Education Report: Developing measures of outcomes from education

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<th>To:</th>
<th>Hon Chris Hipkins, Minister of Education</th>
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Purpose of Report

This paper seeks your agreement that the Ministry of Education develop a post-education outcomes framework. This will inform the development of measures of success from secondary and tertiary education, as well as broader outcomes of education over time.

Summary

You are seeking to better understand the outcomes from education and how we can measure success of the secondary schooling system. As part of this, you commissioned the New Zealand Qualifications Authority (NZQA) to look into a sophisticated national measure of senior secondary school success, with an emphasis on pathways for young people. We understand your interest is in what value increased qualification achievement is creating for individuals and the country as a whole.

After discussions between the Ministry and NZQA, we propose that the Ministry will take this work forward by developing a post-education outcomes framework. This would:

- focus on identifying the value of skill development and qualification attainment for individuals and the country, and on how well education helps to prepare people for a changing world
- build on ongoing work on outcomes across education, as well as domestic and international frameworks
- incorporate a stronger focus on social outcomes, in line with Treasury’s Living Standards Framework
- cover all people post-education, regardless of their level of education attainment or life stage.

Starting this work by developing a post-education outcomes framework will ensure that any measures identified can be grounded in a shared understanding of education’s contribution to New Zealand. The outcomes framework will also support ongoing work to deliver the strategic
components of your Education Work Programme, and could, over time, support better accountability across government for achieving the outcomes specified.

Recommended Actions

The Ministry of Education recommends you:

a. agree that the Ministry of Education will develop a post-education outcomes framework and report to you with an initial outline by July 2018

b. note that this framework will be designed to support the development of your Education Work Programme and the identification of more specific measures, including measures of education success, over time

  Noted

c. agree to discuss with officials your views on the scope of the framework and your intended audiences

  Agree / Disagree

d. agree that this Education Report is proactively released as part of the next publication.

  Release / Not release

Andy Jackson
Group Manager
Tertiary Education

Hon Chris Hipkins
Minister of Education

2/6/18
Background

1. You have asked the New Zealand Qualifications Authority (NZQA) for advice on developing a sophisticated national measure of senior secondary school success, with an emphasis on pathways for young people. We understand your interest is in what value increased qualification achievement is creating for individuals and the country as a whole.

2. Following discussions between NZQA and the Ministry of Education, officials consider that this work will best be led from the Ministry, with ongoing support from NZQA, the Tertiary Education Commission and other agencies as appropriate. Officials also consider that a set of indicators would be required to provide strong insight into the secondary schooling sector and the extent to which NCEA achievement supports a student's future success.

3. This paper seeks your agreement that the Ministry will undertake this work, starting with a focus on identifying the key outcomes of the education system as a whole.

Proposed direction for the work

4. The Ministry of Education has been working to improve how it measures success and outcomes for learners for some time. Annex 1 sets out the various pieces of work in train and the progress that we have made.

5. As a result of this work, we:
   a. have a strong suite of post-education outcome measures, that capture labour market outcomes from tertiary education
   b. are improving our knowledge of factors relating to the transition from school to tertiary education and employment
   c. are extending our work to cover outcomes for all young people leaving school, whether or not they attended or completed tertiary education, or went straight into the workforce
   d. will be developing wider measures of well-being connected to educational achievement.

6. In further developing this work, we intend to better reflect the social outcomes that may result from education. Currently social outcomes are not strongly identified within the range of measures and frameworks we have developed. As part of this, we are looking at how education links to the Treasury’s Living Standards Framework and is integrated into Statistics New Zealand’s “Measuring NZ” project.

We need a shared understanding of education outcomes

7. We understand that you are seeking a measure of secondary schooling success. We consider that, before developing such a measure (or set of measures) it is important to understand the full contribution of education, at all levels, to New Zealanders' outcomes.

8. The Ministry has already been working with other sector partners to develop an education system performance framework and to identify potential education system performance measures and information gaps to be addressed. We propose to build on this and develop a post-education outcomes framework that can be used to identify key indicators to measure the performance and value-add of the education system.
9. Approaching your request in this way will support:
   a. the development of more specific measures that are grounded in a shared understanding of education’s contribution to New Zealand
   b. understanding the effect of different pathways on outcomes, from school through tertiary education and employment
   c. more informed development of measures and outcomes to be used to guide the future direction of the education system through the strategic components of your Education Work Programme (for example, through development of the new Tertiary Education Strategy and refresh of Ka Hikitia and the Pasifika Education Plan)
   d. meeting the Treasury’s expectations for an education system performance framework, which would inform the setting of Ministry and sector priorities and policy settings
   e. over time, better accountability across government for achieving outcomes, as agencies and individuals work to deliver improvements for learners and New Zealand.

10. This approach will ensure that the work supports strategic policy work now and in the future.

What could this framework look like?

11. The proposed post-education outcomes framework would be developed to cover all people after they have left education, regardless of level of education attainment or life stage, and would include both social and economic outcomes.

12. It would focus on identifying the value that skill development and qualification attainment creates for individuals and New Zealand. It would also look at how well education does in helping people to be prepared for a world of rapid change across the labour market, as technology influences the ways we work and what skills are needed.

13. The framework would:
   a. be informed by national and international outcomes frameworks, including Treasury’s Living Standards Framework, Statistics New Zealand’s “Measuring NZ”, the OECD’s framework for well-being and progress, and the UN Sustainable Development goals, as well as by the Ministry’s previous work
   b. identify outcomes of enduring importance, beyond specific government priorities
   c. not be limited by currently available data
   d. provide a clear line of sight between outcomes, pathways and aspects of education that could be influenced (so that it can direct attention to what might be done differently in education in order to improve the outcome).

14. The framework would focus on learner outcomes from school and tertiary education, the outcomes of life-long learning and re-engagement with education later in life. It would also potentially quantify public and private returns to investment in education. It would allow us to look in more detail at the different pathways people take through education and employment.

15. We will work with NZQA, the TEC and other agencies as appropriate in developing the framework and identifying measures.
16. We will provide you with an initial outline of the framework by July 2018. This outline will identify the key outcomes areas and how they fit together, show where current measures and indicators are available, and indicate areas which will require further development.

Proactive Release

17. It is intended that this Education Report is proactively released as per your expectation that information be released as soon as possible. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.

Annexes

Annex 1: Existing post-study educational outcomes monitoring
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The list below summarises the information and evidence currently available that relates to outcomes of education. Much of this has been produced from Statistics New Zealand’s Integrated Data Infrastructure (IDI) or its predecessor linked datasets, or through analysis of regular national survey data. All of it is available on the Education Counts website.

Many of these outcomes incorporate breakdowns by gender and ethnic group, or by level of attainment, field of study or provider type. Since 2017, employment and earnings outcomes have been published by provider.

Linked data can track tertiary graduates from 2003 onwards, and school leavers onwards from 2009, some 13 or so post-study years for tertiary graduates, and seven or so years for school leavers.

What is known or available currently

Regularly published national statistics:

- earnings premiums for tertiary graduates
- destinations of tertiary graduates
- employment rate differences for tertiary graduates
- proportion of graduates going overseas and return rates
- benefit and Not in Education, Employment or Training (NEET) rates for tertiary graduates
- student loan debt burden
- student loan repayment rates

The Ministry has analysed the post-study impacts on school students of various risk factors (such as stand-downs, family welfare background, ethnicity and sex). Specifically, the impact on average post-study welfare costs per school student, average corrections costs per student, and average tax per student. We have also looked at the impact of the Youth Guarantee programmes in terms of education, employment and other outcomes.

Regularly published international statistics:

These are the international comparisons related to education outcomes published annually in OECD’s *Education at a Glance*. The last one on social outcomes covers themes that vary from year to year. An annual New Zealand summary of this report can be found here. It includes:

- earnings premiums by level of education
- employment rate by level of education
- NEET rates
- returns on investment in education
- social outcomes by level of education

What is currently being developed

There is a range of work currently being developed, including:

- Extending our understanding of the earnings benefits of education by shifting the reference group to school leavers (rather than tertiary graduates currently).
- Modelling the risk factors of participation and achievement of young people in tertiary education to gain better insights on the relative contributions of different risk factors, and which things matter most.
- Labour market outcomes for industry training, including by Industry Training Organisation.
- Evaluating the relative effectiveness of vocational programmes in schools.
• Outcomes of the Ongoing Resourcing Scheme (ORS). Report to evaluate differences in outcomes in post-education between mainstream and special schools, those that leave at age 18 or before, or stay until 21 across the different levels and type of educational needs.

What is planned for development

There is further work planned for development, including:

• Developing regular, and extensive monitoring of social outcomes of education.
• Better understanding of the link between field of education and labour market to better inform education links with labour market planning.
• Developing quantitative estimates of the benefits of education - both public and private, economic and social, to provide new insights on the benefits and returns to education.
• In particular, developing insights on the cumulative benefits and lifetime earnings for various types of education and for different types of learners.
• Benefits of course-based completion compared with qualification completion to provide insights to inform policy around “hop-on hop-off” learning and lifelong learning.
• Better understanding of student mobility to inform, amongst other things, regional provision issues.
• Benefits of lifelong (re-)engagement with education. It is also expected that the IDI will be used to inform short and long-term monitoring and evaluation of the fees-free initiative.