

NCEA | Taumata Mātauranga ā-Motu Kua Taea

# NCEA Review 2018

## Connections with pathways into further education and/or employment

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NZQA requires each qualification registered on the New Zealand Qualifications Framework to be regularly reviewed so that the qualification remains useful and relevant and continues to meet the needs of the learners, industry and stakeholders for which it was developed. NCEA is scheduled to be reviewed by December 2018.

This paper provides information on the connections between NCEA | Taumata Mātauranga ā-Motu Kua Taea<sup>1</sup> and the pathways into further education and/or employment including:

- connections between NCEA attainment and employment or further study causes of poor transitions to employment and further study
- the literacy and numeracy skills of NCEA holders.

It also raises further questions for consideration.

### Focusing question

How well does NCEA prepare students for tertiary study, employment and further education, and how can we strengthen this?

Holders of NCEA levels 1, 2 or 3 have a range of destinations, including:

- further education at school/kura and in tertiary education, including industry training
- part time or full time employment, including industry training
- not being in education or employment.

<sup>1</sup> Taumata Mātauranga ā-Motu Kua Taea is the Māori name for NCEA. "NCEA" is inclusive of both Māori and English medium.



## People with NCEA levels 2 and/or 3 are more likely to be employed or in further study

School background and achievement are strongly related to the extent to which young people are employed after leaving school/kura. More young people with NCEA level 2 or higher are employed by the age of 23 compared with those without NCEA levels 2 or 3. With each level of NCEA, there is a steady increase in the proportion employed.

Nearly half of all school leavers have NCEA level 3. Having higher levels of NCEA provides students with more opportunities such as further study. Achieving greater success at school/kura also gives students more confidence to attempt further study (Engler, 2011)<sup>2</sup>, and these students are more likely to have greater success in subsequent study.

People with lower qualifications are less likely to undertake work-related training or professional development.<sup>3</sup> In order to create better transitions for learners moving from school/kura to employment, changes have been made. For example, Vocational Pathways offer options for students to choose courses at NCEA levels 1, 2 and 3 and develop pathways to further study, training and employment. It shows students how their learning and achievement are valued in the workplace, by aligning their learning to the skills required for working in different industries. As Vocational Pathways were only implemented from 2013, it is too early to evaluate how they contribute to long-term student outcomes.

## ... but NCEA attainment does not guarantee successful transition to further study or employment

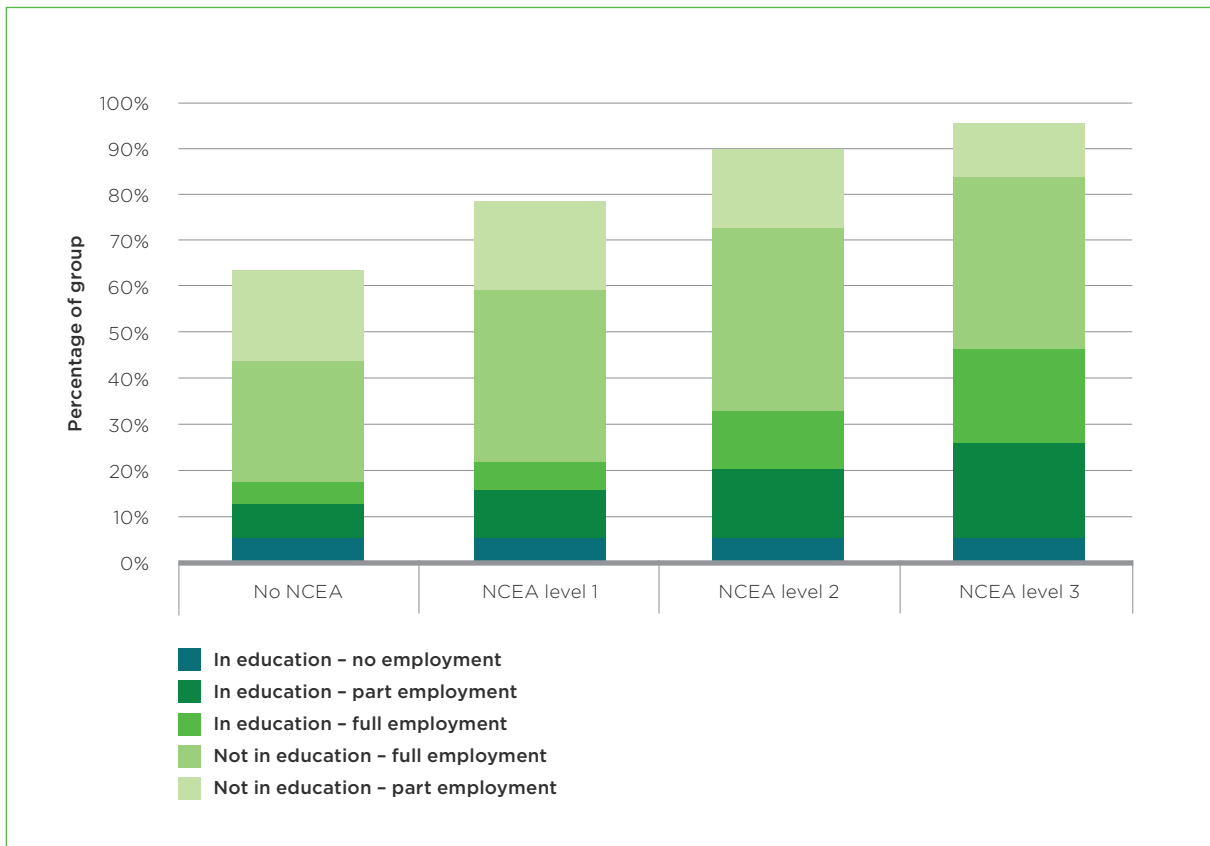
Success in NCEA does not guarantee future life success. While young people with no NCEA qualifications are much less likely to be in education or employment than those with NCEA qualifications, some NCEA holders are not in education or employment. Other NCEA holders repeat study at lower levels of the qualifications framework rather than progressing to higher levels of study. This may suggest that there is a lack of clarity or understanding by stakeholders of the capabilities of NCEA holders. Alternatively, students may deliberately seek to broaden their skills. Students may make particular choices because of external factors, for example, the available opportunities.

Figure 1 (page 4) sets out participation in employment and education of the 1991 cohort at age 23, by the highest NCEA level.

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<sup>2</sup> Engler, R. (2011). *School's Out - What Next?* Ministry of Education.

<sup>3</sup> Ministry of Education and Ministry of Business Innovation and Employment. (2014). *Skills and Education: Survey of Adult Skills (PIAAC)*.

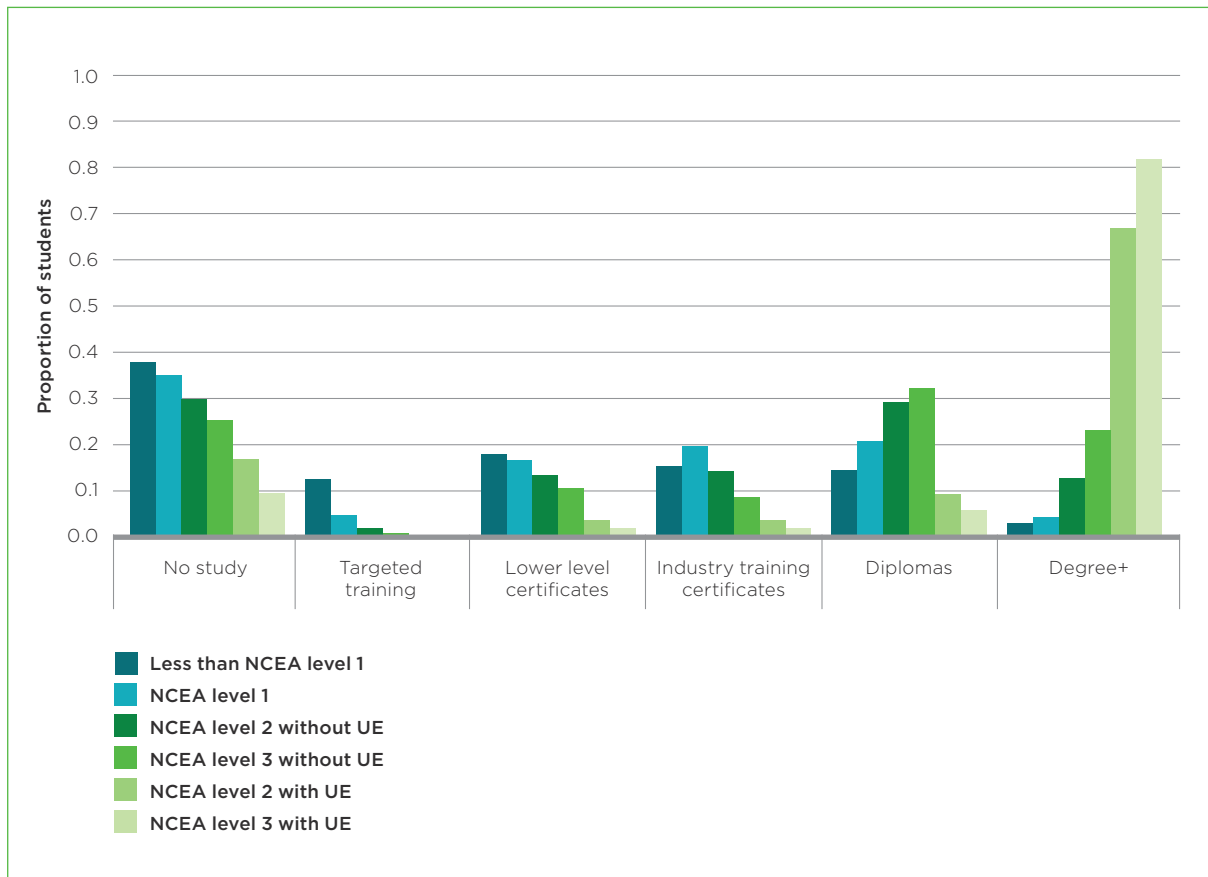


**Figure 1:** Employment and education participation of 1991 cohort in New Zealand at age 23, by highest NCEA level<sup>4</sup>

<sup>4</sup> Earle, D. (2016). *Labour Market Outcomes of Skills and Qualifications*. Ministry of Education.



Figure 2 sets out the proportions of students in each post-secondary activity for six school achievement categories (from having at least some NCEA credits and using the highest level of attainment).



**Figure 2:** Proportion of students in post-secondary activity for six school achievement categories<sup>5</sup>

**Note 1:** Diploma-level study includes certificates at level 4. Industry training includes Modern Apprenticeships.

**Note 2:** Students with NCEA level 2 and University Entrance who progressed to bachelor's study underperformed compared with those who achieved NCEA level 3 with University Entrance. University Entrance is now linked to NCEA level 3.

## NCEA holders have better literacy, numeracy and problem-solving skills

On average, young people aged 16 to 25 with NCEA qualifications have higher literacy, numeracy and problem solving skills<sup>6</sup> than those with no qualifications. Many people who gain NCEA qualifications go on to further study, which further develops their skills.

<sup>5</sup> Engler, R. (2011). *School's Out - What Next?* Ministry of Education.

<sup>6</sup> Ministry of Education and Ministry of Business Innovation and Employment. (2014). *Skills and Education: Survey of Adult Skills (PIAAC)*.



Young people with NCEA levels 2 to 3 as their highest level of achievement have slightly higher average skill levels than young people with level 2 to 3 New Zealand national certificates in such areas as tourism or occupational health and safety. Both of these groups have much higher average literacy, numeracy and problem solving skills than young people with no qualifications.

### **... but literacy and numeracy may require further work**

However, research suggests that further improvements to literacy and numeracy support could be considered (for further information, see the “Literacy and Numeracy requirements for NCEA” paper in this series). Recent sector feedback (through New Zealand Qualifications Authority’s University Entrance review) indicated that there are concerns about some students’ literacy and numeracy skills. NZQA is currently reviewing the standards that can contribute to the University Entrance requirements.

## **Issues to consider**

### **What skills and capabilities would employers like NCEA holders to have?**

Some employers require specific skills from NCEA holders, while others prefer generic skills. In some cases, employers also look for people who have similar skills and experiences to themselves. The Pathways Advisory Group<sup>7</sup> has developed an Employability Skills Framework that describes the skills and capabilities required for work, including behaviours, attitudes, beliefs and personal qualities such as self-management and resilience. When recruiting staff, employers look for employability skills, alongside educational achievement, work experience and essential skills such as literacy, numeracy and ability in ICT.

### **What skills and capabilities would tertiary education organisations like NCEA holders to have?**

Tertiary education organisations have differing expectations about the skills and capabilities required of NCEA holders, depending on the level and nature of the study. Universities and other tertiary education providers offering degree-level study want learners to be well-prepared for the next level of education. Expectations about student capabilities have changed with students now being expected to use more primary information sources in their work.<sup>8</sup> However, the recent review of University Entrance retained the current requirements.

The higher the level of NCEA attainment, the greater the likelihood of a student passing most of their courses in tertiary education. While academic achievement is the strongest predictor of first-year university performance, not all higher-achieving students perform equally well at university/wānanga. Some with lower school achievement outperform those with higher school achievement.

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<sup>7</sup> The Pathways Advisory Group comprises employer and industry representatives, educators, government agencies and industry training representatives.

<sup>8</sup> Hipkins, R., Johnston, M., & Sheehan, M. (2016). *NCEA in Context*, Wellington: NZCER Press.



Engler (2010a)<sup>9</sup> found that lower performing students from low decile schools/kura performed better in their first year of degree studies than similar students from high decile schools/kura. Engler suggests that among lower-achieving students, the educational performance for those from low decile schools/kura is underestimated and overestimated for those from high decile schools/kura.

Engler (2010b)<sup>10</sup> found that the likelihood of a student studying at bachelor's level depended on:

- how well the student performed at school/kura (the relative number of Excellences and Merits compared with Achieved and Not Achieved results)
- the student's ethnic group (more Europeans and Asians studied at a bachelor's level than Māori or Pasifika)
- the socio-economic status (decile) of the last school/kura they attended
- whether they progressed directly to tertiary education after leaving school.

Engler (2013)<sup>11</sup> considered those studying for one-year non-degree qualifications and found that if a student's prior school attainment and their ability are taken into account, students with higher school attainment are more likely to complete a one-year non-degree qualification than students with lower school attainment. This is true for both full time and part time students. Students with higher school achievement are also less likely to drop out. However, full time and part time students of average ability with the same level of school attainment have a similar likelihood of finishing these qualifications in their expected year of completion – year one for full time students and year two for part time students.

While further foundation level education should not be necessary for NCEA level 2 or 3 holders, learning gaps sometimes need to be addressed. The Tertiary Education Commission applies a funding condition for levels 1 and 2 foundation education to ensure that NCEA holders don't unnecessarily repeat their learning, as some foundation learning levels are prerequisites for particular courses. This may affect study choices and how tertiary education organisations respond to prior achievement.

## **How do the expectations of NCEA holders link to the careers information they receive?**

The Government provides information to students on study options, on outcomes from study and on career information through a range of products including Occupation Outlook and the Careers NZ portal (now managed by the Tertiary Education Commission).

Consideration needs to be given as to how the expectations of NCEA holders, regarding their qualifications, can link in with careers information provided around pathways into further study and careers.

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<sup>9</sup> Engler, R. (2010). *Academic Performance of First-Year Bachelors Students at University*, Wellington: Ministry of Education.

<sup>10</sup> Engler, R. (2010). *School Leavers' Progression to Bachelors-Level Study*, Wellington, Ministry of Education.

<sup>11</sup> Engler, R. (2013). *Staying the Course: School Leavers Completing their First One-Year Non-Degree Qualification*, Wellington, Ministry of Education, 2013.



## **There is a lack of clarity about the different expectations for NCEA levels 1, 2 and 3**

Currently, all three NCEA qualification descriptions are similar and do not appear to be well-connected to the New Zealand Qualifications Framework's expectations about the knowledge, skills and attributes for different levels of study. People actively engaged in NCEA, such as parents and caregivers with children undertaking NCEA, generally understand the nature and expectations of each NCEA, but for many others there is still confusion.

## **Given that some NCEA holders have poor experiences, what common characteristics need to be addressed?**

Recent research has identified students at level 4 and above who are at the greatest risk of not transitioning well, including through non-participation and underachievement, into tertiary education.

Unsurprisingly, the two greatest risk factors for non-participation in higher-level study by age 20 are having low or no school qualifications or lower prior education performance in school-level qualifications. However, even among young people with similar levels of prior education achievement, some face higher risks of non-participation. Additional risk factors include:

- having one or more children
- having parents with low or no tertiary education qualifications
- having had a period of being Not in Education, Employment or Training (NEET) or not being in full time employment while aged 16 to 18
- having attended a school/kura with a low NCEA level 2 attainment rate
- being Māori.

There is also a strong relationship between school-level attainment and first-year course pass rates at level 4 and above. Low prior education performance and lower attainment of school-level qualifications are significant risk factors for passing fewer than 85% of first-year courses at levels 4-7 and at a bachelor's level. Other significant risk factors for underachievement at level 4 and above include the following:

- Tertiary education-related factors, such as field of study and type of educational institution, which identify the additional risk of passing fewer than 85% of first-year courses at levels 4-7 and at a bachelor's level.
- If other factors are taken into account, young Māori and Pasifika students are less likely to pass 85% or more of their first-year courses at levels 4-7 and at a bachelor's level.
- Passing fewer than 85% of first-year courses is the most significant risk factor for not remaining in study and not completing a qualification within three years (levels 4-7) or four years (bachelor's).