

**Tertiary Education
Commission**

Te Amorangi Mātauranga Matua



Changing to Cohort- based qualification completion and retention rates

Consultation document

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Introduction

This document seeks feedback on proposed changes to the methodologies to calculate two of the educational performance indicators (EPIs) – the qualification completion rate and the retention rate.

These changes apply to tertiary education organisations (TEOs) that receive student achievement component (SAC) or Youth Guarantee (YG) funding. Alongside this work, we are also working with industry training organisations to address similar issues.

What is in this document

The main document includes seven key proposals to change how we measure the qualification completion rate and the retention rate. We also provide information on how these rates would be calculated for different register level grouping and different kinds of study (e.g., full-time versus part-time study).

Appendix 1 describes the more detailed business rules if these proposals were adopted and examples of how the rules would be applied.

How and when to provide feedback

We welcome your feedback on the proposals in this document. We have created an [online form where you can do this](#). Please provide feedback **5pm Friday 22 January 2016**. If you have any questions, please contact the project team on tecinvestment.approach@tec.govt.nz or contact the Sector Helpdesk on 0800 601 301.

Why we need better performance measures

We know that there are problems in how the qualification completion rate and the retention rate are currently measured. The qualification completion rate, in particular, often generates rates that are not meaningful. For example, in 2014, 26 TEOs had qualification completion rates over 100%.

Good performance measures and how the proposals were developed

We recognize that good performance measures should:

- reflect what is educationally important;
- support accountability for *continuous improvement* rather than compliance;
- enable decision-makers to better understand how to improve social and economic outcomes for learners and NZ;
- be simple and transparent – performance information that has clear meaning and be calculated in a simple way;
- be timely – performance information that readily enables decision-makers to improve performance;
- be auditable – performance information that can be analysed; and
- be consistent and comparable – performance information that enables meaningful comparisons across providers, jurisdictions and time.

We looked at other jurisdictions to identify examples of good practice, and to develop a methodology that allows TEOs to compare their performance against their international peers.

We also engaged with representatives from each sub-sector to get their feedback on a general approach (e.g., cohort-based methodology) and to work through the details in using this approach.

When we will be introducing the changes

We would like to have agreed changes by the end of the year, and to produce performance information in the middle of next year (2016).

For the 2017–2018 plans, this information will inform our engagement with you on your performance and setting performance targets, particularly in cases where the new methodology points to significant performance issues.

We would like to publish performance information as soon as we are able to analyse and test the new performance information with the sector. Once we have collated feedback, we will be making decisions about when we will be able to implement any changes for publication and performance linked funding.

Cohort-based methodology – qualification completion rates

We propose moving to a cohort-based methodology for measuring qualification completions:

Proposal 1: Use a cohort-based methodology for the qualification completion rate

Sub-sector representatives strongly supported moving to this kind of methodology because it provides a simpler and more transparent view of a TEO's performance. It is also standardly used in other jurisdictions, and therefore allows TEOs to benchmark their performance against their international peers.

On a cohort-based methodology, a qualification completion rate measures how many learners of a starting cohort go on to complete a qualification after a given amount of time.

DEFINITION

The qualification completion rate for a given level x at a TEO A in year y =

Total number of learners in the starting cohort for year y who complete a qualification at level x within a given timeframe, divided by

Total number of learners in the starting cohort at level x for year y

EXAMPLE

If there are 100 learners who start at degree-level at a TEO in 2007, and 50 of these learners go on to complete a qualification at degree-level within 5 years (by end of 2011), the qualification completion rate would be 50%.

Rules for the starting cohort

There are different ways in which learners can count in a starting cohort. We propose the following three simple rules to determine when a learner is counted in a starting cohort, which sub-sector representatives supported:

Proposal 2: Use the following THREE rules to determine when a learner is in the starting cohort for a given year

RULE 1: 1ST ENROLMENT AT A TEO IN A GIVEN LEVEL

- A learner counts in a starting cohort in a given year x and level y at a TEO where the learner's first enrolment at the TEO is in year x and level y.

Note: If a learner transfers from TEO A to TEO B in year x after having completed some study at TEO A, the learner will enter into the starting cohort at TEO B in year x, even though this is not the learner's 1st year of study for the qualification. The learner will remain in the starting cohort at TEO A and be counted as a non-completion. We are considering the possibility of providing information in the future on when learners transfer to supplement this information.

RULE 2: THERE IS A SIGNIFICANT GAP (5 YEARS OR MORE) IN ENROLMENTS FOR A LEARNER

- A learner counts in a new starting cohort in a given year and level at a TEO if there is a gap of 5 years or more between the current enrolment and the previous enrolment in that level at that TEO.

RULE 3: SUBSEQUENT ENROLMENT AFTER HAVING PREVIOUSLY COMPLETED A QUALIFICATION AT THE TEO

- A learner counts in a new starting cohort in a given year x and level y at a TEO if the learner has a subsequent enrolment in year x and level y at the TEO following the completion of a prior qualification at the TEO.

Example: If a learner starts and completes a qualification (e.g., level 4 diploma) in 2007 and then enrolls in another qualification, at level 4 or any other level, in 2008, the learner will have been counted in the 2007 cohort at level 4 with a completion, and then again in the 2008 cohort at the level at which they enroll in.

Rule for counting completions

We recognise that learners should have the flexibility to switch qualifications because they sometimes do not know which qualification best meets their needs when they initially enroll. We propose to use a rule that provides this flexibility:

Proposal 3: a learner has a completed qualification if, and only if, the learner completes a qualification at the same level as the qualification the learner started at the beginning of the cohort

EXAMPLE:

If a learner starts a level 7 Bachelor of Arts qualification and switches to and completes a level 7 Bachelor of Science qualification, this counts as a completion at level 7.

Tertiary sector representatives noted that it is also important to recognise cases when learners progress onto qualifications at a higher level, without having completed the qualification, and also cases when learners exit and complete a qualification at a lower level.

For cases when learners progress onto a higher-level qualification, we propose to exclude these learner enrolments from the cohort once they have progressed and include them in the cohort at the higher level in the year that we see in the initial enrolment at the higher level.

EXAMPLE:

A learner starts a level 4 diploma in 2008 and then learner enrolls in a level 5 diploma in 2009 without having completed the level 4 diploma. In this example, the learner will be initially included in the L 4 cohort for 2008 but then excluded from it once we see the enrolment in the level 5 diploma. However the learner will then be included in the L 5 cohort for 2009.

For cases when learners exit out with a lower-level qualification, we intend to provide supplemental information showing the proportion of learners who exit with a lower level qualification.

Cohort-based methodology measuring 1st year retention

Feedback from the sector has also made it clear that there are problems with the retention rate, which currently measures the proportion of learners who are retained in the following year or who complete. This rate is considered not useful because, for shorter qualifications, it duplicates the qualification completion rate, while for longer qualifications, it is often misinterpreted to mean 1st year retention (which is how it is usually measured in other jurisdictions).

We propose to change the focus of the retention rate to measure 1st year retention for longer qualifications – degree-level qualifications and above. This will measure a key momentum point and serve as a lead indicator for completing longer qualifications:

Proposal 4: Use a cohort-based methodology to measure 1st year retention for degree-level qualifications and above

DEFINITION

The 1st year retention rate for a TEO A in year y =

Total number of students in a starting cohort who are still in study at level x in year y+1 at TEO A, divided by

Total number of students in the starting cohort at level x for a given year y at TEO A

RULES FOR STARTING COHORT (DENOMINATOR)

These are the same as the starting cohort rules used for the qualification completion rate.

RULES FOR COUNTING RETENTION (NUMERATOR)

Like the proposed rule for counting completions, we propose to count a learner as having been retained if, and only if, they re-enroll in a qualification at the same level in the year after their 1st year of study.

Calculating rates by register level and types of study

Register levels

We currently present the EPIs using the following register level groupings: 1–2, 3–4, 5–6, 7–8. This approach groups qualifications that are significantly different in size (e.g., a level 7 degree qualification vs. a level 7 diploma) and that have significantly different completion rates on a cohort-based approach.

We propose to use the following register level groupings, which according to the Ministry of Education’s analysis, reflect more meaningful differences in the completion rates between different types of qualification:

- L 1–3 Certificates
- L 4 Certificates
- L 5–7 Diplomas
- L 7 Graduate Certificates/Diplomas
- L 7 Degrees
- Honours & Postgraduate Certificates/Diplomas
- Masters
- Doctorates

Proposal 5: Analyse rates based on the following register-level groupings

While qualification completion rates will be presented in register level groups (for example level 1 – 3), the rates will be calculated at each level and then combined using a weighted average.

Timeframes for measuring rates

The time that it takes for a learner to complete a qualification depends on the size and the level of the qualification. The following table shows when the completion rate at different register levels tends to plateau:

L 1–3	L 4	L 5–7 (dips)	L7 (grad certs, dips)	L 7 (deg)	L8 (hons & pg certs/dips)	L9 (mast)	L10 (doct)
2–3 yrs	2–3 yrs	3–4 yrs	2–3 yrs	5–6 yrs	4–5 yrs	3–4 yrs	6–7 yrs

Proposal 6: We propose to use i) a 6-year timeframe to measure qualifications at degree-level and above and ii) a 3-year timeframe for qualifications below degree-level and Level 7 graduate certificate/diplomas

Rates by full-time versus part-time study

We know that there are differences in the qualification completion rates for full-time versus part-time students, and we intend to calculate completion rates for full-time and part-time study. This requires rules to determine when a student is studying part-time or full-time over the entire course of their study.

Proposal 7: We propose to use the following two rules to determine whether a learner is in full-time or part-time study over the entire course of their study

- **RULE 1:** Within a calendar year, a learner is studying full-time if they study .8 EFTS or more
- **RULE 2:** A learner is in full-time study over the entire course of their study if and only if the learner is in full-time study for all or most of the years of their study. Otherwise, the learner is in part-time study.

EXAMPLE:

A learner studies .8 EFTS in the first three years of their study, but only studies .5 EFTS in their fourth year. The learner counts as being in full-time study because for most the calendar years (3 out of 4), the learner is in full-time study (i.e., studies .8 EFTS or more).

Appendix 1: Detailed business rules and examples

This appendix describes the more detailed business rules for counting learners in the starting cohort and completions. A learner can only be counted once in a cohort at a level in a given year.

Method for calculating the starting cohort

1. The first course enrolment at the TEO in the given level will determine what cohort a learner belongs to.
2. A first course enrolment will be for the 'master' NSN, if the same student has multiple NSNs.
3. The register level of the cohort will be the NZQF level of the qualification included in the first course enrolment.
4. The qualification award category code will be that of the qualification included in the first course enrolment.
5. The year of the cohort will be the year of the course start date of the first course enrolment.
6. A first enrolment cannot be for:
 - a course enrolment for a qualification with a qualification award category code of 25, 37, 90, 96, 97, 98 and 99
 - a qualification that the learner has already completed.
7. A first course enrolment is defined as a course enrolment in a register level (and qualification award category code for level 7 enrolments):
 - that is not preceded by a course enrolment in the same register level (and qualification award category code for level 7 enrolments) for a period of five years. The five-year period is determined using the prior course enrolment course end date and the current course enrolment course start date;
 - or if preceded by a course enrolment within the five-year period there is an intervening qualification completion for that register level (and qualification award category code for level 7 enrolments).
8. If there are enrolments linked to different qualifications at different levels for the same learner in a given year y, the learner should be counted in the cohorts for each of these levels. *Note:* a learner cannot be counted in different cohorts at the same level in the same year.
9. Exclude a learner from a cohort at level x in year y, if there is a subsequent enrolment for the learner at a higher level.

Method for determining a completion

1. Count a completion if it is at the same register level as the qualification that the learner was initially enrolled in
2. Count all completions even if there is no course enrolment with the same qualification code as the completion for the same learner
3. Count all completions even if there is an enrolment that starts after the year that the learner completed the qualification.

Examples illustrating how cohorts are determined

Example	Year n-1	year n	year n+1	Starting Cohort
No previous course enrolments within the last 5 years with different register levels for qual and course		Course enrolment (course L3 (qual code A - L 4))		Year n cohort at L 4
Switch in qualifications at the same level		Course enrolment (qual code A - L 4)	Course enrolment (qual code B - L 4)	Year n cohort at L 4
Previous enrolment with completion	Course enrolment (qual code A - L 4) Qual completion (qual code B - L 4)	Course enrolment (qual code B - L 4)		Year n-1 cohort with completion at L 4 AND also in year n cohort at L 4
Course enrolmmt straddles years			Course enrolment (qual code A - L 4)	Year n cohort at L 4
Gap year in enrolments	Course enrolment (qual code A - L 4)		Course enrolment (qual code B - L 4)	Year n-1 cohort
Concurrent enrolments across different levels		Course enrolment (qual code A - L 4)	Course enrolment (qual code B - L 5)	Year n-1 cohort at L 4 and year n cohort a L 5
Subsequent enrolment in qual after completion with same qual code		Course enrolment (qual code A - L 4) Qual completion (qual code A - L 4)	Course enrolment (qual code A - L 4)	Year n cohort at L4 with completion but not in year n +1 cohort at L 4