

# Developing the Second Tertiary Education Strategy – The Response from the Royal Society of New Zealand

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The Royal Society of New Zealand (RSNZ) is New Zealand's independent, national academy of sciences, a federation of some 60 scientific and technological societies, and also individual members. We promote a critical awareness of science and technology in schools, in industry and in society. We invest in excellence in people and ideas and put them to work as an inspiration to New Zealanders.

The following response was prepared by staff at the RSNZ in consultation with the Science and Technology Education Committee, the Academy Council and the Council of the RSNZ. As such, it is the official response from the Royal Society of New Zealand to the Discussion Document "Developing the Second Tertiary Education Strategy".

In summary, we endorse the goals of the new strategy, and suggest some areas of focus.

Government should provide sufficient support, for all areas of learning, in order to achieve goals of the new strategy. This means both excellence in design of the system, and sufficient funding and/or investment for it to achieve its goals.

Successful implementation of the strategy will depend on mechanisms of funding, evaluation and monitoring and feed-back loops to enable continual improvement. The lack of detailed information on these funding and evaluation mechanisms, as well as the Maori Education strategy, leave us to encourage the Ministry of Education to provide clear signals and use a consultative approach, and take particular care in setting up those systems, so they achieve the intended goals.

We also suggest that research undertaken in tertiary education organisations should encompass 'blue skies' research as well as applied, and targeted as well as untargeted. In particular, Universities are the main institutions for undertaking untargeted research that will contribute to the pipeline of new knowledge for future economic, social and environmental needs in New Zealand. This distinctive contribution should be recognised and supported.

Research collaborations should be more thoroughly enabled between universities, Crown Research Institutes and Research Associations, with an examination and removal of current barriers.

Equity of access should be supported strongly for all TEOs. Pathways of education from secondary to tertiary education and beyond should be designed with a comprehensive view of a person's total education throughout life. Programmes should be supported that support transition from secondary to tertiary education, that promote ongoing vocational learning and equity of access and success (completions).

Our response follows the questions laid out in the discussion document.

## Question 1 – Section 2: Tertiary Education Strategy Contributions

We propose three contributions: (Please tell us your views on these contributions and their underpinning areas of focus.)

- **educational success for all New Zealanders through lifelong learning;**

This goal is important to achieve wellbeing in all peoples, including those with low literacy in older age groups and with low levels of formal qualifications. Basic literacy and numeracy learning in community settings should be considered worthy of substantial public support. Ongoing vocational and professional learning is crucial; while some may be provided by professional bodies, it is important that Government ensures that there is coherence and connection, and sufficient support for areas where the professional bodies have difficulty.

- **creating and applying knowledge to drive innovation;**

This goal is important to move New Zealand's economy towards 'transformation' and to enable people to take risks, and practise entrepreneurial activities. However, it should be noted that Universities have a valid role in developing and increasing a body of knowledge, based on excellent research that does not necessarily drive innovation immediately.

The preserve of Universities to undertake wholly blue-skies research has been partially removed with some government research funds earmarked for 'targeted' research – namely the Foundation of Research, Science and Technology portfolios of funds. The Performance Based Research Fund, which is really a 'General University Fund Based on Research Performance' should be used by Universities to support 'blue-skies' research, to create a pipeline of basic, new, and emerging knowledge,

and also on applied and 'innovation-driving' research. We in New Zealand need both types of research in the system.

- **strong connections between tertiary education organisations and the communities they serve.**

Strong connections are important to tailor qualifications to meet the needs of stakeholders such as employers of graduates. Connections that involve collaborations are sometimes difficult in the current situation but their importance must not be ignored.

In respect of science and technology research, for example, there is a perception that differing funding systems between Crown Research Institutes or Research Associations and Universities results in difficulties for strong, official collaborations to occur. We understand that frequently, collaborations among scientists of like minds do occur. We see the value of strong connections. However, improvements to the system are required to enable easier, clearer and stronger connections between different research organisations, and the users of research (e.g. regional councils, environment groups, health authorities, businesses etc) and to this end we would propose drawing together leaders from the respective players to find common ground and make recommendations regarding amendments to the funding regimes.

## Question 2 – Section 3: How Contributions Will Be Achieved

The tertiary reforms are building a new planning, funding, quality assurance and monitoring system. Feedback from consultation with stakeholders and providers on these reforms will continue to inform the ongoing development of this system.

Please tell us your views on whether the actions outlined for the government and tertiary education organisations will be sufficient and suitable to achieve the direction proposed in this discussion document:

The three-year funding path will enable greater certainty for the Tertiary Sector in their planning and budgeting so long as the regulatory regime results in a level playing field for all organisations.

We encourage the agencies building these new systems (planning, funding and monitoring) to base them on the best available evidence, and incorporate a positive feedback-loop from monitoring to planning.

## *Supporting Access and Opportunity*

There are several mentoring and transition programmes run in tertiary organisations, such as universities and polytechnics that make it easier for disadvantaged students to achieve at their tertiary education. Such programmes may fall between the cracks in funding, and it should be made clear that their support should be part of the 'equity of access' concept. We recommend that support programmes are put in place by TEOs to enhance equality of access

We agree with the concept of supporting the extra costs of special-needs students (such as disadvantaged students).

## *More Active Engagement and Investment-based Approach to Planning and Funding*

The success or failure of this concept depends on how it is implemented. Quality implementation requires excellent staff in the relevant agency (e.g. TEC) with strong links to TEOs, and highly proficient consultation systems.

An investment-based approach for something that society feels is worth 'funding' (such as health and education) may fly in the face of common sense to many people. The public research sector (Crown Research Institutes) has already been through such an attitude change – investment in research for the public good, for economic benefit, and for knowledge creation requires agreed priorities to ensure that human capabilities are maintained. If there are casualties as a result of policy changes they should be dealt with sensitively with clear signals to enable realignment of plans and strategies along with a suitable timeframe for implementation. Disinvestment should be made with a long transition phase, so that staff with valued skills can be realigned to a new plan.

The plans that define the roles of TEOs in the network will be integral to the outcome of overall funding and special care should be taken in developing these plans. Close collaboration between management staff and teaching staff will be required in plan development, in association with government.

We agree that a diversified and sophisticated set of funding instruments to support the 'differentiated network' of TEOs will be useful. However funding instruments are only as good as those implementing them to ensure that the desired policy outcomes are achieved.

Taking a longer term view is an excellent policy change. While some would call for an even longer term view than 3 years, we appreciate the constraints of the Budget process, and applaud this effort.

## *Better alignment across government agencies*

It is important that students get up-to-date information on career choices and pathways especially if the government is taking a more active role in engaging the tertiary education sector to provide for the needs of NZ. It is crucial that there is cohesion and congruence between all government agencies and their aims in post-school education and training.

## *Strengthened focus on Quality*

There may be a conflict between having a high trust and high accountability system alongside greater transparency in the performance of a TEO. The quality measures need to reflect the distinctive contributions of different TEOs, such that university quality measures should be different from technical institutes, and industry organisations

## *Support for Distinctive Roles in a Network of Provision*

The Discussion Document states that the government will make a transparent statement of its expectation of the distinctive contributions expected from different types of tertiary education organisations. This is absolutely necessary to enable clarity of policy and purpose of the new Strategy.

While the Tertiary Education Strategy may be focusing on education, it is absolutely fundamental that Universities and other TEOs undertaking research to support their qualifications and teaching be supported in the underlying research. Research that does not appear to be of direct relevance to 'transforming the NZ economy' should stand alongside that which does. It is one of the distinctive roles of Universities to undertake research that adds to a body of knowledge without necessarily looking for immediate application to society's wellbeing or wealth.

Similarly, polytechnics and adult learning centres require support for maintaining their distinctive role in provision of vocational training. It is not helpful to have polytechnics aspiring to university accreditation in order to achieve increased funding and status.

### Question 3 – Section 4: Direction and the STEP

The STEP priorities identify areas for increased effort or investment to support the change needed to achieve the objectives set in the TES. The proposed priorities are:

- *increasing educational success for young New Zealanders – more achieving level 4+ qualifications by age 25;*
- *increasing the level of literacy and numeracy in the workforce;*
- *increasing the delivery of skills and competencies to meet regional and national industry needs; and*
- *improving research connections and linkages to create economic opportunities.*

Please tell us your views on the proposed priorities, and how these priorities fit with the distinctive contributions of different tertiary education organisations:

The Royal Society of New Zealand sees three thrusts as crucial in tertiary education. It is imperative that New Zealand lifts the achievement of the lower quartile of our student cohort and adult workforce. This requires attention at the tertiary level, the compulsory schooling level, and the transition between the two. Support and encouragement is needed to persuade young people to raise their sights in terms of achievement in academic or vocational areas. Programmes and pathways must be provided to foster this. Continued support must be provided for adult learning to improve levels of workplace literacy and numeracy.

Secondly it is important that the NZ populace is scientifically and technologically literate in order that they are able to make informed decisions on issues surrounding them. A broad-based education up to undergraduate, certificate or diploma level will assist in achieving this. Care must be taken to see that study pathways do not provide too great a degree of specialisation at too early a level nor that students compose the content of their qualifications such that they provide inadequate backgrounds for future careers.

Thirdly, research connections that are beneficial are not always related simply to economic opportunities. For example research regarding child development may inform practises in early education or parenting, while research in public health may improve policies relating to disease reporting, or medicine provision. Neither of these may be related to economic opportunities, yet they may be hugely valuable to New Zealand as a whole.

It is admirable to consider economic opportunities, and enabling closer linkages between researchers and users of research, but it should be more widespread than that particular policy goal of government that relates to economic transformation.

## Question 4 – Section 5: Building an Evidence Base

To be effective, the TES and STEP must be based on evidence of:

- *what the tertiary education sector is achieving;*
- *where there are current challenges for the sector;*
- *what future challenges and opportunities there will be; and*
- *how the sector can contribute to broader government goals.*

Please tell us your views on what are the most important areas to monitor the progress of the TES and STEP:

More centralised investment in evaluation of outcomes would provide independent evidence on the success of these policy changes. To be effective, evaluations require systems to be set up in advance, and in some cases, measures of before and after the new TES and next STEP. We would encourage the TEC to support a programme of social science in this area. Areas that should be monitored would include graduate employment, recruitment and retention, completion, post-graduate completion, and workplace literacy and numeracy. Labour requirements must also be monitored and projected in order to inform course development and focus for the future workforce. In addition, maintenance of human capabilities to provide a high quality education should also be a component of the measurement of success.

## Question 5 – General Comments and Reflections on the Discussion Document

Will the TES and the STEP priorities, as outlined in this document, help you to make choices about tertiary education as a provider, student, employer or parent?

The questions asked in the discussion document fail to address some of the issues our tertiary system should attend to, and will therefore fail to elicit the answers it needs. Paramount amongst these is the increasing importance of environmental challenges facing the global society now and in the future. The TES fails to sufficiently address the educational needs of teachers and learners in this regard. It has no mention of sustainable development or eco-literacy. New Zealand's future depends on more than just an efficient labour market.

Achieving the desired goals of the TES depends on how the strategies are implemented. Choice of education provider (as an employer or parent) often comes down to suitability for specific needs and the quality of information and advice available. Therefore having strong systems for community and employer involvement in education provision (including curriculum setting, quality standards, employment opportunities and work-place training) are important.