. The review removed the ethnicity, isolation, and family income criteria for access, making the scheme available to all students at risk.

*Parent support and development programmes* – These share a common objective of improving children's educational outcomes, through improving parenting capability and practice. Three ethnically-targeted programmes within this suite of initiatives were reviewed – Anau Ako Pasifika (AAP), Whānau Toko i te Ora (WTITO), and Parents as First Teachers (PAFT). The review found that even if ethnicity is a causal factor, other risk factors (eg, parental education, socio-economic status) are likely to be more accurate predictors of poor educational outcomes and the need for parent support. The review also noted that it was important to ensure culturally-appropriate delivery methods. The outcome of the review was that ethnic targets were removed from the PAFT programme, alternative means of providing support for Pasifika families are being explored for the use of AAP funding, and better alignment is being developed between WTITO and other forms of parent support and development for families with very high needs.

*Tertiary Special Supplementary Grants* – These provide institutions with funding support for Māori and Pasifika students to improve participation, retention, and completion in tertiary education. Following the review, the grants are to be provided for study at diploma level and above only, while the funding will be provided based on an enrolment and completion mix, using a socio-economic status indicator for targeting, such as the decile of the school most recently attended or eligibility for student allowance. Ethnicity was removed as a targeting criteria.

*Skill Enhancement* – This programme provides vocational training at level three and above on the National Qualifications Framework for Māori and Pasifika, aiming for further education or employment. A substantial redesign of the programme, including transition to other funding types, was agreed.

### ***Research, evaluation, and monitoring***

The Ministry of Education is investing in the development of its system to measure the effectiveness of its interventions for improving outcomes and reducing inequalities. The system consists of the following.

*A set of education indicators that are in place and subject to ongoing development* – The indicators provide increasing knowledge of how we are meeting our overall system-wide mission of raising achievement and reducing disparity. For each of the indicators, we are able to break down the information to monitor the progress of Māori and Pasifika students and to identify gender and socio-economic differences, although the changes to decile structures have meant that the trend information for socio-economic indicators is available only over the past four to five years with any degree of certainty. There is a range of indicators which measures progress against our vital outcomes of effective teaching, engaged families and communities, and quality providers. There is a gap in terms of indicators of performance of students with disabilities and special education needs, and work is underway to develop such indicators. This involves analysis of what data and information is being gathered at present and what new information might be collected that could inform such indicators.

*An evaluation strategy, designed to improve how the Ministry creates and uses evaluation to inform decision-making at both policy and implementation levels* – With public sector management focusing on managing for outcomes, evaluation is an important tool for the Ministry. Evaluation helps the Ministry take stock of its progress by monitoring, measuring, reviewing, and evaluating as we go, and it helps the Ministry to learn from success and failure and to modify what we do and how we respond.

*The Ministry will continue to improve its monitoring of outcomes and to assess the impact that programmes are making* – Programmes will continue to be evaluated for their effectiveness and comprehensiveness and outcomes scrutinised to determine if new or different programmes are required or if programmes need to be expanded. A number of other programmes will be able to report on outcomes over the next year as programme implementation is completed and the first evaluation reports on outcomes become available. These will be closely monitored to determine if the Reducing Inequalities programmes are achieving the desired outcomes for students. These results will feed into our managing for outcomes process so that we can make decisions on expanding successful pilots, or reallocating funding, and so on.

## Research, evaluation, and monitoring information published in 2004–05

Title	Details	Key findings
Results from the Trends in International Mathematics and Science Study (TIMSS)	International study assessing year five and nine students in mathematics and science. This was the third cycle of the study.	New Zealand was one of a small number of countries to show a significant increase in the average performance of year five students in mathematics and science from 1994 to 2002, although the same increase was not observed for year nine, where students continue to perform above the international mean in both maths and science.
Results from the Programme for International Student Assessment (PISA) 2003	International study assessing 15-year-old students in reading, mathematics, and science literacy. 2003 is the second administration in the first cycle from 2000–06.	New Zealand students' performance places us in the second-highest group of countries in maths, reading, and science literacy, and in problem-solving. In terms of the spread of scores, New Zealand has a wider distribution than many other high-performing countries in maths, reading, and science literacy, and in problem-solving.
Focus on low socio-economic status achievement in reading literacy	This report focuses specifically on low socio-economic status achievement results from PISA 2000. The study looked at factors relating to high and low achievement among low socio-economic status students.	A substantial proportion (28%) of low socio-economic status students performed very well in PISA. High achievement among low socio-economic status students is likely to be linked to interest and engagement in reading, time spent on homework and self-concepts in reading, and their academic ability. For boys, engagement with school was also linked to achievement.
Focus on Māori achievement in reading literacy	This report focuses specifically on Māori achievement results from PISA 2000. The study looked at factors relating to high and low achievement among Māori students.	A quarter of Māori students performed very well in reading. They performed better than 69% of students in the OECD in this study. High achievement among Māori is more likely to be linked to interest and engagement in reading and self-concepts in reading, and their academic ability. Availability of educational resources in the home is also linked to higher scores for Māori students.
Focus on Pasifika achievement in reading literacy	This report focuses specifically on Pasifika achievement results from PISA 2000. The study looked at factors relating to high and low achievement among Pasifika students.	One in five Pasifika students performed very well in reading. High achievement among Pasifika students is more likely to be linked to high motivation and engagement in reading, confidence with computers, greater access to educational resources in the home, more time spent on homework, more interest in reading, and a more positive wider school environment.
Progress in Reading Literacy Study (PIRLS)	International study assessing the reading achievements of nine-year-olds, conducted in 2001. A ten-year trends study, being a partial replication of the 1990 Reading Literacy study, was administered in conjunction with PIRLS.	Overall, year five New Zealand students performed significantly above the international mean. The range of scores between our lowest and highest performing students was large compared to most other high-performing countries.  Information from the trends study showed that the overall performance of students in reading literacy was virtually the same in 2000 and in 1990, both in terms of average performance and the range of scores.
National Education Monitoring Project (NEMP) – assessment results 2004	This project looks at achievement across all areas of the curriculum over a four-year cycle, sampling students at years four and eight. It reports on gender, ethnicity, and decile-band subgroups. 2004 covered reading and speaking, music, and aspects of technology.	The year four cohort showed steady to significant improvements in achievement across all three subjects compared to 1996 and 2000 cohorts. There are fewer students at both years four and eight in the bottom bands for reading, compared with 1996 and 2000. The level of disparity for year four Māori and Pasifika compared with Pākehā students has reduced substantially in reading since 2000.

Title	Details	Key findings
Annual monitoring of reading recovery	Reading recovery data, including numbers of participating students, and numbers successfully completing the programme.	The overall pattern of progress was consistent with previous years, with about 59% of students successfully completing reading recovery in 2003 and a further 25% expected to complete in 2004. There were proportionately more boys, Māori, and Pasifika students in reading recovery.
Evaluation of Te Kauhua	Pilot project designed to trial new models of professional development to enhance teacher effectiveness in raising the achievement of Māori students in mainstream education.	By the end of the project, 69% of teachers considered they were better equipped to raise Māori achievement and 70% reported making changes to their classroom practice.  The overwhelming response (91%) was that it is possible to raise Māori student achievement in mainstream education. Key strategies are use of te reo, tikanga Māori, curriculum planning, and pedagogy.
An analysis of effective teaching in literacy activities for new entrant Pasifika children in mainstream decile one schools	A research-based intervention in low-decile schools which provide a site for analyses of effective teaching in literacy activities for new entrant Pasifika students.	Literacy achievement levels in these schools were typically low after one year of instruction. The research established a need for teachers in mainstream schools to be able to effectively teach children with diverse cultural and linguistic backgrounds. This is so for Pasifika students who have a range of bilingual skills when they come to school.
Competent Children at 12	Longitudinal study following a sample of Wellington region children from near age five to latest report at age 12.	Early childhood experience continues to make a contribution to the children's maths and reading comprehension scores seven years later. This is linked to the way early childhood education develops children's skills in working and thinking and the nature of staff-child interaction. Family income and maternal qualification are linked to competency scores at 12. Language use and experience is important for development, as are maths activities and conversations prior to school.

## Conclusion

Progress continues to be made in Reducing Inequalities in the education sector. There has been progress within the Ministry in sharpening the focus on the causes of inequality. The framework makes the outcomes sought more explicit, and links strategies, programmes, outcome measurement, research, evaluation and monitoring, and relationships into a coherent framework. There has been progress on a number of key outcomes, although more needs to be done. The Ministry and the entire education sector continue to work on these key areas. In addition, we are working collaboratively with other government agencies to address cross-sectoral issues.