# INFORMATION FOR LEARNERS

Learner decision-making behaviours

Research Summary

October 2014

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# Learner decision-making behaviours: Research Summary report

## Background

In 2012, the Tertiary Education Commission (TEC) began a programme of work to gain an understanding of the decision-making behaviours of those considering enrolling in tertiary study. The TEC undertook research on this which informed the development of its *Information for Learners consultation document*.[1]

This report summarises the key findings of the TEC's research, with specific focus on:

- how learners make decisions on tertiary study;[2]

- the information that learners need to help them make decisions on tertiary study; and

- the best way to provide this information.

## Approach

To investigate these three areas of focus, the TEC adopted a mixed-methods approach which included:

- stakeholder interviews with the New Zealand Union of Students' Associations; Careers New Zealand; Careers and Transition Education Association (Aotearoa) Ltd; and careers advisors from four Wellington secondary schools;

- a review of New Zealand and international literature on the research questions;

- workshops attended by peak body representatives from industry training organisations, institutes of technology and polytechnics, private training establishments, wānanga, and universities; and

- learner consultation through workshops and a nationwide survey.

This work led to the development of a wide set of information considered useful to inform learners' enrolment decisions, and was subsequently refined to a subset known as the 'Key Information Set'. Through the *Information for Learners consultation document*, the TEC sought feedback from tertiary education stakeholders on the proposal that tertiary education organisations (TEOs) consistently publish the Key Information Set across the qualifications offered.

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[1] http://www.tec.govt.nz/Tertiary-Sector/Reviews-and-consultation/Information-for-Learners/

[2] The term 'learner' can include those in some form of education (for example secondary school students, or current tertiary students), or anyone else potentially making decisions about engaging in tertiary education.

# Research Summary

## How do learners make decisions on post-school pathways?

**Learners' decisions on education depend on sense of self.** Carpenter (2008) highlights that all good career decision-making depends on self-knowledge (understanding one's own aspirations, strengths, weaknesses, and motivations) and occupational knowledge (knowledge of the world of work).

Carpenter explains that the development of the 'possible self' is seen as a critical building block for identifying growth and career development. A person's possible self is a future accomplished adult, complete with skills that one has yet to learn, who is achieving, working and living in the way they desire. Providing more and more information about tertiary education and careers is seen to be of little value until a person has developed their sense of self (Carpenter, 2008).

> *"Aspirations, and possible selves are the critical drivers of the decision-making years [for students]."*
>
> **Carpenter (2008), p. 23**

**Learner decisions on education and career are made through a series of choices.** Learners' tertiary education and career decisions often start well before their final year or two of secondary education (Bloomer & Hodkinson, 1997). These decisions inform them on whether to engage in tertiary study and if so, where and what to study (Leach & Zepke, 2005). Bloomer and Hodkinson (1997) note that younger learners are likely to change their minds, as early decision-making can be quite unstable.

> *"Our job-shopping infrastructure often leaves young people overwhelmed and baffled by the apparent abundance of choice available to them and the complexity of the pathways they must negotiate in the job-shopping process."*
>
> **Vaughan et al. (2009), p. 18**

**Learner decisions on education and career are complex and dynamic.** Higgins, Vaughan, Phillips, & Dalziel (2008) state that the decision-making process is compounded by the following interrelated dimensions:

- Decision-making is a process, not a one-off event, and is part of one's life course;

- Decision-making about a post-school path is a wider lifestyle choice and is strongly shaped by context and culture; and

- Decision-making is a social process, taking place in interaction with others, so that the actions of others (besides the individual making the decision) will shape this process.

**Learner decision-making is influenced by personal, social, psychological, and environmental factors.** Research identifies a range of factors that can affect how learners seek and use information as well as their decision-making processes. These factors generally fall into the following categories:

- Personal – factors such as prior educational experience and attainment as well as socio-economic status can have a significant impact on an individual's likely engagement and success in a given tertiary setting (Higgins et al., 2008; Maani, 2000).

- Social – peer and societal pressures can influence how individuals participate in tertiary education and what they study (Higgins et al., 2008; Maani, 2000; Diamond et al. 2014).

- Psychological – an individual's intrinsic motivations (e.g. interests and passion for learning) and extrinsic motivations (e.g. career, employment, and financial considerations) as well as their perceptions and beliefs all play a part in driving their study choice (Zhang, 2009; Diamond, et al., 2014).

- Environmental – an individual's environment such as geographic location and schooling can impact on their accessibility, and successful transition, to tertiary education (Higgins et al., 2008; Maani, 2000).

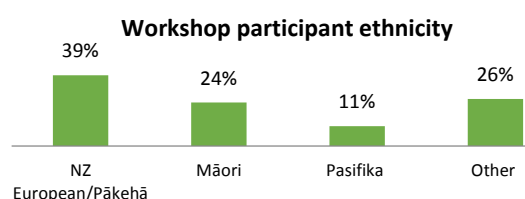## Learner decision-making is influenced by parents and community.

The literature reviewed by the TEC frequently describes the influence of parents on their children's career choice and tertiary education, whether as a source of information or direct influence. There is substantial evidence that career development begins in childhood through family and parental interactions and experiences. Parents are seen as occupying a unique position as they, more than others, have the ability to nurture and increase the self-knowledge and confidence in a child (Carpenter, 2008).

As noted by Chauvel and Rean (2012), parents and whānau are key in instilling in their children the aspiration to pursue tertiary study, and can be a strong motivating influence. Research shows that these influential adults enable transition success through their support for young people to think seriously about their future career goals and to progress toward them (Chauvel & Rean, 2012). These findings have also been found to apply to Pasifika communities (Chauvel, Falema'a, & Rean, in press). Results from the TEC's Learner Information Needs survey further reinforce the importance of family and community considerations when Māori and Pasifika youth make decisions on tertiary study.

## Learners often make decisions based on partial information and under conditions of uncertainty. A recent UK study argues against the assumption that people will behave rationally if they have complete and accurate information – decision making is a much more complicated process, according to Diamond et al. (2014).

### The TEC's learner workshops

In 2013, the TEC ran nine learner workshops with 82 learners (including Youth Guarantee students) from secondary schools, universities, institutes of technology and polytechnics, and private training establishments.

**Workshop participant ethnicity**



| NZ European/Pākehā | Māori | Pasifika | Other |
|---|---|---|---|
| 39% | 24% | 11% | 26% |

Learners were asked to rate and discuss the usefulness of a proposed set of information for supporting their decision-making on what and where to study (information fields included access and pathways, costs of study, learner engagement and success and employment outcomes of study).

The five information fields rated most useful by learners were:
- entry requirements for study
- skills taught that will help me get a job
- where the qualifications are offered
- total fees
- loans and allowances

Subsequent discussion between participants and facilitators covered:
- the need to simplify and make current information more accessible and consumable;
- the significant influence that parents, teachers, families, and communities have on decisions about tertiary study;
- the importance for those in teaching roles, including families and communities, to provide effective guidance and advice; and
- the sense of confusion and panic for younger learners and the desire for more help and guidance with their educational decisions.

Workshop findings informed the design of a nationwide learner survey for the TEC to gauge the usefulness of its proposed Key Information Set with a wider learner demographic.

An explanation from the behavioural economics perspective is that too much information can lead people to disengage with the information-seeking process. This can in turn lead to people making decisions based on partial information, relying on biases and heuristics rather than on solely rational criteria. While this reduces the burden created by the complex and time-consuming process of information-seeking, decisions made under these conditions may not necessarily serve in the best interests of the individual. This highlights the need for information providers to consider not only the content but also the mode of delivery so that learners (and their families) have access to meaningful information, and are well positioned to use such information for their tertiary education decisions.

## What information do learners need to make decisions about tertiary study?

**Learners need clear information on pathways into tertiary education and from education to employment.** Mourshed, Farrell, and Barton (2012) note that learners are increasingly unhappy with being left to make sense of the array of available information about tertiary education options. The TEC's literature review and learner workshops indicated that learners would like clear information on career options and the training pathways that lead towards their desired career. Alongside this information is the need for further guidance to help learners work out the right questions to ask, the places to go for information, and the skills to make enrolment decisions that align with the outcomes that they want from their education.

*"Fewer than half of the youth surveyed said they had the right information to decide whether to pursue further education or [which] programmes offered the best economic returns."*
**Mourshed et al. (2012), p. 86**

Ensuring that stakeholders have quality data and information will support them to make more informed choices towards achieving their goals in their educational and career journeys. Research suggests that learners are particularly interested in information on career options, training pathways, local employment, estimated earnings, and educational programmes that prepare individuals for specific occupations (Mourshed, Farrell, & Barton, 2012). In some cases, this may mean simply aggregating existing information currently scattered across different sites to bring a consolidated and coherent view of the linkages from education to employment.

In the New Zealand context, Higgins et al. (2008) observe that TEOs are competitively marketing themselves through schools and media as offering highly employable knowledge and skills. All of this change in a globalised New Zealand economy has created a very challenging decision-making environment for school leavers in the twenty-first century.

*"Imagine what would happen if all educational institutions were as motivated to systematically gather and disseminate data on students after they graduated – for example, on job placement rates and career trajectory five years out – as they are regarding students records before admissions. Young people would have a clear sense of what they could plausibly expect upon leaving a school or taking up a course of study, while education institutions would carefully consider what they teach and how they connect their studies to the job market."*

**Mourshed et al. (2012), p. 20**

Feedback from the TEC's peak body workshops indicated support for information to be more 'learner-centric'. While TEOs already publish a significant amount of information to support enrolment decisions, there is a lack of consistency across the sector. In the TEC's stakeholder interviews, stakeholders noted that information provided by TEOs often has a marketing flavour designed to attract enrolments and should be treated cautiously by learners and their advisors.

**Learners want information on the cost, quality, and outcomes of tertiary study**. International research on the information needs of learners, together with the findings from the TEC's consultation, points to learners wanting comparable information to help them select an institution and course of study. This information can be grouped under three headings:

- Cost – study and course-related costs;

- Quality – learner satisfaction with the standards of teaching and/or course; and

- Outcomes – employability of graduates.

Researchers note that when making decisions on tertiary study, learners are interested to know what outcomes they can expect from their education (Renfren et al., 2010; Higgins et al., 2008). While tertiary education is known to contribute to personal, social, and cultural outcomes, several studies suggest that economic outcomes such as future employment and earning potential are key considerations for learners (Renfren et al., 2010; Higgins et al., 2008).

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### The TEC's learner survey

Following on from the learner workshops, the TEC undertook a learner survey to gauge the usefulness of a refined set of information to learners for choosing what and where to study.

**Who responded?**
Of the 292 respondents, 62% were current or past tertiary students; 32% were in secondary schools; and 6% were not in study.

**Survey participant ethnicity**

| NZ European/Pākehā | Māori | Pasifika | Other |
|---|---|---|---|
| 65% | 15% | 11% | 9% |
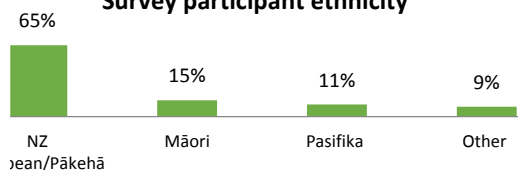
**What information was important?**
Respondents indicated that all the information put forward was important to varying degrees.

Employment outcomes information was considered highly important, specifically information on the skills that will help learners get a job, and the types of jobs that different qualifications can lead to. Information on total fees and on loans and allowances was also considered to be very important as was, to a lesser degree, information on access to learner support and satisfaction.

**Where to provide the information?**
Amongst respondents, the most popular places to seek information were providers' websites; a centralised website; and conveying through the enrolment process.

For respondents that were enrolled in tertiary education, providers' websites were overwhelmingly the most popular delivery method. For secondary school students, career counselling was also seen as one of the most useful ways to get information on options for tertiary study.

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The TEC's learner workshops and survey reinforced the importance of economic outcomes from tertiary education and that a key reason for learners to engage in tertiary education is post-tertiary employment, ideally in an area of interest. Earning potential was also seen as important, but to a lesser extent. This aligns with a New Zealand study which found that decisions on career pathways were not based purely on financial return, but on wider choices around a desired or anticipated lifestyle (Higgins et al., 2008). Tertiary education organisation representatives at the TEC's peak body workshops also agreed on the need to ensure that any key information set looks more broadly than just employment outcomes, to account for other reasons that learners undertake tertiary study.

# What are the best ways to provide information to learners?

**Parents and community are key sources of information for learners.** Research suggests that learners value information from trusted, impartial sources and will generally turn to family, friends, and teachers with whom they have a strong relationship for advice. It is therefore crucial for information providers to engage with those who influence the decision-making of learners and to understand how decisions are formed.

It is important to ensure that parents and families, including those of Māori and Pasifika peoples, are involved early on in planning and supporting their children to make study choices, set and plan goals, and progress into tertiary study (Chauvel & Rean, 2012). Part of this involves providing communities with clear and consistent information. Supporting parents to support their children is critical as they are not always well armed to do so. In Chauvel, Falema'a and Rean's literature review, for example, Pasifika parents were aware of their children's goals and career plans, but struggled to come up with appropriate advice on how these aspirations could be realised at each step of the pathway through secondary school.

**Career education at secondary school is a key source of information for learners.** The importance of career education in secondary school – and the need for this to be improved – was highlighted throughout the TEC's literature review as well as its learner survey and workshops. Research undertaken in New Zealand has also identified the need for further development of careers education in secondary and tertiary education institutions, including support for integrating careers education into the school curriculum (Dalziel, 2010).

A coherent approach to careers education which helps young people investigate identity, abilities, goals, opportunities and constraints in plotting their career pathways is discussed by Dalziel (2010). Other researchers suggest moving away from the traditional career education model of dispensing information in which learners are overloaded with information, and career educators often operate in a time-poor environment (Higgins, Nairn, & Sligo, 2010). These authors propose a more effective model for the current

> *"To help young people pursue the links between school, tertiary education, employment possibilities and labour market realities, more systematic processes are needed. These should enable young people to engage in identity work, to explore their own abilities as life-long learners, to assess the landscape ahead and to learn strategies for managing the continuing development of career pathways."*
>
> **Higgins et al. (2010), p. 23**

## International developments

Internationally there has been a shift in recent years across government and tertiary education organisations towards making better and more comparable information available to learners to inform their enrolment decisions. This includes publishing information on learner achievement as well as graduate destinations.

The United Kingdom's Unistats website provides comparable information on those areas that learners have identified as important in making decisions about study. This information set is comparable across providers and courses on the centralised Unistats website and is published by tertiary education providers on their respective websites for the undergraduate courses that they offer. http://unistats.direct.gov.uk

Australia's My University website provides learners with a broad range of information about Australian universities and other higher education providers. It enables learners to search undergraduate and postgraduate courses and compare details such as fees, entry requirements, teaching and learning performance, learner satisfaction, and graduate outcomes surveys. http://myuniversity.gov.au/

environment in which more importance is placed on helping learners to develop self-awareness and strategies for decision making.

**The websites of tertiary education organisations are a key source of information for learners.**
In a UK study, secondary school students intending to move onto higher education were found to rely most heavily on information gathered from tertiary education organisations' (TEO) websites (Renfren, et al., 2010).

The TEC learner consultation found that TEO websites are preferred by learners as a place for information to inform decisions on what and where to study to be published. However, learners felt that TEOs could improve by making information easier to find and understand. Survey results also indicated a preference for information to be published on a website specifically targeted at learners.

**Information provided to learners needs to be targeted and tailored.**
Literature indicates that even though many learners have clear ideas on the information they would like, only a small number actively seek out this information (Renfren, et al., 2010).

Diamond et al. (2013) offers one explanation to this behaviour in terms of 'information overload'. They state that there are limits to the amount of information-processing people can undertake when making a decision. More and more information is being provided to young people as the means to improve decision making, when in fact they are already drowning in too much information.

> *"…having too much information can sometimes hamper effective judgement and decision making... For providers of information about [higher education], understanding behavioural principles may offer a route to enabling a more informed and reflexive approach to student decision making."*
>
> **Diamond, et al., (2014), p 5**

Given that the outcomes of learner choice are fundamentally personal, the responsibility falls to information providers to work towards tailoring the way in which information is presented and delivered to optimise information use and reduce the burden of information-processing for decision makers. Practical suggestions includes the use visual presentation methods such as infographics and data visualisation tools, as well as user-driven web functionality in how information can be selected, grouped and compared by users (Diamond et al., 2013).

## Conclusions

The aim of the TEC's Information for Learners work is to support better tertiary education enrolment decisions. Learners need to be able to identify and assess the value of tertiary education and how it will contribute to the achievement of their desired outcomes.

Making decisions about tertiary education is a complex process which often starts early and may be implicit throughout an individual's engagement with family and friends, school, employment, and the wider community. Learners' motivations and influences inform their educational aspirations as well as their likely engagement and success in the tertiary education system. There is potential to use these behavioural insights to develop more targeted and tailored information delivery that could enable learners to process and manage information more effectively for decision making.

For government and education providers, there is a shared responsibility to challenge learners to look at how they are making decisions and which choices are likely to result in them achieving the best outcomes. A better understanding of the dynamic nature of learners' information-seeking and

processing behaviours will enable providers to reconsider how they can improve the delivery of information to support informed tertiary education enrolment decisions.

## Next steps

In June 2014, the TEC engaged in an open consultation on publishing information to inform learners' enrolment decisions. Building on the TEC's research on the information behaviours of learners, the consultation document proposed the Key Information Set that should be published by TEOs to inform enrolment choices and outlined how this information should be provided.

The consultation generated 63 responses from a range of tertiary education stakeholders including tertiary education organisations and representative bodies, learner groups, and government organisations. Analysis of this feedback has given the TEC insight into key areas that will enable, and also potentially constrain, the outcomes it is seeking.

In summary, there is support in principle for the intent of the Information for Learners work specifically to enable informed decision-making by learners and their families. Some of the submissions questioned the need, and many have issues with the proposed content of the information set, the implementation process and data responsibilities.

To support the progress of this project, the TEC is establishing a sector working group consisting of TEC and tertiary education organisation sector representatives. The working group will address some of the key themes raised in the responses from the consultation and pilot this work to uncover opportunities and constraints in the implementation planning process. This collaboration is intended to ensure that the outcome is both achievable, effective and links back to the Information for Learner's project intent.

Across government, a cross-agency work stream is underway between the relevant educational agencies including the TEC, New Zealand Qualifications Authority, Ministry of Business Innovation and Employment, Ministry of Education, Careers New Zealand and Ministry of Social Development to explore how information and data across the relevant agencies could be better provided to learners to ensure that it is both used and useful in their decision-making process.

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