
To	Te Poari Mātauranga Academic Board	From	Eric Stone, Lead, Quality Systems, Te Korowai Kahurangi Trude Cameron, Schools Operations Manager
Title	Report on Non-completion data gap analysis	Date	28 May 2020

Recommendation/s

That the Academic Board receive the stock-take of Unitec non-completion data compiled by the Working Group: Non-Completions, and discuss the recommendations for action and provide direction.

Purpose

This discussion item is in response to ACTION-049 Working Group: Non-Completions, 2020-05-06.

This action item followed on from an inaugural meeting of Academic Board Working Group: Non-Completions and discussion on what non-completion data is still needed for the investigation.

Background

The history of this matter stems from a recommendation in the NZQA External Evaluation and Review Report of Unitec Institute of Technology, dated 11 April 2019. The recommendation relates to KEQ2:

Undertake more detailed study into the reasons that prevent some learners from completing their studies and/or returning after year one. Ensure the academic board actively monitors such matters and works on interventions within the purview of Unitec.

Unitec responded to this recommendation that included the following 2019 Academic Quality Action Plan (AQAP) items:

1.2.4 REC 3a: Undertake detailed study on reasons for non-completion

- 1.2.4.1 REC 3a: Identify existing data on non-completion
- 1.2.4.2 REC 3a: Identify gaps in data on non-completion
- 1.2.4.3 REC 3a: Undertake further study and data collection on reasons for non-completion
 - 1.2.4.3.1 Review existing Unitec student data on non-completers
 - 1.2.4.3.2 Use new Student Tracking/Monitoring data in 2020 to track at-risk and non-completers
 - 1.2.4.3.3 Collect further data from recent non-completers
 - 1.2.4.3.4 Collect further data from relevant Support Teams and teachers

1.2.5 REC 3b: Ensure Academic Board monitors this study and works on interventions

This memo supports completion of AQAP items 1.2.4.1 REC 3a, 1.2.4.2 REC 3a and supports Academic Board oversight in 1.2.5 REC 3b.

Findings

Unitec is developing capability in collection of data to understand non-completion. There are currently three institutional wide data sources on non-completion and a range of other sources that can be harvested. The three institutional wide sources – Change of Enrolment (COE) Requests, Non-Completion Dashboard and Learner Outreach Project are discussed below, followed by comments on other available sources of non-completion data.

It is respectfully noted that there may be potential individual staff sources of data collected through team or individual effort as part of academic and other pastoral support. These staff may not consider their actions and data sources are required to be shared for institutional learner analytics.

COE Requests

All student requests to withdraw from a course or programme are submitted electronically through PeopleSoft, either by the Student, or by the appropriate Unitec staff member (APM, Enrolment Operations team) on behalf of the student. The system collects a reason for withdrawing and there is space to include any other useful information in a text box.

We are currently investigating whether it is possible to access this data in a more efficient manner.

Non-Completion's Dashboard

Unitec's existing systematic data collection is sufficient to profile non-completions demographics for the institute, school, programme, priority groups, gender, mode of study, ethnicity, level, entry qualification, prior activity and others metrics for qualification non-completion.

This dashboard is due to be published on 27 May 2020 through Unitec's Power BI portal.

The dashboard contains statistical data on non-completions based on 2019 students EPI data. This dashboard provides insights on which specific subsets of students are non-completers. This information is useful for the targeting and resourcing of intervention strategies. Course non-completion data will be considered for incorporation in the future.

Note: A demonstration *Non-completion Institutional Report* has been completed using this dashboard to show how to interpret the graphs in the dashboard. This is attached as Appendix B.

Learner Outreach Project

Unitec is developing systematic capability in collecting data that will better inform the reasons for non-completions.

This data is currently being collected in spreadsheets as part of the Learner Outreach Project (LOP). Data will be available for analysis in mid-2020.

The Learner Outreach Project (LOP) is an initiative to positively influence an increase in completions by contacting and supporting at risk students. In doing so the LOP gathers data on non-completions.

How does it work?

LOP is a learner-centric system in each School, with central support from Student Success, for 'outreach' and support for learners/students identified as requiring support.

Specialised professional support staff follow up "learners of concern", working closely with teaching teams to identify and establish best approach and support. They also have a responsibility for tracking and monitoring progress of Unitec Priority Groups, in particular Māori and Pacific. The LOP is being piloted in 2020 Semester 1.

What data on non-completions is gathered?

Should an intervention to influence a student not succeed then the record on pastoral care provides an indication for the issue contributing to non-completion. The pastoral support reasons include: Personal/Family, Medical, Mental Health, Financial (Personal), Attendance, Academic Progress, Enrolment/ Study Plan, Employment, Digital Access, Informal complaint, Academic Grievance, Disciplinary, Delayed Start/ Arrival, Visa/ Section 61, Tuition Fees and Refund/ Withdrawal.

Data collection issues

One of the problems with the data collected in the LOP is that currently the data is collected in spreadsheets and is not dynamically accessible for queries and reports. This can be changed at a later date and it is recognised that the agile approach to systematic collection of LOP will benefit the automation and synchronizing of data at a later date.

Other non-completion data

This section recognises other known sources of non-completion data at Unitec. Appendix A: Table 1 - Stock take of data sources on non-completions shows the breadth and depth of coverage of non-completion data. The table includes the COE Requests, Non-Completion's Dashboard and Learner Outreach Project.

As with the LOP other sources of data are not dynamically accessible for queries and reports to more fully contribute to learner analytics.

Recommendations

To be able to fuller develop and understanding the "gap" in non-completion data it is recommended:

1. The Learner Outreach Programme initiative should have an early review including consideration of:
 - cross-analysis with non-completion data held in PeopleSoft or Power BI
 - possibility of linking data to PeopleSoft data
 - academic support and holistic support need to talk to each other
2. Other forms of data collection and processes should be reviewed in conjunction with the review of significant Institutional initiatives and strategies, such as the I See Me Initiatives, to ensure that relevant data is captured to inform change and to systemise the collection of non-completion data.

Attachments

Appendix A

Table 1: Stock take of data sources on non-completions

Appendix B

Appendix B – How to interpret Non-completion Institutional data – A draft report

Contributors / Co-Authors

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People Consulted

TKK insights team

Appendix A

Table 1: Stock take of data sources on non-completions

	Course engagement and completion					Retention	Qualification completion
	Secondary focus		Primary focus area				
Activity	No Shows – “identified within 30 days of the Class Start Date and processed within 60 days of the Class End Date”	Withdrawal before the 10% date (90% refund of fees)	Withdrawal after 10% date (no refund of fees)	AWOL or formal withdrawal – after the 75% date (no refund of fees)	Completed course - did not pass	Cohort-based first year retention rates Programmes with more than 2.0 EFTS and >Level 4	Cohort-based qualification completion.
	Grade – no grade Funding - No funding	Grade – no grade Funding - No funding	Grade =W Fees – no refund	Grade -DNC	Grade – unsuccessful course completion grade		
Prompting patai	What data do we have about students who are no shows?	What data do we have about students who withdraw before the 10% date?	What data do we have about students who are a W grade?	What data do we have about students who are a DNC grade?	What data do we have about students who fail a course?	What data do we have about students who are not retained across Semesters? What do we know about students who fail to meet requirements to re-enrol due to insufficient credits/wrong selection of courses etc?	What data do we have about students who do not complete a qualification?
PeopleSoft Data	Attendance data	Attendance data	PS Stat Report provides demographics of W Grade COE data	PS Stats Report provides demographics of DNC Grade PS Grade report PS withdrawn students report COE data	PS Stat Report provides demographics of W Grade COE data	Graduation report - graduation declines	

For Discussion

Institutional Data		Anecdotal evidence from schools reaching out to students	SEATS data Attendance tracking data Moodle engagement data CEP data	Student finance data	Course survey data Institutional Power BI Data APE/SAC data	TKK missing grades data Complaints & Appeals summary reports NPS data Power BI data	Non Completion's Power BI Dashboard Graduation report - graduation declines
Learner Outreach Project data	Data is collected in worksheets by individual Learner Outreach Advisors and focuses on required pastoral care that gives insight into reasons for non-completion						
What research is underway?							Combined Priority group research project on non-completions
Maori	No shows - Combined Priority group survey on No Show students – survey 1202 students – Data & Analysis to come						Combined Priority group research project on non-completions
Pacific Peoples	No shows - Combined Priority group survey on No Show students – survey 1202 students – Data & Analysis to come						research project on non-completions
International	No shows - Combined Priority group survey on No Show students – survey 1202 students – Data & Analysis to come				Analysis of specific student cohort to check correct study plan to qualification – Data shows students have failed and have not been correctly advised to repeat - progression pathway to completion not correct	Analysis of formal complaint outcome & resolutions leading to non-retention & non-completion	Combined Priority group research project on non-completions Analysis of QCR data 2019 led to identification of large parttime cohort still active in programme – institutional partnership students only expected to completed some courses and not the

For Discussion

							full programme (BBS & BAS)
Under 25s	No shows - Combined Priority group survey on No Show students – survey 1202 students – Data & Analysis to come						Combined Priority group research project on non-completions

Appendix B – How to interpret Non-completion Institutional data – A draft report

Summary of Unitec Non-Completions for the Reporting Year of 2019

This is an Institute level summary only with data retrieved as of 1 April 2020 (data at school, programme and priority group levels are available using the Dashboard filters).

All the visuals are profiles of non-completions for the reporting year of 2019, i.e. 3745 (or 46%) of 8214 enrolments unless otherwise specified. Data used are based on submissions to TEC in January 2020 matched with up-dated non-completions directly from the Unitec data warehouse.

1. Summary – Demographics

- In terms of sheer number, non-completions are mostly of students who are male, under 25 and domestic.

2. Summary – Enrolment Details

- At least 50% of the non-completing students
 - managed to pass 61.5% of the credits they were enrolled in before they stopped studying.
 - were enrolled in only 16.7% or less of the total programme credits and then stopped studying.
- 66% (2470 students) were active for 1 year (2 semesters) or less, i.e. these students stopped enrolling after 1 year or less.

3. Enrolment status

- The impact of programme expiry on non-completion is minimal.

4. High and Low Performers (can be drilled down to programme level)

- High performers: Those with low non-completion rates are those with the smallest enrolments.
- Low performers: Trades & Services and Applied Business are having a significant negative impact on the Institute Qualification Rate because of 1) large student enrolment and 2) high non-completion rate.

5. Age group

- While those in the young and old age groups have higher non-completion rates, the 15-19 and 20-24 age groups have higher impact on the Institute rate because the 2 groups alone make up 62.8% of the total non-completions.

- Male non-completion rates diverge from (are significantly higher than) female ones from age 30 onwards.

6. Age, gender, level, mode

- Regardless of gender, non-completing students have a lower median age than those who completed.
- Study mode is a key influencer – part-time students have high non-completion rates.
- Comparing completion rates and non-completion rates, there is a disproportionately greater number of non-completing females enrolled in Level 7 programmes and non-completing males enrolled in Level 3 programmes.
- Drill down non-completion rate by gender and programme level – Male above 35 have highest non-completion rates for Level 3 programmes; Female 20-24 have highest non-completion rate for Level 7 programmes.

7. Age and Ethnicity completion and non-completion

- New Zealand Europeans are the only ethnic group with a higher median age for non-completions as against completions. This group displays a characteristic that is the reverse of the general age median trend for Unitec.
 - Drill down one level – this is fuelled by the male group only
- Filter by % of Credits Passed of Total Credits Enrolled to 0 % only, i.e. those who did not engage at all, the non-completions have a median age of <25 regardless of ethnicity.
- Filter by Applied Business, both New Zealand Europeans and Māori have a higher median age for non-completions. The median age gap between non-completions and completions for the Chinese ethnic group is 10 years.

8. Median Age and Ethnicity by School

- Applied Business has a disproportionately large group of non-completions from young Chinese students (with a median age of 20).
- Trades & Services has a disproportionately large group of non-completions from middle-aged New Zealand Europeans (median age = 30).
- For Computing & Information Technology, non-completions are evenly distributed among different ethnic groups, but New Zealand Europeans tend to be younger than those of other ethnicities.
- Filter by % of Credits Passed to get only those who passed 0 credits, i.e. who did not engage at all – the Pacific students were generally young for each school (highest median age at 26 in Healthcare & Social Practice)

9. Credits Distribution

- 939 students (or 25%) passed 0 credits. This included those who attempted and failed all credits and also those who did not engage at all i.e. who did not attempt even the first assignment.
- Click on 2384 in the top right hand visual to get only those who made an attempt to engage (i.e. who have zero non-completed credits), at least 50% of them have passed all the enrolled credits (showing 100% as the median in the top middle visual) but these students still stopped studying.
- Click on 1320 in the top middle visual to get only those students who passed all the courses they were enrolled in (which represent 35% of all non-completions). At least 50% of those students have already passed 25% (median) of the Total Programme Credits but still gave up.

10. Highest Secondary Qualification Overview

- Students with overseas qualifications constitute the greatest group of non-completions, but the overall non-completion rate is not high (lower than the median).
- The non-completion rate is fuelled more by NCEA2 Sixth Form Certificate and NCEA1 School Certificate as these 2 have a higher than median non-completion rate and relatively large student size.

11. Highest Secondary Qualification by School

- The reason why the overseas qualification group had the greatest number of non-completions is due to a disproportionately large number of Applied Business non-completions.
- Trades & Services topped all schools in both enrolments and non-completions across all qualifications except University Entrance and University Scholarship.

12. Prior Activity Overview

- Wage or salary worker is the group with the greatest number of non-completions
 - Try various filters – to find this only specifically applies to ≥ 25

13. Prior Activity by School

- Non-completions are mainly fuelled by wage or salary workers in Trades & Services and those with prior overseas activities in Applied Business as these groups in the respective schools have a large student size and high non-completions.

14. Credits Passed by Prog Level and School

- The majority of non-completing students passed 25% or less of the total programme credits before they dropped out (stopped re-enrolling).
- Comparing the 2 largest groups (largest circles), non-completing students enrolled in Level 3 programmes in Trades & Services made a greater attempt at earning their credits (median % passed = 25%) than those enrolled in Level 7 programmes in Applied Business (median % passed = 16.7%).

15. Last Secondary School

- Although a large number of non-completions are from overseas secondary schools, the non-completion rate for this category is below the median, hence the rate is fuelled by non-completions from a large number of other schools as each school only constitutes a small proportion of total non-completions.

16-19 Probability tables by priority group

- Probability rates are only statistical calculations based on the 2019 reported data and do not take into account any other circumstantial factors and will change if the intake ratios by different groups change.

Conclusion

- Key influencers include:
 - Study mode (part/full time)
 - Age group (Under 25yrs)
 - Prior activity interacting with school
 - Ethnicity and programme level interacting with age
- Some groups stand out with high non-completion rates and number of non-completions:
 - New Zealand European male wage-earners over 30 enrolled in Level 3 programmes in Trades & Services.
 - Young Chinese students, around 20 years of age, with overseas qualifications enrolled in Level 7 programmes in Applied Business.
- Different interactions between dimensions across schools are observed and so analysis by school and priority group would be useful.

For Discussion