THE STARPATH PROJECT

STARPATH PHASE 3

FINAL REPORT

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THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

EDUCATION AND SOCIAL WORK
STARPATH | TE ARA WHETŪ

This report is a synthesis of all research carried out during 2016 and 2017 as part of the Starpath Project. This includes observations of two and three-way academic conversations, and an analysis of the experiences and perceptions of the school leaders, teachers, students, and whānau interviewed or surveyed.

Table of Contents

List of Tables

List of Figures

Executive Summary

This report presents the findings from Phase Three (2016 – 2017) of the Starpath Project. Phase Three continued to build on the work established by the first two phases of the project (2005 – 2015) and sought to investigate an enduring problem of practice: What will enable more Māori and Pasifika students in schools serving lower socio-economic communities to achieve University Entrance (UE) that allows progression into degree-level study. Phase Three worked with nine secondary schools in Auckland and Northland. These schools had previously participated in the Starpath Project and were familiar with the practices of data tracking, Academic Counselling and Parent/Student/Teacher Conferencing promoted by the project.

Phase Three employed a mixed methods approach, including quantitative analyses of achievement data, and qualitative surveys, observations, interviews and document analyses.

Key findings for schools.

Most students and their whānau had positive things to say about their experiences at school. Teachers and leaders were reflective about their practice and the Starpath team were able to observe a number of exemplary academic conversations. At each stage of the research Starpath provided feedback to the schools. This report presents a summary of the findings from this work.

- **The importance of effective teaching and high expectations**. Many students articulated that effective teachers encouraged them to aim for high achievement, had an individualised approach where possible and gave specific feedback to students about how they could improve their results. However, while high expectations were clearly an espoused theory within schools, our data showed that the accompanying teaching actions were often absent. There are specific characteristics of high expectation teaching that need to be embedded in teaching practice. There must be a deliberate culture within the school that supports every student to reach their potential and meet their aspirations.

- **Authentic whānau and school relationships are crucial.** Authentic relationships between school and whānau, focused on student learning, are a crucial lever enabling Māori and Pasifika student success. It is imperative that Māori and Pasifika students achieve highly at school, without forsaking their identity, language, and culture. Whānau are key in supporting cultural connectedness. Schools need to engage in genuine and enduring partnerships with whānau and community.

- **Effective systems and processes around NCEA and UE are essential.** Starpath continues to stress the importance of effective data utilisation and achievement tracking. While there is some evidence of improvement there needs to be a relentless focus on ensuring thorough checking and consistent practices. The University Entrance Award is a complex qualification and students choosing the UE pathway need specific attention and careful academic counselling to ensure that they have every opportunity to meet all the requirements. It is not just a matter of student subject choice and long-term course planning. Rather, schools must also make efforts to ensure careful curriculum design, enabling timetable structures, regular course audits, and guided review of options and opportunity.

- **Schools need to provide opportunities for students to be inspired.** It is important for Māori and Pasifika students to see university as a 'place for people like me' - a place they can aspire to belong to. Students appreciated the speakers and the visits universities made to their school but all too often this only happened in Year 13. Students and whānau talked about increasing opportunities to be 'inspired early'. Students, particularly those transitioning to university, valued the opportunity to visit universities and to participate in mentoring programmes that included university students 'like them' as mentors.

- **Students need multiple opportunities to learn and achieve.** Students and whānau appreciated the effort individual teachers put in to ensuring students had every opportunity to achieve. This included extra tutoring, further catch up assistance when work was missed, and additional opportunities to experience exam-style assessments. Students also welcomed the efforts schools made to keep their subject options open. This was particularly difficult in small school situations where limited staffing often led to multi-level classes and a reliance on distance-learning options. In the high stakes environment of senior school, it is the responsibility of teachers and middle leaders to make explicit the requirements of each NCEA standard and ensure that students have the opportunity to reach those requirements. It is also important that students have experiences, for example in literacy, that give them the opportunity to take learning to the next level.

- **Effective learners have a high degree of self-efficacy and self-belief.** In the student/whānau interviews there were some strong statements about the power of self-belief and internal motivation. Students talked about ownership of their learning and their responsibility to themselves and their whānau to be academically successful. As students experience success, either individually or as a group, their confidence grows, and they have more motivation to 'stay on track'. It behoves schools to make every effort to establish an environment that supports and enhances student self-efficacy, academic motivation and self-belief.

- **Tracking and monitoring Year 9 and 10 students for UE is important.** It is expected that students entering secondary school 'at' or 'above' curriculum level 4 would be on track for Merit and Excellence endorsements at NCEA Level 1 and 2 and then progress to achieve UE. We report, however, that this expectation is too optimistic. Too often students who are seen as 'doing well' in the early years of secondary school are not given adequate attention. Even in schools that have streamed classes, there is little evidence that talented Year 9 and 10 students were specifically tracked for UE potential in the senior school. It is important that Year 9 and 10 students of potential should be seen as a priority group, and targeted for high quality attainment.

- **Effective data utilisation is crucial for student success.** Collecting achievement data regularly throughout the year is important, but there also needs to be consistent reviews of those data to enable their use in identifying students who are in danger of not reaching their potential. It is vital that students who fail to achieve an Achievement Standard are quickly identified and are given a further opportunity to gain credits. This level of scrutiny requires careful tracking of individuals, including those students seen as high achievers. While attaining UE Literacy is a barrier for some students, it is not the defining hurdle. A substantial number of students who have gained UE Literacy still fail to gain UE. It seems that the gaining of subject credits is the high bar. Aiming for 14+ credits for all students in all subjects is a start and attention is needed to ensure students aiming for UE have subjects that offer 14+ UE approved credits.

Key findings for universities.

The findings presented here relate to student, whānau, and school leader perceptions of what universities do to encourage young people with UE potential into academic study.

Enabling Factors

- **University visits and talks.** Students who have a university path in mind are keen to develop an enduring relationship with a university. They want something more than a one-off visit to their school in their final year. Many students are looking for a relationship sustained over several years, that involves access to a variety of events including visits to the university where they can gain a sense that they will 'fit in'. Students and whānau members were particularly impressed by universities that actively recruited Māori and Pasifika students from Year 10 onwards, and those that communicated critical information to whānau as well.

- **Providing financial scholarships.** Financial scholarships influenced students' decisions about which university to attend. They would like a lot more information about financial scholarships.

- **Cultural affirmation.** Students talked about the importance of feeling that Māori and Pacific students were wanted by the university. They were looking for evidence that their culture would be respected, valued and enhanced in the university setting.
- **Clarity of pathways and a range of course options.** Students and their whānau want to better understand the benefits of a university education. They want to see the potential outcomes and are sometimes looking for very specific course information and training.

Discouraging Factors

- **Financial constraints.** Tertiary study was seen as expensive, often beyond the reach of students from economically deprived backgrounds. For those students without whānau or connections living near the university, the costs of travel and accommodation were seen as prohibitive.
- **Universities not welcoming.** Universities were described as unfriendly and impersonal, and perceived as more interested in making money than supporting learners. Students and their families wanted to know more about the pastoral support services available at university.
- **Negative perceptions of academic study.** There were concerns about what was perceived as the competitive nature of tertiary study, especially when compared with study at school.
- **Concerns about job opportunities post-study.** Students were particularly worried about accumulating debt and not finding appropriate work after study.
- **Insufficient information, concerns about transition and lack of cultural affirmation.** A number of students reported that they did not have sufficient information to feel confident about the transition to university. They were looking for strong support in the transition phase. There was also a suggestion that the universities should take time to make sure parents are informed and inspired about their children attending university. By seeking to form a relationship with the student they are also forming a relationship with the whānau and community.

Major recommendations.

To conclude, the report indicates positive ways in which schools and universities can enhance outcomes for Māori and Pasifika students, particularly those from low-income backgrounds.

For schools:

We encourage schools to continue to develop systems and processes that allow students to thrive in their learning environments. Students must develop independence, be inspired to succeed, and have multiple opportunities to be successful. Schools need to:

- Develop independent learners.

- Develop a school culture that values UE as an achievable 'end of school' goal.

- Assign staff with specific responsibility for tracking achievement.

- Maintain a strong induction programme for new staff and hold focused Professional Learning and Development (PLD) sessions to ensure data utilisation and academic counselling practices are sustained and evaluated.

- Provide opportunities for students to be 'inspired'.

- Ensure consistency of academic conversations.

- Develop authentic relationships with students and whānau.

- Ensure effective tracking and monitoring practices are consistent.

- Provide ample opportunities to learn and succeed.

- Set simple and specific student attainment targets.

We encourage schools to take deliberate action to set high expectations for the Year 9 and 10 students with UE potential.

- 'Spark a light' for university study early.

- Break down negative stereotypes by promoting a picture of Māori and Pasifika students as successful learners.

- Ensure academically advanced students are extended and supported.

For universities:

Students, whānau, and schools were very clear about recommendations for universities. They recognised that university study would not be the same as their learning experiences at school but for those students with degree-level aspirations it is important that they find their place early in the university setting.

We encourage universities to:

- Continue to provide financial support and assistance, particularly for low-income students.

- Ensure effective communication channels between universities, students, whānau and community.

- Connect with schools and students early. Be seen as long term partners not just talent gatherers at the end of the school process.

Introduction

Hāpaitia te ara tika pūmau ai te rangatiratanga mō ngā uri whakatipu

Foster the pathway of knowledge to strength, independence and growth for future generations.

This report presents findings from Phase Three of the Starpath Project. Phase Three continued to build on the work established by the first two phases of the Starpath Project and sought to investigate an enduring problem of practice: *What will enable significantly more Māori and Pasifika students in low decile schools to achieve University Entrance (UE) that allows progression into degree-level study?*

This report is written for the Vice-Chancellor of the University of Auckland, the participating schools, and the wider education community of Aotearoa, New Zealand. Phase Three of the Starpath Project was funded by the University of Auckland.

History of Starpath: Phases One and Two

Phase One: 2005 - 2010

Established in 2005, Phase One of the Starpath Project was funded by the New Zealand Government as a Partnership for Excellence. The financial partnership included the Tertiary Education Commission, the ASB Community Trust, the University of Auckland, the Tindall Foundation, and the West Coast Development Trust. The focus of Phase One was to work with schools to improve the educational outcomes for students, particularly Māori, Pasifika, and other students from low socio-economic communities, who were not meeting the criteria for the National Certificate of Educational Achievement (NCEA) required to progress to degree-level study.

The first year of Phase One involved scoping activity with one school and then the work was extended to two other Auckland schools. These schools were later joined by a further two schools from Northland.

By the end of the first phase Starpath reported the following findings about schools:

- A lack of longitudinal data for goal setting and tracking.
- Unequal access to relevant NCEA subjects and poor understanding of NCEA.
- A lack of evidence-based academic guidance.
- A failure to achieve NCEA Level 2 literacy standards.
- A lack of effective leadership focus on academic achievement.

Phase One established the research base for the scaled work of Phase Two and produced a number of research reports, notably:

- *Targets and Talk: Evaluation of an evidence-based academic counselling programme.* (McKinley, Madjar, van der Merwe, Smith, Sutherland & Yuan, 2009).
- *Stumbling blocks or stepping stones? Students' experience of transition from low-mid decile schools to university.* (Madjar, McKinley, Deynzer & van der Merwe, 2010).
- *Unibound?: Students' stories of transition from school to university.* (Madjar & McKinley, 2010).

Phase Two: 2011 – 2015

In Phase Two, the Starpath Project invited 39 schools (including the original five schools) to participate in a research and development programme designed from the findings of Phase One. The aim was to

research, identify, develop, and deliver a 'toolkit' of strategies to transform current patterns of under achievement. Schools were asked to:

- Establish an evidential database that could be used for school-wide planning and target setting as well as track individual learning patterns.
- Appoint key personnel: a student achievement manager (SAM) to oversee student progress and a data manager to support data utilisation practices promoted by Starpath.
- Track and monitor student progress on a regular basis.
- Establish an academic counselling system (two-way conversations) where each student had a significant adult they could talk to about academic progress.
- Hold enhanced parent/student/teacher conferences (three-way conversations) of 20 to 30 minutes where the academic counsellor would discuss student progress towards learning goals.

In addition, Starpath partnered with the Woolf Fisher Research Centre to upskill teachers in literacy instruction, and the University of Auckland Centre for Educational Leadership to provide leadership support. In 2014, Starpath also extended its work to include an investigation of the patterns of student achievement in Years 9 and 10. This extension was funded by the Ministry of Education.

During this phase Starpath published a number of academic papers, particularly on topics such as opportunities-to-learn, subject specific literacy, data tracking, and transitions to higher education. Teacher resources were also published, notably:

- *Understanding NCEA: A relatively short and very useful guide for secondary students and their parents.* (Madjar & McKinley, 2011).
- *Malamalama I le NCEA: o se taiala pu'upu'u ae sili ona aogā mo tamati o aoga maualuluga ma o latou matua.* (Madjar & McKinley, 2012) (translated by Faimai Pisu Tuimauga).
- *The Starpath Toolkit: an online resource for secondary schools implementing Starpath strategies to raise student achievement.* www.starpathtoolkit.auckland.ac.nz

From the evaluation of Phase Two a number of key findings emerged:

- There were marked improvements in parent/whānau attendance at the three-way conferences, as compared with the 'traditional' parent-subject teacher interviews. Our estimates suggested an overall increase in parent/whānau attendance of about 48 percentage points (from approximately 23% attendance prior to Starpath, to approximately 72% attendance in 2014). Schools indicated that they highly valued the three-way conversations and believed that they had markedly improved home-school information flow, and improved relationships with whānau through better mutual understandings and greater mutual trust.

- Schools appreciated the support provided by the Starpath team around data use, and felt that the practical support provided was helpful for tracking and monitoring of student achievement over time. Starpath schools indicated a need for a continuation of support in maintaining longitudinal data, particularly when there was turnover in the SAM role.

- Student attainment rates increased markedly over time and across NCEA Levels 1 and 2, although to a lesser degree at Level 3. However, attainment rates for the University Entrance (UE) award remained static across Phase Two at around 30% to 40%.

- Students were sensitive to low expectations from teachers – both of themselves or of the community as a whole. Of particular concern for these students was a sense that they and their peers were being 'profiled' into a priority group via the inappropriate (and sometimes public) use of a 'traffic lights' tracking system. Students felt uncomfortable at having their achievement trajectory predetermined in this way, and particularly expressed concerns that having a 'red label' was disheartening and demotivating, especially for a group of students that were already struggling with learning.

- From the literacy observations (of Year 12 lessons in English, mathematics and biology across one year), teachers were observed to increase the amount of literacy instruction provided overall, including extending the length of texts that students were expected to read in a given time-frame. However, there was little evidence of a shift in the amount of 'critical' literacy discussion or instruction, theorised to be important for attainment of UE and success in degree-level study. This may be one reason why there was not a systematic upward shift in the pass-rates of 'literacy rich' NCEA Level 2 achievement standards across the time period.

- Findings from the leadership work indicated that schools were very aware of the barriers and enablers to student success within their own contexts. Perhaps for this reason, schools were found to take a somewhat 'scattergun' approach, in that they often had a variety of both small and large 'interventions' to deal with these issues. As a result, there tended to be a lack of a systematic, cohesive, and focused approach to dealing with one or two key areas of need.

Starpath: Phase Three

Starpath Phase Three set out to work with nine schools in Auckland and Northland to investigate an enduring problem of practice: what will enable significantly more Māori and Pasifika students from low socio-economic schools to achieve UE that allows progression into degree-level study?

Starpath asked the schools to focus on a UE target because:

- The University Entrance Award (UE) is the highest qualification to be gained from school.
- No matter what students' immediate post-school plans are, gaining UE opens opportunities for future study at degree-level and/or employment.
- It is an ambitious target for the students and the school.

To achieve this goal Starpath encouraged schools to:

- Create an ambitious UE target list, based on course opportunities and student aspirations.
- Track and monitor student progress to ensure systems and processes were in place to maintain their achievement.
- Promote high expectations and ensure opportunities to achieve were kept open.
- Ensure students were offered and maintained viable UE courses, including the opportunity to gain UE Literacy.
- Strengthen data capabilities of managers and teachers.
- Track Year 9 and 10 students of UE potential for Merit and Excellence grades at NCEA Levels 1 and 2.

Baseline Achievement Data for Phase Three

In the 39 Phase Two Starpath schools, we saw shifts across 2011 to 2015 in NCEA Levels 1, 2, and, to a lesser extent, Level 3. While there was some variability across schools, shifts in general were quite high. For UE, however, schools generally did not make large improvements to their pass rates across the same time period (see Figure 1 below). For this reason, UE has been the main focus of the Phase Three work.

Phase Two student achievement results in NCEA and UE
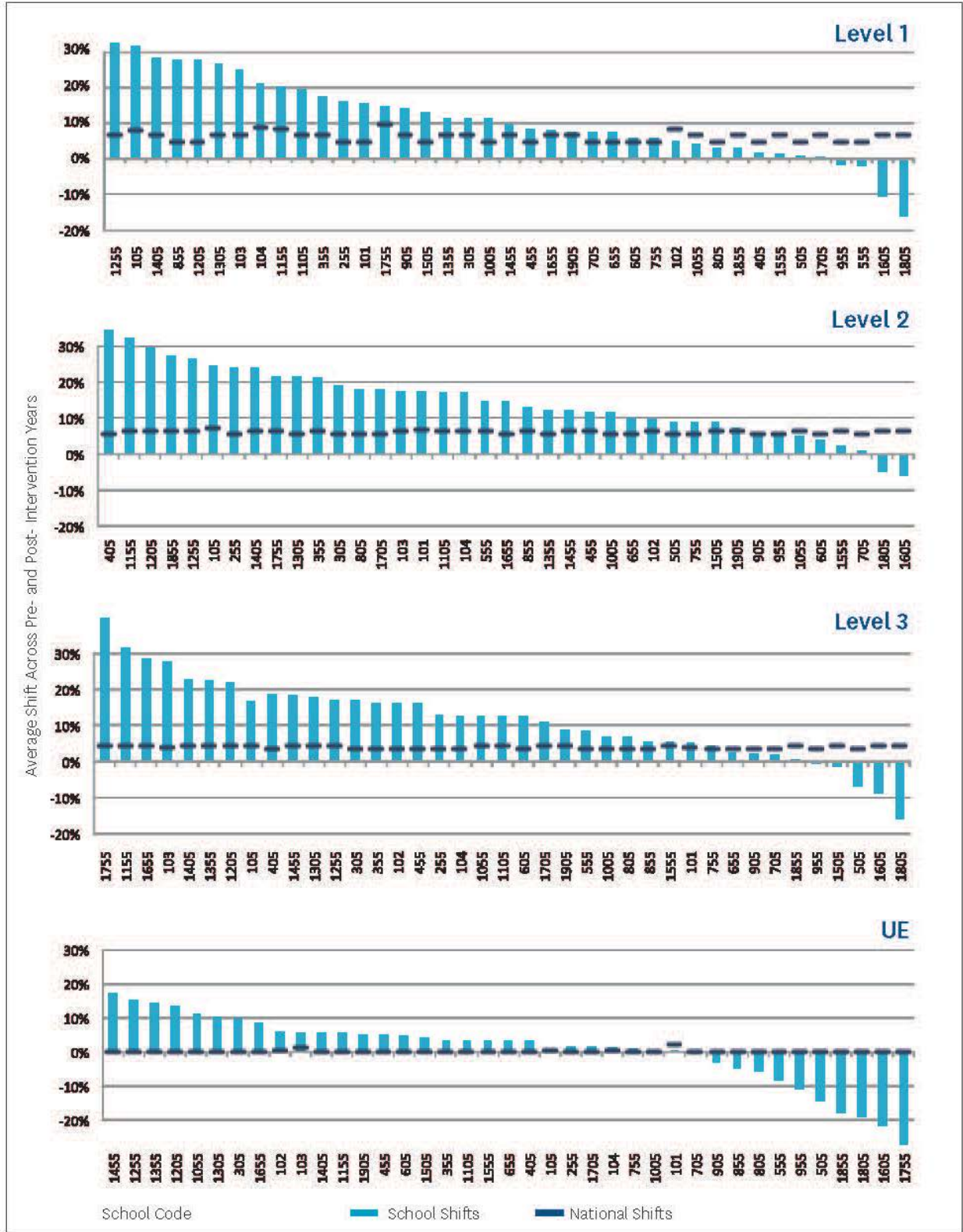
Figure 1: Average shift across pre and post-intervention years for all 39 Starpath schools by level of NCEA.

Selection of Phase Three Schools

For funding reasons Starpath Phase Three was not able to work with all 39 Phase Two schools. The nine schools for Phase Three were, however, selected from Phase Two schools to ensure they were already familiar with the practices of academic counselling (two-way conversations) and parent-student-teacher conferencing (three-way conversations). The nine schools were selected according to the following criteria:

- Had a high proportion of Māori and/or Pasifika students.
- Were based in a low socio-economic community (Decile 1-3).
- Were willing to build a strong data culture to inform student academic performance.
- Were willing to commit to setting a 'stretch' target for UE attainment.

After much discussion the following schools were selected: Aorere College, Bay of Islands College, Dargaville High School, Kaitaia College, Mangere College, Manurewa High School, Northland College, Onehunga High School, and Southern Cross Campus. Within the first year of Phase Three, one school chose not to participate in the research. Therefore the qualitative findings contained in this report relate to eight schools in Phase Three.

Phase Three: Research Methodology

Findings from Phase Two indicated that schools needed much more innovative and intensive support to understand different sources of evidence to inform their cycles of enquiry on student achievement. The aim of Phase Three was to investigate what factors enabled students to succeed at secondary school, and to use this evidence with schools to inquire into teaching and learning. The main focus of Phase Three was to increase the attainment rates at UE for Māori and Pasifika students, using evidential cycles of enquiry.

The specific research questions for Phase Three were:

- What factors enable Māori and Pasifika students to achieve at a high level, and what factors influence their ambition to go on to university study?

- Are schools meeting their UE targets? If not, what barriers and enablers exist for target students to attain UE?

- How are Māori and Pasifika students in Years 9 and 10 identified and tracked towards UE? What interventions are in place if they fall behind?

The data used to answer the research questions and inform the PLD (Professional Learning and Development) came from eight sources. A summary of the data sources and the total number of individuals that participated is provided in Table 1 below.

Table 1: Summary of Research Measures

Measure	N Schools	N Individuals
School practices survey	8	317
Observations of academic conversations (teachers and students)	3	39
Observations of academic conversations (teacher, student and whānau)	9	82
Interviews with students and whānau (70 interviews)	8	125
Interviews with school leaders	8	49
UE Literacy audits	6	N/A
Student achievement data	9	2449
Meeting minutes and documentation	9	N/A

Each of the research measures are described in more detail below, together with the specific aim or objective that each measure sought to describe. The findings from each research measure were sent to participating schools; including findings for each respective school, as well as an aggregate of all Starpath Phase Three schools' findings. These findings were also brought to meetings for discussion to inform next steps for PLD and other actions. Findings were also presented at the 2016 and 2017 Starpath Partners' Days.

Measures

School practices survey.

The purpose of the school practices survey was to gather information from all teaching staff about current school practices around target setting, tracking and monitoring, and course design. The school practices survey was designed to enable Starpath to understand more about:

- The types of data that schools routinely collected.
- How schools tracked and monitored student progress.
- How confident schools were in their ability to collect, analyse, interpret, and use these data to inform next steps for teaching and learning, and course design.

The resulting data were a mix of categorical and qualitative data, incorporating Likert scales (strongly disagree to strongly agree), and sections for comment. Data from the survey were downloaded into an Excel spreadsheet. Pivot tables and pie graphs were used to summarise the categorical data. Qualitative data were analysed (using open coding) and coded into broad themes.

Observations of academic conversations (two-way).

Observations of two-way conversations with teachers and students were conducted to determine the quality of academic conversations that happened in schools, particularly for Māori and Pasifika students who intended on pursuing a UE pathway. To this end, we observed some of the academic conversations between teachers and students. Observation notes were recorded by hand, using a purpose-built observation tool (a copy of the tool is provided in Appendix A). The observation tool was designed to capture evidence about academic conversations, student agency in decision-making, feedback/feedforward, and course advice.

Data arising from the two-way conversations were manually entered into a Statistical Package for the Social Sciences (SPSS) database for analysis. Report summaries and crosstab analyses were used to

summarise the resulting data, to determine the amount of time spent discussing different aspects of learning (e.g., current achievement, next steps for learning, and goals). Observers were also asked to describe their impressions of the qualitative nature of the conversation (e.g., rapport, relationships).

Observations of academic conversations (three-way).

Observations of three-way conversations with teachers, whānau, and students were conducted to determine the quality of academic conversations, the level of partnership evident between home and school, and the sort of advice and information that were given to whānau of students that intend on pursuing an academic pathway. As with the two-way observations, observation notes were recorded by hand, using a purpose-built observation tool (Appendix A) which also captured parent agency in decision-making, feedback/feedforward, and course advice.

Data were also manually entered into an SPSS database for analysis, including time spent discussing different aspects of school and home-based learning (e.g., current achievement, next steps for learning, and student and whānau goals). Observers were also asked to describe their impressions of the qualitative nature of the conversation (e.g., opportunities for whānau to provide input, ease of communication, rapport, and relationships).

Interviews with students and whānau.

Starpath wanted to find out what Māori and Pasifika students who had aspirations to gain UE, and their whānau, had to say about enablers and barriers to student success at their school. The interviews were semi-structured and asked about student goals and aspirations; the enablers and barriers to achieving them; what influenced their decisions around goals and future options; and what they would change at the school and tertiary level to enable *all* Māori and Pasifika young people to have opportunities to excel.

The interviews with students and whānau were audio recorded (with the permission of all student and whānau participants). Recordings were then semi-transcribed and coded into the overarching themes of 'enablers', 'barriers', and 'suggestions for improvement'. These overarching themes included sub-codes for school-level, student-level, whānau-level, and tertiary-level findings.

Interviews with school leaders.

We also carried out interviews with school leaders. The purpose of these conversations was to find out more about the systems and processes in place for identifying and supporting target Māori and Pasifika

students, as well as to find out more about opportunities for reassessment, and opportunities to learn about scholarships and tertiary study. In each of the eight schools that participated, we interviewed a range of leaders, including Principals, Deans, Heads of Department, Whānau Leaders, and Careers Advisors.

As with the interviews with students and whānau, leader interviews were audio recorded (with the permission of all school leader participants), semi-transcribed and coded into the over-arching themes of 'enablers', 'barriers', and 'recommendations for improvement', then sub-coded for school-level, student-level, whānau-level and tertiary-level findings. Additionally, the interviews were coded for evidence of high or low expectations for student success.

UE Literacy audits.

Partner schools were offered an independent audit of their Level 2 and 3 courses to examine student opportunities to learn for UE Literacy. This audit was conducted for six schools. It involved an analysis of Achievement Standards on offer in each Level 2 and 3 course, whether these could contribute to UE Literacy, and which component they might contribute to: reading, writing, or both. This was followed by a summary of gaps in opportunities to learn for students, namely a list of subjects which could be offering opportunities for UE Literacy at Levels 2 and 3 but were not doing so. Accompanying this work we completed an analysis of the Achievement Standards which contribute to the UE Literacy requirement, and learnt that there were far fewer opportunities in Level 2 subjects for students to gain these credits than there are at Level 3. A summary is provided in Table 2 below.

Table 2: Analysis of Achievement Standards Contributing to the UE Award

NCEA Level 2	NCEA Level 3
46 Achievement Standards contribute to UE Literacy	113 Achievement Standards contribute to UE Literacy
11 subjects contribute	27 subjects contribute
33 standards have reading credits	97 standards have reading credits
28 standards have writing credits	62 standards have writing credits
15 standards have both reading and writing credits	48 standards have both reading and writing credits
25 standards are externals	52 standards are externals
21 standards are internals	61 standards are internals

Results from both the internal school audit of UE Literacy and the analysis of all Achievement Standards available for UE Literacy were presented to senior leaders in the schools. The analysis of the UE Literacy standards is published on The Starpath Toolkit.

Student achievement data.

We requested that schools send through a download of their target students' credit summaries each month. This was used to determine how target students were tracking throughout the year, and as a basis from which to collaborate with schools around processes in place for identifying students' opportunities to learn and gain credits, and where additional supports may need to be provided. Data were provided in comma separated values (csv) and Excel spreadsheets. These data were transferred into a master tracking Excel spreadsheet for all schools, then analysed using pivot tables and other summary statistics. Analyses were shared with schools to discuss practices related to tracking and monitoring, and indicators of achievement patterns.

Meeting minutes and documentation.

Finally, we wanted to capture some evidence about how schools are implementing Phase Three of the programme, and what impact (if any) the implementation of Phase Three had on student outcomes. To this end, the Starpath team (with agreement from schools) kept a record of all meetings held in schools, including decisions made, key action items, responsibilities, and time-frames. These data were qualitatively assessed to gauge programme implementation over time.

Phase Three: Professional Learning and Development

The specific Professional Learning and Development (PLD) aims of Phase Three were to:

- Work as an improvement partner with schools around the UE achievement challenge.

- Work to develop a culture of high expectations for academic success among target students.

- Strengthen the strategies developed with schools in Phase Two; in particular, relating to data utilisation for improvement, by:

  - Lifting expectations and setting ambitious achievement targets.

  - Interrogating student achievement data (including the quality and quantity of achievement credits).

  - Tracking and monitoring student progress.

  - Increasing students' opportunities to learn through enhanced course design.

  - Enriching academic conversations (both two-way and three-way).

Professional learning and development in Phase Three was responsive to schools' needs. Members of the Starpath team delivered PLD in partner schools on a request basis. Common requests for PLD from partner schools were in the areas of academic counselling, including two-way and three-way conversations (usually a refresher for staff), and support in using data for middle leaders/deans. We also delivered presentations on exam literacy, as many leaders in our schools commented early in this phase that their students struggled to pass external exams. In total across the two years of Phase Three, 16 PLD workshops were presented in seven partner schools.

Additionally, Starpath provided four support sessions for students in the areas of exam literacy (Years 11-13) and an introduction to NCEA for students at the beginning of Year 11. Another presentation was also given to parents about UE at one school. A summary of PLD delivered in 2016-17 to Phase Three partner schools is provided in Table 3 below.

Table 3: Summary of PLD provided to partner schools in Phase Three

Presentations to teachers, student achievement managers and leaders	23
Presentations to students	4
Presentations to whānau	1

Phase Three: Findings for Schools

Quantitative Findings for Schools

Overall attainment.

The provisional 2017 UE results obtained from NZQA show a decline in the percentage of students achieving the UE Award compared with 2016, for all Starpath schools except for one which made a slight percentage increase in 2017. Five of the nine Starpath schools were within five percentage points of their 2016 rates, however four schools attained considerably lower pass-rates than they had achieved previously (see Figure 2). As at date of printing, the 2017 national UE attainment rates have not been published, so we are unable to determine whether the Starpath schools' results reflect a shift in attainment rates nationally. All schools except two achieved lower percentage attainment rates than the national decile 1-3 percentage for 2016.
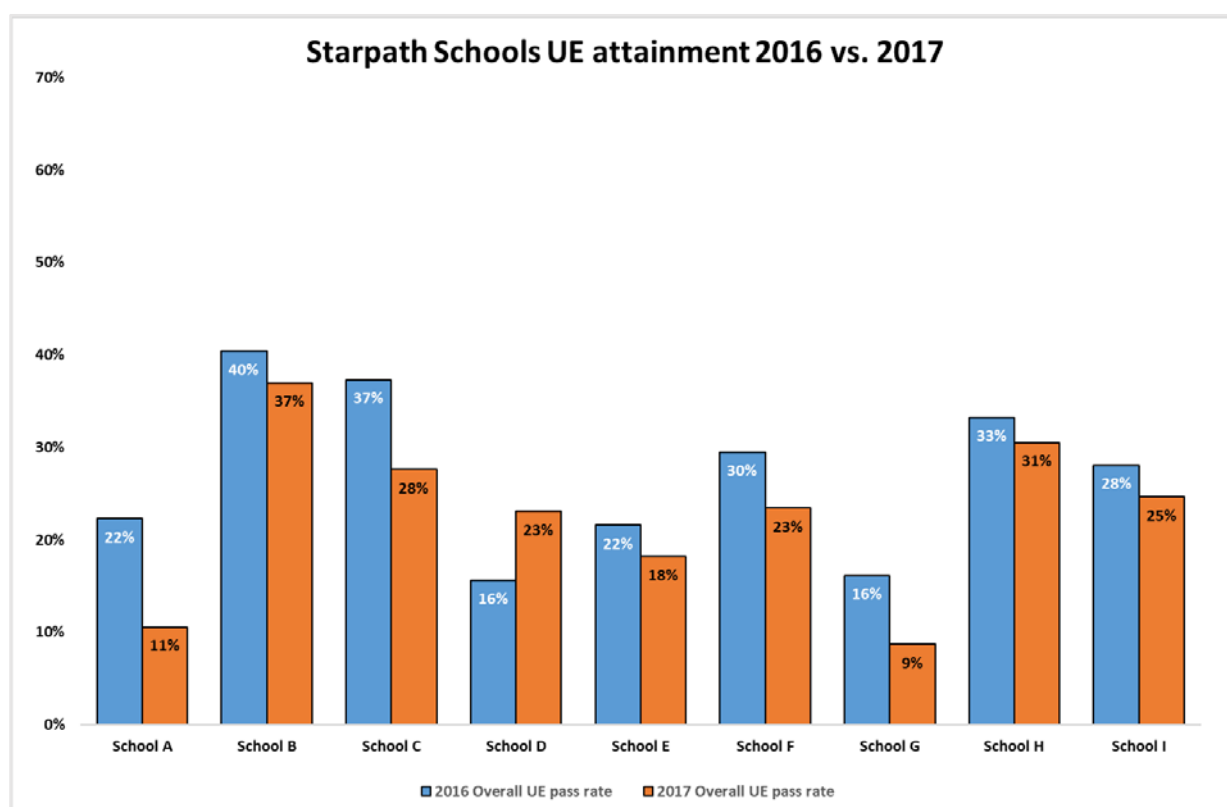
Figure 2: Starpath Schools UE attainment 2016 vs. 2017

For Māori students, the picture is slightly improved; of the seven schools with a sizeable Māori student population (i.e., at or above 20%), two schools increased their attainment rate compared with 2016, and two schools maintained about the same pass-rate as the previous year (see Figure 3). Note that

two schools have very small proportions of Māori students and are therefore not included in this comparison.
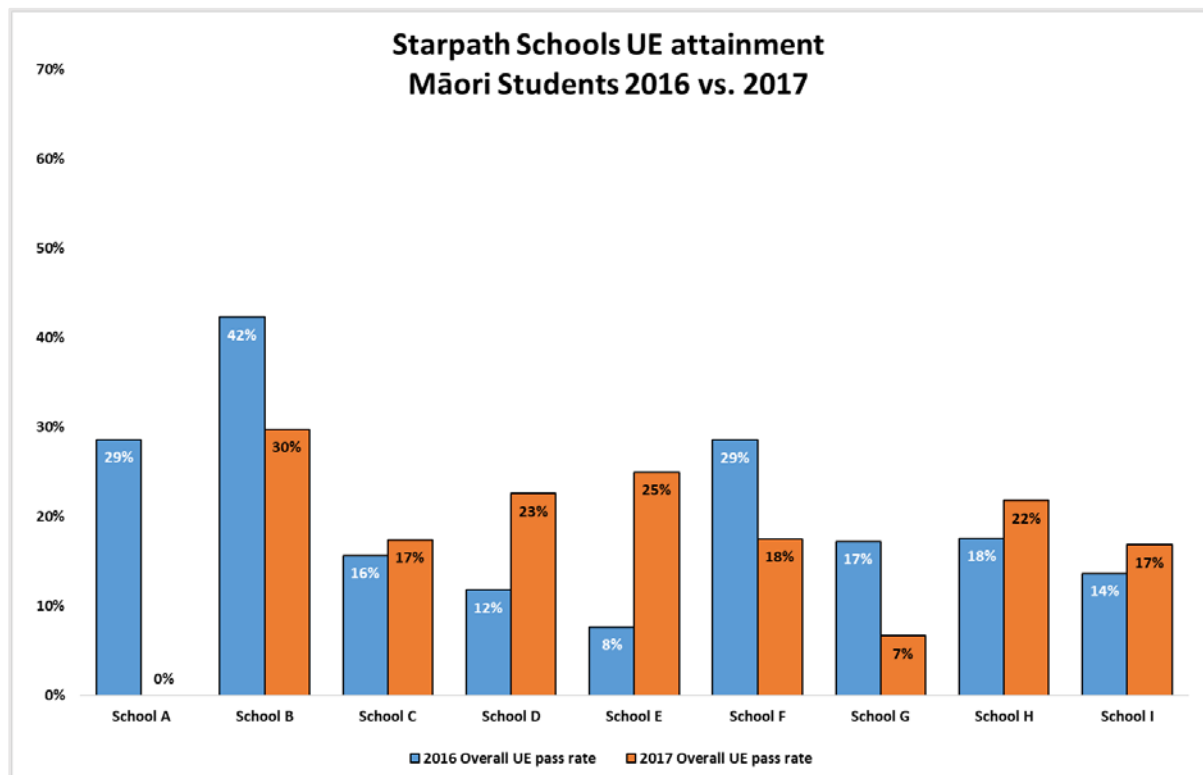
Figure 3: Starpath Schools UE attainment Maori Students 2016 vs. 2017

Unfortunately, of the five schools with a sizeable Pasifika population (at or above 20%), only two schools increased their attainment rates compared with 2016, and the other three schools decreased their attainment rates by more than five percentage points in 2017 (see Figure 4). Note that four schools have a small population of Pasifika students and are therefore not included in this comparison.
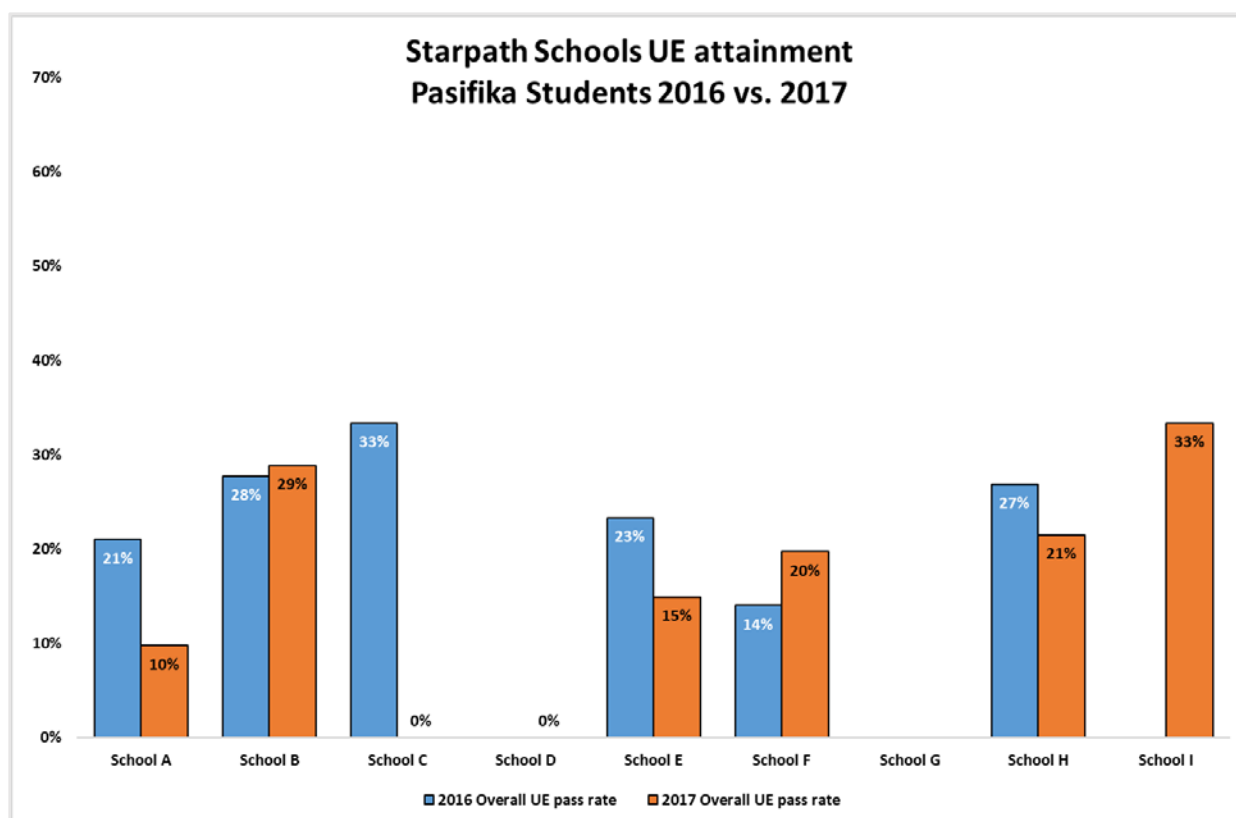
Figure 4: Starpath Schools UE attainment Pasifika Students 2016 vs. 2017

UE attainment and targets.

Schools involved in the Starpath project were asked to nominate 'stretch' targets for UE – in other words, ambitious goals for their UE pass-rates in both 2016 and 2017. The Starpath team theorised that both ambitious targets, and targeted actions, were needed to drive school-wide achievement shifts. Unfortunately, none of the nine Starpath schools achieved their UE targets in 2016 or 2017 - although one school was within five percentage points of achieving their targets in both years. See Figures 5 and 6 for more detail. It is important to note that all schools' UE targets for 2016 and 2017 were at or above the 2016 decile 1-3 national pass-rate of 30%. As such, one explanation for this finding is that the targets chosen by the schools may have been too ambitious, and therefore not achievable within the time-frame. However, we do have some evidence that these UE targets may not have been widely disseminated across the staff within the schools, and therefore may not have been supported by school-wide actions to lift achievement at UE. We ask our Phase 3 Starpath schools to reflect on this information.
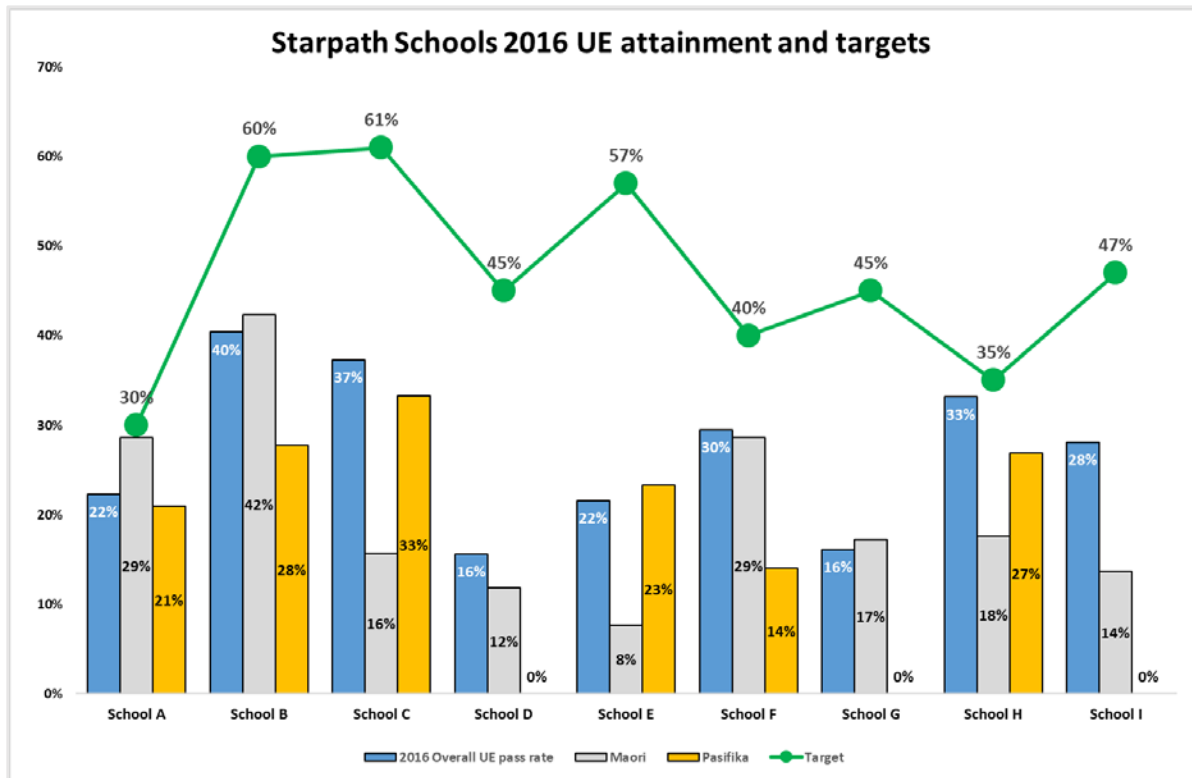
Figure 5: Starpath Schools 2016 UE attainment and targets
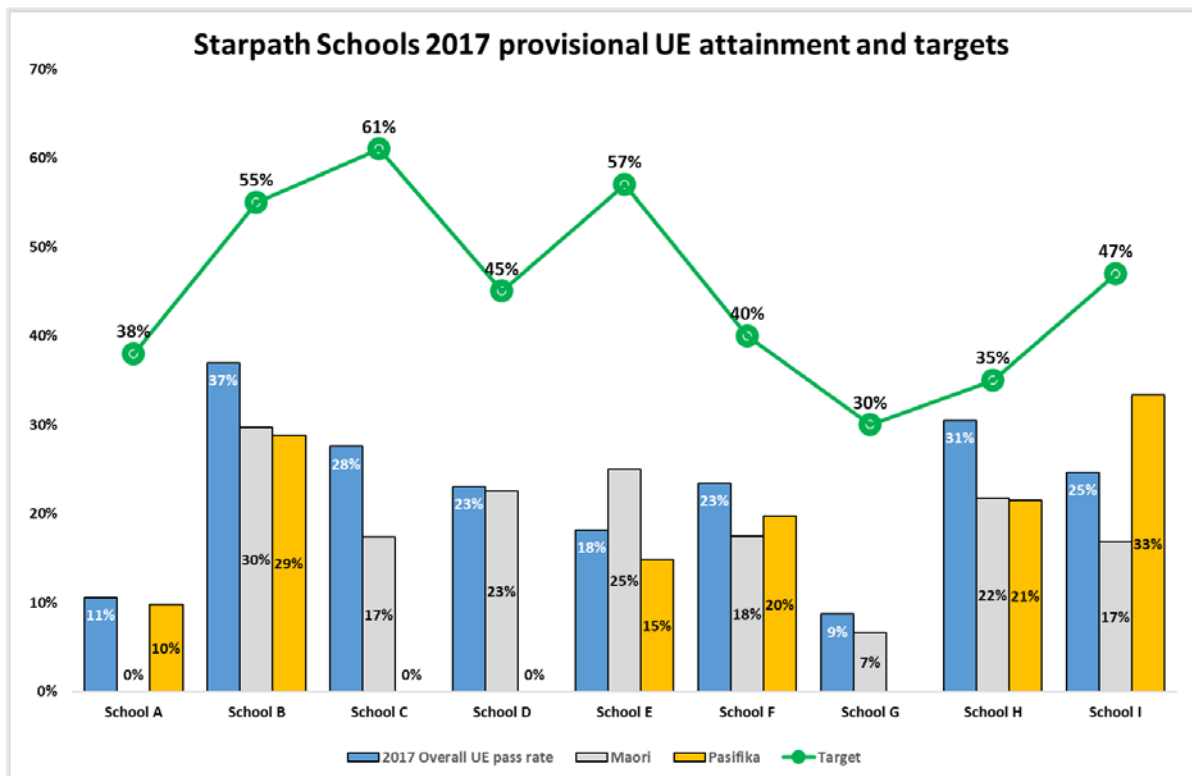
Figure 6: Starpath Schools 2017 provisional UE attainment and targets

Potential barriers to UE.

We asked the nine Starpath schools to provide us with ongoing achievement data for Year 13 target students across 2016 and 2017, to allow us to track their annual progress and identify any potential issues for achievement. The following information relates to the 2449 students from nine schools for whom we received longitudinal data.

As shown in Figure 7 below, there are many potential barriers to achievement of the UE Award, and we acknowledge that navigating the UE Award is complex. However, **our major finding from the 2017 data is that the third subject is a persistent stumbling block for students achieving UE:** 11% of all students (and 17% of Māori and 16% of Pasifika students) did not achieve UE in 2017 **solely because they did not have 14 credits in three approved subjects.** It is important to note that these students met all other UE criteria; they had achieved over 60 credits at Level 3, and had achieved UE literacy. In other words, if these students had taken a third approved subject (and gained 14 credits in that subject), the average passrate would have been approximately at or well above the national Decile 1-3 passrate in 2016. Thus, we strongly encourage schools to maintain practices that will increase the likelihood of these students attaining UE:

- Additional, targeted academic counselling for the UE target group especially those who are not merit or excellence Level 2 overall students;

- Regular tracking, and monitoring of individual student's achievement and progress in each subject and across their timetable as a whole.

Schools also need to expect more accountability from the teachers of UE approved Level 3 courses. Setting targets based on how many students attain 14 or more credits would be the most logical, single target to increase UE attainment within each school. Year 13 is a high-risk year for achievement, as students (usually) only have the one year to attain UE approved credits. Thus, teachers of UE approved Level 3 courses should put extra consideration into offering additional achievement opportunities such as resubmissions, further assessment opportunities, and potentially additional assessments for students, regardless of whether students are on a UE or Level 3 pathway. As soon as an assessment has been attempted and entered, all students should be given 'next steps' toward the next achievement opportunity – and those who have not achieved should be given higher priority.

2017 Potential UE Barriers

	UE attained	Missing UE Literacy	Missing both 60+ L3 Credits and UE Lit	Missing 60 or more L3 Credits	3rd Subject Domain	All UE Pre-reqs not achieved
Pasifika	20%	19%	27%	18%	16%	2%
Maori	18%	13%	34%	15%	17%	2%
All others	45%	11%	16%	15%	11%	2%
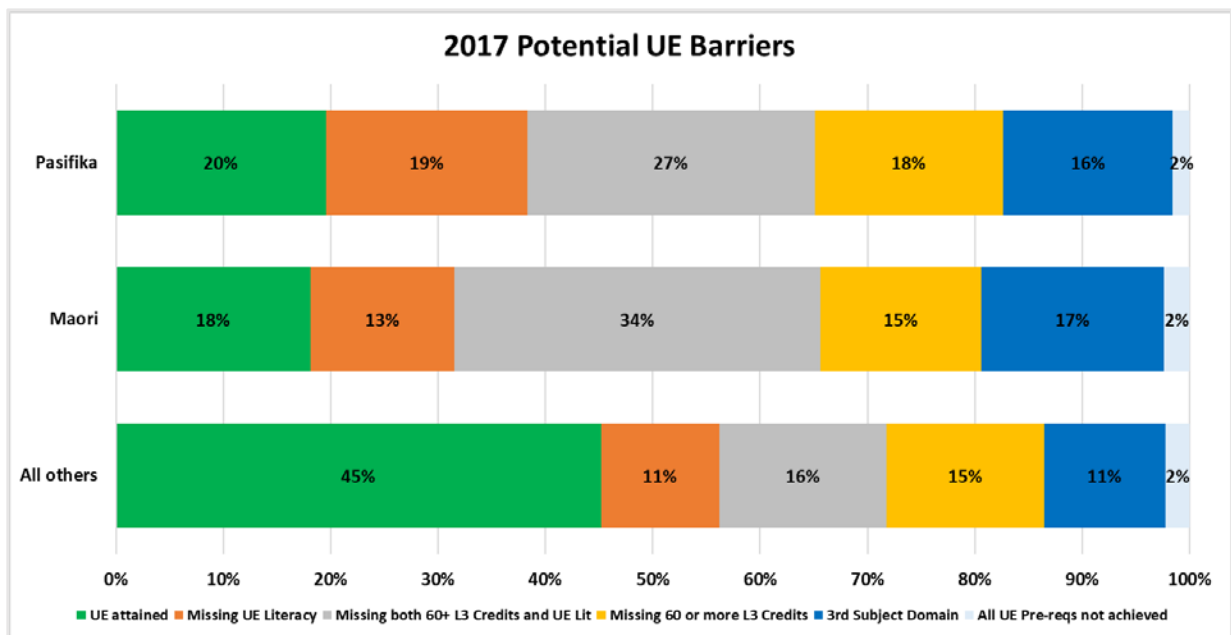
Figure 7: 2017 Potential UE Barriers

Backmapping target students.

Finally, the Starpath team conducted a 'backmapping' exercise to determine what factors predicted success at UE.

Unsurprisingly, very large proportions (79% and 93% in 2017 respectively) of students that attained Level 2 with a merit or excellence endorsement went on to achieve UE. What *is* noteworthy is that only 12% of students that attained Level 2 with 'achieved' gained UE. This indicates that students that 'pass' Level 2 must still continue to push hard to achieve the UE Award. This pattern is even more pronounced for Māori and Pasifika students; only 52% of Māori and 48% of Pasifika students that attain Level 2 with a merit endorsement went on to achieve the UE Award (see Figure 8). Prior achievement is not a guaranteed indicator of success at UE. We therefore urge schools to continue to work hard with all target students by providing additional focussed academic counselling and systematic regular targeting of achievement, further academic counselling opportunities above and beyond their normal academic counselling mentor group, and more intensive and regular tracking and monitoring.
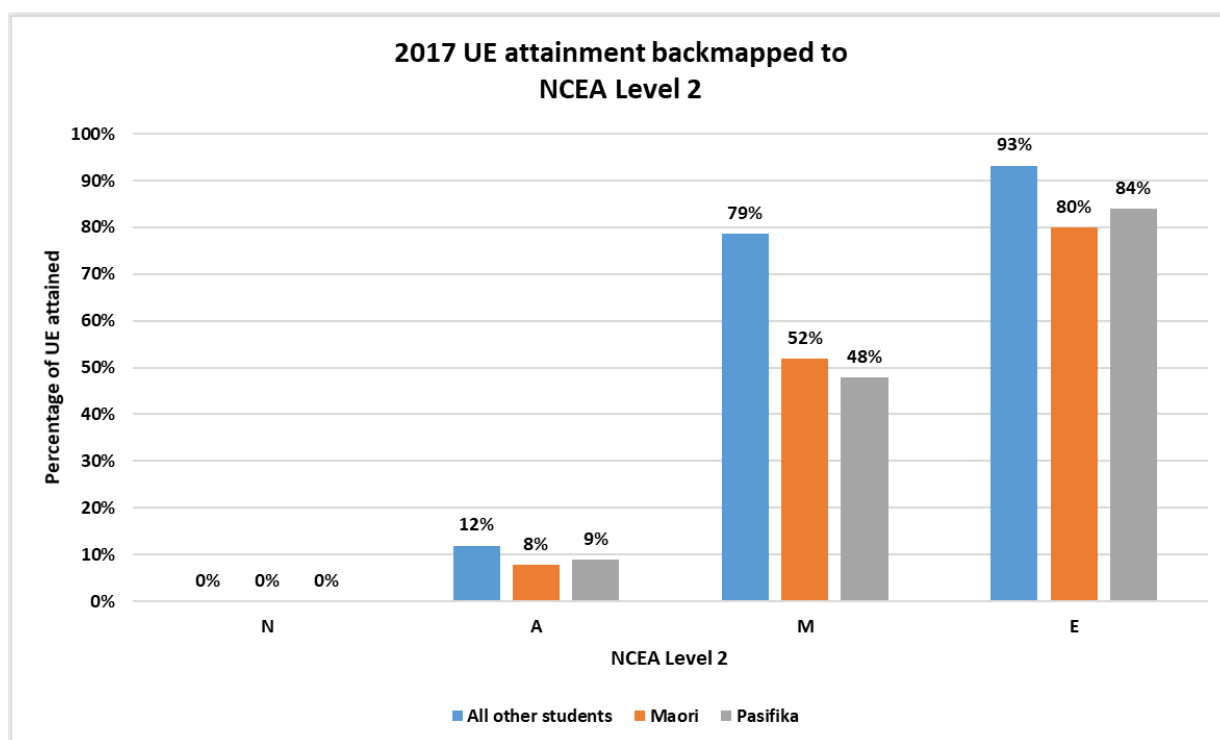
Figure 8: 2017 UE attainment backmapped to NCEA Level 2

We also compared students' Year 9 achievement with their success at UE (for the 503 students for whom we have Year 9 data). Again, unsurprisingly, we found that prior achievement predicts future success. However, similar to the previous analysis, we found that simply being 'at expected' curriculum level is insufficient to guarantee success at higher levels. Only 41% of students at curriculum Level 4 for reading in Year 9 went on to achieve UE - and only 66% of students at curriculum Level 5 and 88% of students at curriculum Level 6 achieved UE. Similar to the previous analyses, the risks are compounded for Māori and Pasifika students, for whom proportions of achievement at UE are even smaller, despite above-average prior achievement. See Figure 9 for details. Again, we urge all schools to work towards having as many students as close to Level 5 as possible by the end of Year 9. We also recommend they closely examine and longitudinally track student achievement data across all levels to ensure all students are on a positive trajectory for success at UE.
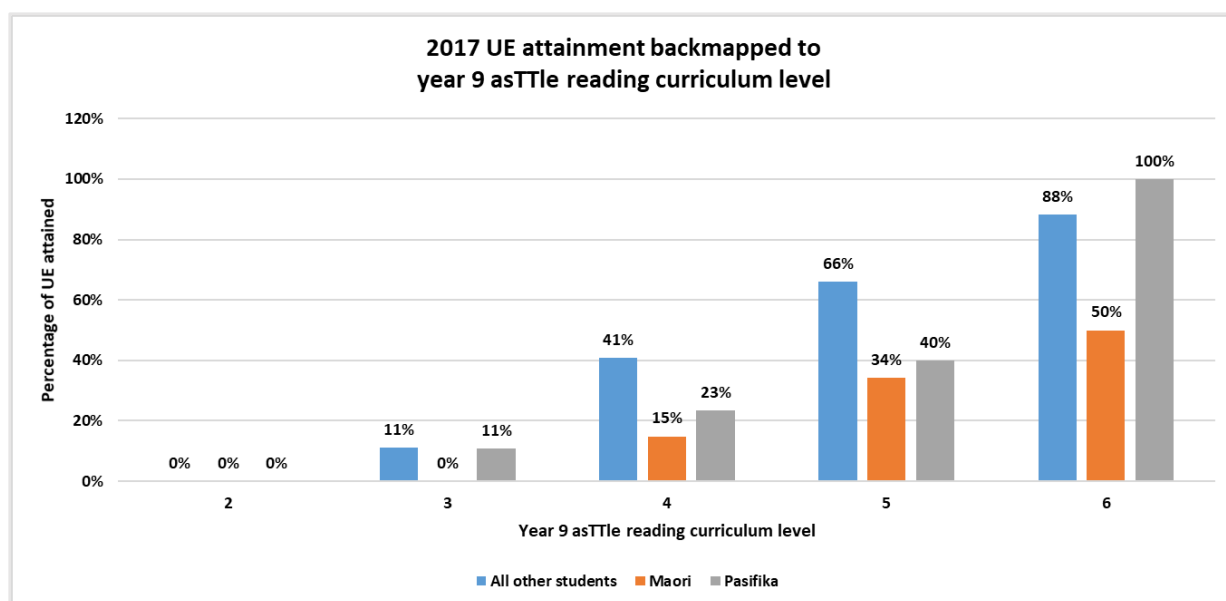
Figure 9: 2017 UE attainment backmapped to Year 9 asTTle reading curriculum level

Qualitative Findings for Schools

The following section presents the eight key findings arising from the Phase Three research. The presentation of the study findings is preceeded by a brief outline of the extant research evidence. The findings are also presented in the order we found to be most often referred to by students and whānau. We acknowledge that these themes are connected and do not stand on their own.

1.   The importance of effective teaching and high expectations.

Undeniably, teacher effectiveness has a significant impact on student engagement, learning, and achievement outcomes. The Education Review Office (ERO, 2014) has stated that the "actions of all staff play a significant role in creating a nurturing ethos in schools" (p. 4). As such, effective teachers should "engage and motivate their students" (Ministry of Education, 2013a, p. 16) and be supportive of students, both academically and holistically (Graham, Meyer, McKenzie, McClure & Weir, 2010). Research from *Te Kotahitanga* also found that teachers who teach smaller groups, and allow time to speak to and work alongside students enhanced student learning (Bishop & Berryman, 2009). Importantly, the extant research shows that effective teachers demonstrate high expectations for all students.

High expectations for all students is a principle that underpins *The New Zealand Curriculum,* and both *Ka Hikitia* and the *Pasifika Education Plan* argue that educational success for Māori and Pasifika

students is enabled by schools having high expectations of them (Ministry of Education, 2007; 2013a; 2013b). Further evidence of the importance of high expectations for these learners comes from *Te Kotahitanga*, where interviewed students, whānau, teachers and principals indicated that high expectations played a significant role in Māori students' ability to succeed (Bishop & Berryman, 2009). However, Rubie-Davies (2015) has argued that simply *having* high expectations will not translate directly into student achievement. Instead she has argued that high expectations manifest "through the learning opportunities that teachers provide, through the psychosocial environment in the classroom and through the interactions that teachers have with students" (p. xiv). Rubie-Davies (2015) has also theorised that there are three core principles that underlie the beliefs and practices of teachers who hold high expectations of all students. The three core principles are: implementing heterogeneous grouping and challenging learning experiences for all students, developing a positive class climate, and implementing goal setting (involving the development of student engagement, motivation, and autonomy, coupled with teacher feedback and monitoring of student progress). High expectations are particularly important for Māori and Pasifika students as research has shown these learners are disproportionately affected by low expectations (Rubie-Davies, Hattie & Hamilton, 2006; St George, 1983; Turner, Rubie-Davies & Webber, 2015).

Additionally, Darr (2005) has argued that successful students drive and are active participants in their own learning. However, our data has shown us that many students have learnt to be passive recipients of course content. Philpott (2009) has argued that whilst many teachers want to teach students in a way that encourages independence and the development of their own learning styles, their ability to implement such a pedagogy is negatively impacted by the pressure for their students to pass their assessments. The result, Philpott (2009) argued, is that many teachers lose sight of developing independent learners, and the "normal mode of lesson delivery … [becomes] 'spoon-feeding' them the content" (p. 35). Moreover, Darr (2005) posited that learners should be self-regulating, which means they should set their own goals, reflect on their strengths and weaknesses, and be strategic when approaching tasks.

Given that Māori and Pasifika learning is often centred on working together, it is important to note that developing self-regulation does not come at the expense of collaboration (Glynn, Cowie, Otrel-Cass & Macfarlane, 2010; Wylie, Moses & Hughes, 2016). Indeed, group work and self-regulation can co-exist. Research has indicated that for Māori students, the failure to develop self-regulation is a marker of ineffective teaching. According to interviews undertaken by Bishop and Berryman (2009) Māori students want to learn in ways that mean they can "monitor their own progress… [and] work towards the constant improvement of their practice" (Bishop & Berryman, 2009, p. 31). Additionally, students in the *Te Kotahitanga* project said that traditional 'transmission' teaching is particularly ineffective as it

precludes "interaction and discussion" (Bishop & Berryman, 2009, p. 31). This highlights that some Māori students want to continue to work in groups and have discussion, but also want to be given the opportunity to be actively involved in their own independent learning.

Rubie-Davies' (2015) research identifies the behaviours and perceptions of teachers with low expectations. She found that low expectation teachers had a negative perception of student achievement, and place extra emphasis on student effort, such as interest and motivation in school work, homework completion and behaviour in class. She proposes that one implication of this is that the low expectation teachers may perceive intelligence as being fixed. Two major consequences stemming from this belief are firstly, that low expectation teachers have a perception that there are limits to what their students can learn and that they as a teacher can have little impact on student learning, and secondly, that "when teachers have high or low expectations for all their students, these class-level expectations appear to have consequences both for student achievement and for student psychosocial beliefs" (Rubie-Davies, 2015, p. 80).

In their study on Māori and Pasifika secondary student and parent perspectives on achievement, motivation and NCEA, Graham et al., (2010) found that students wanted teachers who had high expectations. Students felt that low expectation teachers took for granted what they were and were not capable of, and did not give them agency in their learning and assessment. Additionally, Graham et al., (2010) discovered that the Māori and Pasifika parents had high aspirations for their children, preferred them to gain Merit or Excellence grades and certificate endorsements, and for those who had attended university themselves, there was an expectation that their children would do the same. Student participants in their study talked about the influence of family in a positive way, in terms of being able to reward achievement or impose consequences for negative outcomes. They concluded that "there was a clear sense of community expectations whereby everyone would reach a certain level of attainment" (Graham et al., 2010, p. 173).

Teaching and expectations: evidence from Phase Three.

The importance of effective teachers and teacher practices came through strongly in the interviews with students, whānau, and leaders, and was the most commonly cited enabler to high achievement (80 comments). Effective teacher practices were also evident in the observations of two and three-way conversations.

Effective teachers have high expectations for achievement.

During academic conversations, effective teachers evidenced high expectations for student achievement, through encouraging students to aim for higher goals, and using data as a basis for setting goals. Many student and whānau participants also commented on the importance of high expectations:

"They always encourage you to achieve to your full potential and get higher grades, and offer help if you are struggling with a certain concept."

Student

"I have this one teacher who is good, but annoying. She's forever on my case. It's a good thing, because I actually get the work done. But it's annoying, because I don't always want to do it!"

Student

Leaders understood that high expectations needed to be paired with actions or strategies to bring about higher achievement, and talked about the actions they took in supporting students to reach aspirational goals. For example, one leader said that to support students to achieve Excellence, they would "approach [name's] subject teacher to see if they can work with him to get the Excellence".

"Our aim is not just to get them to pass, but to get them better grades… If a student has passed with 'Achieved', it's just a minor thing that needs to be changed to get them to an 'Excellence'."

Leader

In addition, many leaders talked about aiming for UE, regardless of a student's post-secondary school aspirations:

"University Entrance opens the most number of doors, so irrespective of where they feel they're heading at Year 12-13 [they should still try to get UE]. If they change their minds down the track, they still have those opportunities available."

Leader

Whānau and students also talked about teachers encouraging students to achieve academically. Students referred to subject teachers in particular helping them become engaged and achieve in their subject. For example, one student said that: "My English and maths teachers [enable me to achieve]. Some students might not like English and Maths. But they always remind us why we are here, and what we need to do. They always keep me motivated to keep going and stay focused."

"There is always someone trying to push you to be better… there is all this support".

Student

Effective teachers provide individualised instruction and give specific feedback.

Students commented that clear, individualised instruction and feedback are central to their academic success:

> *"Teachers get down into the detail about what students need to do next."*
>
> *Student*

> *"My teacher… if you don't know something, you can go to her - and she won't give you the evils or anything. She'll just hold you [help you] until you finally get it."*
>
> *Student*

> *"During class, they talk to us individually, give us help."*
>
> *Student*

While this was mentioned as an enabler in the interviews with students and whānau, we did not observe many conversations during the two and three-way conversations that contained specific feedback around next steps for learning. Rather, conversations about next steps tended to be focused on obtaining credits at particular milestones (as opposed to developing skills). However, this is likely to be reflective of the fact that observed conversations were between students and their academic counsellor; rather than with a subject teacher.

Effective teachers set appropriate tasks, and provide appropriate levels of support.

Students and whānau indicated that their engagement with learning was often related to the level of task set, and the amount of support given. Tasks that were too easy were considered "boring", and students liked opportunities to work out problems for themselves, provided support was available if needed.

> *"[Teachers that] keep it interesting, not always saying boring stuff like 1+1=2. They make it interesting, crack a joke every now and then, be funny, then back on track, back to work. And keeping it so it's not too easy, definitely."*
>
> *Student*

> *"One teacher - I don't really like him, but I find him useful - he's just strict. He can be funny at times, but he doesn't spoon-feed us and he gets us to think, constantly. He's always putting us on the spot and I think that's good to get your brain working."*
>
> *Student*

> *"They're always on top of me with my work. Like if I don't hand in on time, they will constantly tell me I need to do things. Pressure - but a good pressure."*
>
> *Student*

Ineffective teachers do not adequately respond to students' needs.

Ineffective teaching practices were the most-cited barrier for student success at school. Students and whānau commented specifically about a lack of individualised instruction and support; teachers who appeared disengaged/bored; ineffective classroom management; non-dialogic teaching styles; unspecific feedback; too much scaffolding (e.g., "babying"); and sarcasm.

> *"My teacher, she teaches to the test and I don't know what I am doing. But the problem is she's so set in her ways she's been teaching like this for so many years. It's frustrating."*
>
> *Student*

> *"Sometimes when they teach, it's like they're not really excited about it. And sometimes they can seem a bit lost themselves."*
>
> *Student*

> *"They really spoon-feed us…"*
>
> *Student*

Leaders in schools were generally well aware of these issues, and comments tended to mirror those made by the students:

> *"The kids are seeing teachers that don't care, that don't go the extra mile, who do boring lessons and who don't inspire them."*
>
> *Leader*

> *"The kids are bored out of their trees. So we need to work on that, we need to work on scaffolding, and showing kids how to step through."*
>
> *Leader*

Ineffective teachers/leaders have low expectations of student potential.

A number of school leaders articulated low expectations of students in their interviews with Starpath staff. Leaders across the schools commented about students' low literacy levels on entry to high school

and the challenge schools face in raising these in order for students to be successful in NCEA. They bemoaned a lack of 'academic substance' in their students in terms of literacy skills, and insinuated that students cannot or do not read and that there are groups of students who do not have the literacy or numeracy skills to be successful in a Level 3 programme of study. Low expectations of student achievement for NCEA and UE were also reflected in comments from leaders, such as "we have children that want UE that are never going to gain it" and "in actual fact for NCEA in general it takes them until about Level 2 for those kids to catch up, and we are supporting them all the time". Additionally, one leader expressed their belief that some students do not want to achieve academically because they do not want to be better than their friends. It is important that school leaders and teachers reflect instead on their responsibilities for raising student achievement and designing programmes of learning that attend to students' academic needs.

"A lot of them won't make it. Because there are so many gaps. And there's a division in our learners' abilities that's really hard to cater for every individual need. Literacy and numeracy are big gaps."

Leader

Students and whānau also made comments about low expectations in their interviews. Students in particular were well aware of teacher expectations and the impact they have on academic achievement. One stated:

"If the teacher thinks you're going to succeed in that class they'll push you, but if they think you're not going to succeed they're not going to push you."

Student

"Some students here aren't given a chance to prove what they can do in their class."

Student

Whānau members made comments about teachers not being as supportive as they could be. This contrasts with the view of leaders in one partner school, where leaders thought that perhaps the school and its teachers gave too much support and students were not given the opportunity to build resilience.

Ineffective teachers/leaders have negative perceptions about whanau.

The data showed some negative leader perceptions about the ways whānau encourage (or not) their children to strive at school and progress on to university. A number of leader comments referred to the idea that many Māori and Pasifika students would be the "first in family" to attend university and that "families don't actually understand what that involves" so discourage them from attending. Some leaders suggested that whānau would rather students work to earn an income and "contribute to the

family finances" than go to university. Whilst many legitimate issues were raised in the data about the costs of sending children to university and the consequent financial pressures on whānau, we cannot assume from our conversations with some parents that all Māori whānau feel this way. Some leaders also articulated these negative perceptions about their colleagues:

> *"There's a perception around here [at school] that our kids are decile 1 and they come from impoverished families and P households... I got my Year 9s to write a little thing about all the things they've done and their households. And about 90% had been overseas. And Disneyland. And all sorts."*
>
> *Leader*

Negative beliefs about whānau and students' home lives were observed in three-way conversation observations, the school practices survey, and interviews with leaders. In the three-way conversation observations, researchers commented that many parents were only "listeners" during the conversations and weren't encouraged to take an active part in the conversation. However, where parents were invited, indeed encouraged, to contribute, they expressed pride in their children's achievements and a willingness to support their children's needs where possible. In the school practices survey, 43% of respondents from all schools disagreed or didn't know if all whānau (of Year 13 students) would be informed about the UE requirements, with participants commenting that some whānau "are not interested". Some leaders articulated negative beliefs about whānau and student aspirations with comments like: "Sometimes family pressures to get out there and get a job, get money to help the family or some of them, sadly… accept less than what they are good for".

> *"Every year I've got bright Māori girls that could do it but they just go off the boil. And they go off the boil because…the aspiration is not there, and the priority at home is not towards education."*
>
> *Leader*

Effective teaching: discussion and recommendations.

Leaders, students and whānau were cognisant of the importance of high expectations to student learning and achievement. High expectations are commonly discussed within educational institutions – by teachers, school management, and policy makers. Additionally, the Starpath Project's findings over 15 years have pointed to the fact that whānau and students talk about high expectations as a significant enabler of academic achievement. Whānau and students are aware that some teachers have high expectations of them (and others do not), and can articulate the benefit that this has on their motivation, their engagement, and their achievement.

There was some mention by leaders as to how high expectations manifested in school and teacher practices. Our data shows that a significant number of staff across Starpath schools think that their

school has high expectations of Māori and Pasifika students. Schools may wish to reflect on how these high expectations manifest in teacher practice and their pedagogy. These reflections could provide some valuable information about how high expectation teaching is articulated and operationalised in their schools.

There is a clear gap between the ways Māori and Pasifika parents talk about their expectations and aspirations for their children both at school and beyond, and the perceptions held by some leaders in Starpath partner schools. Repeating negative comments about whānau having low expectations for their children makes the comments very powerful in the lives of students. In fact, they can become self-fulfilling prophecies for students and there has been some speculation about whether teachers' explicit and implicit prejudiced attitudes underlie the ethnic achievement gap (Peterson, Rubie-Davies, Osborne & Sibley, 2016). All parents want their children to achieve their aspirations and be successful in life. A school's role is to ensure that all children have the requisite opportunities and qualifications to reach their potential.

There is a connection between research showing that Māori and Pasifika whānau want more knowledge of NCEA and the belief of some leaders that whānau do not understand the assessment system. Starpath advocates that schools and teachers have a responsibility, indeed a duty, to thoroughly inform whānau about the complexities of NCEA and to keep parents up-to-date with changes as they are introduced. This is an area which is currently under-researched.

2. Authentic whānau and school relationships are crucial.

Authentic whānau and school relationships are a crucial lever in the educational wellbeing of Māori and Pasifika students. Genuine whānau involvement in schools is critical because "students learn more and succeed at higher levels when home, school, and community work together to support students' learning and development" (Epstein & Sanders, 2006, p. 87). As such, teachers must ensure that Māori and Pasifika students' cultural identities are enriched by their experiences at school and their engagement and success is an integrated, school-wide and whānau informed activity (Chu, Glasgow, Rimoni, Hodis & Meyer, 2013; Macfarlane, Webber, McRae & Cookson-Cox, 2014). Ka Hikitia asserts that developing a secure cultural identity is one of the primary enablers of success for Māori students (Ministry of Education, 2013a). It states that "identity, language, and culture are an asset and a foundation of knowledge on which to build and celebrate learning and success" (Ministry of Education, 2013a, p. 17). As such, schools must cultivate a climate in which whānau feel comfortable to initiate involvement in their children's education and should provide them with the appropriate opportunities to do so.

These principles apply to Pasifika whānau too. The Pasifika Education Plan (Ministry of Education, 2013b) suggests that cultural security is also a key enabler of Pasifika students. The idea that cultural security is a key enabler to Māori and Pasifika success has been explored by many research projects (for example, Bishop & Berryman, 2009; Bishop, 2016; Siope, 2011). Consequently, there is a need to re-frame power relationships in schools so that Māori and Pasifika parents' engagement in their children's education is valued by more teachers and school leaders. In their report on schools' progress in promoting success for Māori students, the Education Review Office (2010) observed that in the most effective schools:

> *… parents and whānau were actively involved in the school and in students' learning. Whānau had a sense of connectedness and had a voice in determining the long-term direction of the school. The school ensured that ongoing opportunities for this partnership were encouraged, in order to find out and respond to the aspirations and expectations of parents and whānau (p. 18).*

Parents and whānau should *always* be involved in conversations about their children and their learning. Enhanced cultural connections through engagement with Māori and Pasifika whānau can provide important opportunities for students' learning, particularly the development of cultural identity and a sense of belonging that contributes to wellbeing.

At the opposite end of the spectrum, poor relationships can have an adverse effect on students, both holistically and in relation to their ability to learn (Kiro et al., 2016). Poor relationships can develop from a lack of cultural affirmation. Fraser (2016) claimed that a significant part of fostering an inclusive environment for students is achieved through the affirmation of cultural diversity, rather than insisting upon a homogenous view of the world. However, Fraser (2016) also commented that "some well-meaning teachers succumb to tokenism when they organise a feast or other pseudo-cultural events based upon festivals and celebration. Such events can heighten curiosity about a culture but do little to promote understanding" (p. 5). Lawrence (2011) also argued that engaging Māori students requires culturally responsive pedagogy and practice, rather than *only* "displaying some Māori posters in the classroom, trying to include some te reo Māori and using Māori and New Zealand-based resources" (p. 36).

Whānau and school relationships: evidence from Phase Three.

Phase Three of The Starpath Project found that whānau and school relationships were mentioned frequently by whānau and school-leaders as helping to enable success for Māori and Pasifika students. The significance of whānau and school relationships was also mentioned by students, albeit less frequently. Whānau talked about the importance of being involved in their child's learning through

communication with teachers, leaders, and career advisors. Many whānau members mentioned their school's concerted efforts to involve them in discussion about their child's achievement at school, as well as their child's wellbeing. Whānau also commented about the importance of feeling comfortable on the school campus.

"Every time I come in here, they give me all of the information I need and make me feel welcome... they just make things easier."

Whānau

Many whānau members indicated that they appreciated wrap around support that included them. It was also clear from interviews that many whānau members *wanted* to be connected to the school and appreciated the opportunities to be involved with their child's school and their child's learning.

Many leaders mentioned that they were committed to the notion of whānau-school relationships. They said that the efforts their school makes to engage whānau were critical in relation to enabling Māori and Pasifika success. Some of them talked about opening up activities to whānau, such as university visits to school, trips to university campuses, or visits from ex-students. Other leaders mentioned the importance of increasing the number of whānau attending school events and the importance of responsive school practices in terms of building relationships with whānau. For example, one leader talked about their school shifting from relying on school newsletters to establish contact with whānau, to ringing every home in an effort to engage them.

"[Whānau evenings] have been really successful. There have been really high parental/whānau turnouts on those nights."

Leader

Starpath also found that most schools fostered whānau and school relationships through three-way conversations (between the student, their teacher, and whānau). In observations of three-way conversations, Starpath researchers saw that many academic counsellors were using these conversations to engage whānau in warm, supportive, and authentic ways. Whānau engagement is beneficial to students and their success at school because it ensures whānau have a role in terms of contributing their expectations, aspirations and opinions in relation to their child's learning.

Phase Three data also indicated that supporting and affirming Māori and Pasifika cultures was seen as a key enabler of academic achievement. Māori and Pasifika students and whānau talked extensively about their cultures being acknowledged, and supported. Students discussed the significance of learning about their culture, and learning their own languages. One whānau member talked about their pleasure that Pasifika languages and te reo Māori were available in NCEA and how important qualifying

for UE was for their child and whānau. Students also discussed how important it was for them to be surrounded by peers and teachers who can relate to their cultural background.

The following comments by students and whānau indicate some of the ways that Māori and Pasifika cultural identities are nurtured at school:

"I started learning more about my cultural history - and started learning more about other peoples' [cultural history]."

Student

"Being in the Māori unit, surrounded by whānau in the Māori unit [enables me and my education]."

Student

"[I like having Māori teachers] because they know the struggles that Māori went through, they would know some of our myths and legends, and our tūpuna stories – they can relate to us with some of those."

Student

However, our Phase Three data also highlighted the detrimental impact that poor relationships can have on students and their learning. Some of the students interviewed talked about poor relationships in very clear terms:

"I have been told by this one teacher, that he doesn't like me, he's strict on me. He told me earlier this year that I wouldn't go anywhere in life."

Student

"Some of the students that show up in incorrect uniform, it's because they don't have the money… when a teacher sends a kid out of class that tells all the kids and all the other teachers that they're one of the bad kids."

Student

Students talked about a lack of teacher understanding, respect, and tact as a barrier for them and their learning. Whānau members also indicated that poor relationships and lack of support were a barrier for their children. One whānau member commented on the deterioration of the relationship between her child and the teacher, which led to her child completely disengaging from learning and eventually being removed from the class. Leaders were well aware of the fact that poor teacher-student relationships act as a barrier to Māori and Pasifika student success.

"Some of them [teachers] will have a non-existent relationship [with students]... You get teachers that care, and you get those that just … don't."

Leader

There was not much discussion by leaders about affirming Māori and Pasifika identities, or changing practices and pedagogy to support Māori and Pasifika learners and their cultures. However, one leader talked about making Māori and Pasifika culture "more visible around our school… infusing our place with more Pasifika iconography and Māori iconography could be really powerful in helping root some of these kids here… making it [Pasifika and Māori culture] part of the fabric, the tapestry… of our school would make them feel like this is more of their place, rather than just some random building full of palagi teachers".

Racism was cited as contributing to poor relationships between students and teachers. Research shows that this is an enduring problem in New Zealand schools, particularly for Māori and Pasifika students (Spiller, 2012; Turner, Rubie-Davies & Webber, 2014). These groups face significant barriers to achievement, which stem from negative stereotypes attached to them as members of their ethnic groups (Blank, Houkamou & Kingi, 2016). Personal, interpersonal, and institutional racism act together to perpetuate educational disadvantage. Students talked about issues of racism at school and the negative impact that this could have on them, in terms of their wellbeing, engagement, and achievement.

"We see the way teachers are talking to students, they talk to them like they are dumb. A lot of Pasifika students think the teachers are racist."

Student

Leaders were less likely to be as explicit about the type of racism that students at their schools were facing, instead saying things such as "there is a certain amount of racism here [at school] too".

Whānau and school relationships: discussion and recommendations.

There were clear links between the Phase Three findings and the existing literature. The idea that whānau and school relationships can facilitate Māori and Pasifika success was confirmed by our interviews with whānau and leaders, who articulated the importance of these relationships for student success. Leaders also talked about the importance of their school including whānau in activities and encouraging them to work in partnership with the school. Whānau talked regularly about feeling comfortable in school contexts and feeling supported by the school. Feeling comfortable at school appeared to provide the basis for a range of interactions with school staff. The data shows that once whānau feel comfortable on school campus, and feel supported by the staff, and they engage more

readily. One thing we noticed was that there was no clear rationale by leaders as to why they thought whānau and school relationships were vital for Māori and Pasifika success. We recommend schools reflect on why forming relationships with whānau is important, and consider deliberate strategies that they can develop and implement to strengthen and encourage these relationships.

In line with the literature, our data also indicated that cultural affirmation was a significant enabler for Māori and Pasifika educational success. In our interviews, leaders expressed a desire to create a more culturally inclusive schooling environment for students, their whānau and the wider community. Some leaders talked about the ambition to improve culturally responsive pedagogy and normalise the Māori language, culture, and identity. Research shows that best practice includes incorporating the history, values, and cultural knowledge of Māori students' hapū and iwi into the school curriculum as well as reframing school organisational structures to encourage Māori students and whānau to engage and participate in authentic decision-making in their schools (Webber & Macfarlane, 2017). There appears to be an enthusiasm among some staff to undertake tasks like these in an effort to positively shift school culture. Students and whānau also expressed an interest in seeing more Māori and Pasifika role models in the school context.

"I think acknowledging them [Māori and Pasifika students] more, in the sense that neither of their cultures is very well represented in the school in terms of what we do in the school… so we are working on that. So that is what we are doing PD on at the moment. I think if that becomes something that is more normal and standard across the school it should make a difference. But at the moment I would say that it is an area we need to work on."

Leader

"Getting someone who understands their lives and gets them into school to encourage them about how they've achieved."

Student

Our data also confirms the proposition that poor relationships between the teacher and the student can be a barrier for students and their achievement. Both students and leaders thought that racism and teacher bias was a barrier to Māori and Pasifika success. This finding highlights the reality that some Māori and Pasifika students have to negotiate discrimination and racism in education. There is a need for schools to discuss the best ways to address the issue of racism. Blank, Houkamou, and Kingi (2016) have suggested that mitigating the impact of racism requires teachers to first understand their own biases, and then act to diminish their impact on decision-making and interactions with students. These authors have also suggested that recognising how unconscious bias influences teachers' relationships

with Māori students is the key to lifting Māori educational achievement. They have stated that tools and programmes to address unconscious bias towards Māori should be developed and applied broadly in the full range of education, health, and social service sectors. A whole systems approach is required.

There was only a very small amount of discussion about cultural affirmation in the interviews. Some of this was at a surface level, with plans to integrate Māori and Pasifika iconography into the school. While, as discussed earlier, these intentions were well-meant (and may have some positive consequences), they can often have little impact in terms of creating a more positive learning environment for Māori and Pasifika students. Ensuring Māori and Pasifika students experience connectedness to learning and academic success entails schools embracing Māori and Pasifika knowledge, language, whakapapa, history, and worldview. It necessitates bold leadership and active participation, including making a contribution to actualising the aspirations and wellbeing of Māori and Pasifika students and their whānau because, as stated by Milne (2009, p.49):

> *If tweaking school environments to better reflect our 'diverse' student population, with one-off cultural meals or weeks, bilingual/multilingual signage, bilingual programmes, a kapahaka group and the like, really made a difference for Māori and Pasifika learners, we would already have different results. If raising literacy and numeracy levels to or above national "norms" really was the solution to school engagement, we would already have different results. We don't, and while none of these practices is the answer, they are certainly our primary, often our only focus in our attempts to make change.*

In summary, authentic relationships with Māori and Pasifika whānau can be an effective instrument for positive change and it is clear that schools already know that they must go beyond the student-teacher relationship to include positive learning-focused relationships with whānau and wider community members. There are a number of ways that schools can engage in genuine partnerships with Māori and Pasifika whānau, including:

- Designing interventions to help whānau and other community members to support children's learning at home and school.

- Establishing clear lines of communication between school and whānau through, for example, after-school workshops or meetings focusing on a curriculum area, student behaviour, or wellbeing, where children can attend with their whānau.

- Promoting both whānau engagement and enhanced efficacy of whānau and community members by, for example, encouraging whānau and teachers to work together as collaborators with responsibilities for raising student achievement.

- Inviting and honouring whānau and community stakeholders' input into long-term strategic decision-making and engaging them in developing culturally responsive whole-school initiatives to lift student achievement.

- Drawing upon the resources of the wider community to strengthen school programmes and enhance student success, by incorporating whānau and community knowledge into curriculum and teaching.

3. Effective systems and processes around NCEA and UE are essential.

Since the education reforms of the late 20th century New Zealand schools have been expected to be self-managing, and responsible for their own organisational systems and processes. It has been argued that the way a school does things reflects its culture and values (Caldwell & Spinks, 1992). One way schools can demonstrate their drive for equity and excellence is by implementing systems that effectively open the pathways for all their learners to experience the highest measures of academic success (ERO, 2015, p. 21).

Levin (2008) was clear that much of the success of a school relies on effective routines. Basic operation takes a huge amount of teacher and leadership time. Not only is routine work required to keep the organisation running but a routine that reflects the ambitions of excellence and equity will be supportive of the focus on high academic achievement. Bishop, O'Sullivan and Berryman (2010) have also suggested that any attempt at educational reform to raise achievement requires an alignment of infrastructural and organisational support systems.

Numerous educational researchers (Dumas, 2010; Fullan, 2006; Robinson, 2011; Supovitz, 2002) have argued in favour of the de-privatisation of teachers' practice in order to improve instructional coherence. The positive effects of changing teachers' practice from private to public are many, and include increased support for those who need it, identifying teacher expertise, reduced variation in teaching practice, and resource sharing.

Schools should have a strong culture of evidence-based inquiry. Robinson (2011, p. 94) advocated that "the purpose of data use… is to assist individual and collaborative reflection on the quality of decisions about how and what to teach and the quality of decisions about the administrative and organisation supports for such teaching". She believes that schools should only collect data that they are going to use. Further, she acknowledges that a "major barrier to the use of data is capacity to interpret them" (Robinson, 2011, p. 96). Schools need a data infrastructure – one which should be built together by teachers and leaders, which will assist everyone's needs, including education officials (Robinson, 2011).

Robinson, Hohepa and Lloyd (2009) argued that the development of structures that create a supportive learning environment lies with the leadership roles of the school.

Starpath advised academic counsellors to document short, medium and long term goals for students and to revisit these on a regular basis during the year via academic conversations. Academic counsellors also needed to be able to analyse student achievement data and present these in meaningful ways to students and whānau in academic conversations (The Starpath Toolkit, 2017). In addition, by joining Phase Three of the Starpath Project schools agreed to establish a stretch target for improving UE attainment rates. This placed an emphasis on ensuring viable course design, providing opportunities to gain UE literacy requirements, finding the best possible timetable options as well as designing sound systems for tracking student progress.

Systems and processes: evidence from Phase Three.

Starpath has incorporated a range of topics under the umbrella of 'School Systems and Processes'; from interventions with Years 9 and 10, use of data including the tracking and monitoring of student achievement, whole school curriculum processes (including course design), academic counselling and three-way conversations, confidence in understanding data, NCEA and UE, and having processes in place to help students meet UE requirements. In some schools systems and processes was the most commonly cited school-level enabler by students and whānau.

"The management are pushing for university meetings with the Year 13s but I noticed last year they were trying to get us [younger students] ready for that as well."

Student

In the school practices survey, the majority of respondents agreed or strongly agreed that teachers in their school used achievement data to inform their practice. From interviews with leaders we know that schools also have regular cycles where they track achievement data. Many school leaders understand the importance of consistent tracking and monitoring of student progress, extra opportunities to gain literacy credits and comprehensive academic coaching. Many schools are using achievement data to identify where interventions might be necessary to support students, such as re-submissions, weekly catch-up sessions, and the option for students to come back for Year 14 to attain the credits that they need to complete qualifications.

"Last year we put in place that students, if they missed out on the first one (NCEA assessment), they would have chances to do a reassessment during exam leave. They could come back and work with a particular teacher."

Leader

"We will call them back at the end of the year. I have gone around and got kids out of bed and told them to come back to school. I was like 'get up! Come and finish this and then you are done!' That was only once! But yes, that [opportunities for reassessment] is very common… there's often just one little thing that they need to finish. And they could so easily get it - I mean they have to do the work, but the teachers are happy to sit with them and get them finished."

Leader

Students were aware of an emphasis on tracking their academic progress. In some schools, students also knew that they could use the student portal in KAMAR, and their parents could use the parent portal, to check their achievement. Students with potential to achieve the UE Award were identified and tracked in 2016-2017 (although perhaps not in all schools). We also observed three-way conversations, many of which were data-based and focused on student progress to date, as well as what specific internal and external achievement standards were needed to achieve academic goals. In at least one school, leaders emphasised the importance of making sure whānau were involved in conversations about achievement, and that they understood the details.

"Everyone around here is like 'how many credits do you have?' And you have to tell them, and they'll be checking up."

Student

Leaders talked about improved practices and systems for supporting student achievement. For example, in one school there was a shift to the House Leaders taking responsibility for academic achievement as well as pastoral care. Some teachers also commented that students discussed their progress towards attaining UE in academic counselling and were given a list of UE approved subjects and the criteria for UE. There was also some evidence of changes in course design.

"Courses are tailored to help them get through. For the top ones they can get stretched. They can get extra courses to help them get Excellences. Gone are the days of 'one size fits all', it is tailored to the individual; it's like a personal plan almost."

Leader

Increased accountability for student achievement was also noted, as one leader stated: "If a student doesn't achieve an assessment, there has to be some justification for it on here [the achievement portal] were they not attending? And then we see if we can offer credits in other areas … we may have to re-assess some of them."

We also found evidence of some ineffective systems and processes within schools. These included inadequate use or lack of quality data, lack of information about NCEA, UE and scholarships, issues related to the curriculum and the unavailability of courses, and processes that enable students to meet UE requirements. In the school practices survey, there were varied responses to the question which asked teachers to describe the process that ensures students are able to meet UE requirements, with the most concerning being: "I don't think we have one". Leaders talked about not doing enough for the target UE students and the need for improved practice in that area. In terms of the curriculum, some leaders bemoaned the lack of flexibility with their curriculum and others a lack of course content and subject specialist course delivery, which drastically reduces choices for NCEA Levels 2 and 3 students. Some partner schools offered Pasifika languages as a means of tapping into cultural capital for academic success.

"[We need to be] smarter about how we use the curriculum and how we use assessment. If they are able to do Te Reo Māori at Level 1 in Year 9, then they should [be able to] sit it."

Leader

Students also talked about a limited curriculum, and the impact that this could potentially have on their achievement as well as their self-efficacy.

"In Level 3, I chose a couple of subjects that I didn't really want to do, but I couldn't choose anything else because I definitely didn't want to do any of the others - they were the best out of a bad bunch. So I kind of jumped into them. They're subjects I haven't taken before, like History. I have no idea what I am doing in that class, but hopefully I'll be able to get through."

Student

Interviews with leaders also suggested that there was variability in terms of how data were used. Whilst leaders talked about having some systems in place to track credit attainment and subject choice (in relation to achieving UE), observations of two and three-way conversations showed that while some teachers used data effectively, others did not. These observations showed that there were issues around how up-to-date the data were. Although many conversations mentioned credits already attained, there was limited discussion of how many credits were yet to be attained. There was little evidence of goal and target-setting using the data available. Leaders also discussed a lack of flexibility around systems or individual teachers' practices, and the desire to see the de-privatisation of practice around this.

"You have to open yourself up, open up your practice, particularly around the end of the year. If things aren't working, you have to change."

Others mentioned an increased need for teacher reflection: "Our teachers need to go through and check what is happening and that it is promoting good practice… Making it standard practice that you reflect and adapt according to the need of those individual students that you have in front of you."

"My hunch is that we use data, we look at data, but we don't use that data to change our practice."

Leader

Through the leader interviews we noted that schools continue to have an emphasis on students considered at risk of not achieving, and some who may only be implementing academic counselling if it is deemed necessary for under-performing students, rather than for all students. One school leader stated "if students are not achieving well we conduct academic counselling with them… anyone [achieving] under 65% are on the target list…between 65 and 85% we keep an eye on and the ones above 85% are OK". When asked if leaders track students for Merit and Excellence endorsement, some commented that it was a good idea, indicating that in practice this was not yet occurring. Students suggested a need to be prepared for their career pathway prior to Year 13 and it seemed that in at least one school students felt this was not happening.

"They don't encourage us to go into the right career pathway until Year 13."

Student

Finally, we noted that a lack of information and knowledge about NCEA and UE was a barrier to success for Māori and Pasifika students in four partner schools. Gaps in teacher knowledge appeared to be evident at both the teacher and leader levels. One leader stated: "I'm still learning about the whole system of NCEA." Whilst we acknowledge that newly trained teachers and those from overseas may have much to learn about the intricacies of NCEA and the complexities of UE, it is somewhat alarming that schools have teachers in a position of responsibility admitting to gaps in their knowledge in these fundamental areas. The school practices survey also highlighted a lack of knowledge around schools' UE targets.

With regards to UE, confusion about the qualification itself was not helped when its purpose was questioned. Leaders in one school were concerned that UE no longer gives direct entry to university and there seems little motivation in the idea that it might be a useful qualification in a student's future. In at least one school there was some evidence in the interviews that a number of students confused their attainment of the UE Literacy requirement with the idea that they had gained UE itself. Comments from a staff member suggested that some leaders did not correct this misunderstanding:

"When… we put out documentation we were blown away by the misunderstandings of it. I was thinking wow, this is actually quite serious – if we have got an HOD that has misunderstood, what is being said to the kids? What's being said to the staff?"

Leader

"Some of our staff didn't understand UE… [even though] it is a professional responsibility."

Leader

Whilst 56% of respondents to the school practices survey agreed or strongly agreed that the whānau of all senior students were informed of the UE requirements, regardless of personal aspirations, many made comments which indicated variability, such as: "This could improve"; "We do communicate but could be better"; and "Maybe we need to make this more visible". While there is little recent research into teacher/student/whānau knowledge of NCEA and UE, one New Zealand study did identify that whānau knowledge of NCEA came from their children, rather than the school (Graham et al., 2010). Our interview data suggest that this is still the case. The proposition that some students and families don't understand UE requirements came through in the interviews with leaders, students and whānau. Additionally, whānau members commented about a lack of information around financial scholarships.

"There was a book of scholarships that they had, but I didn't know about that until two years later."

Whānau

"What scholarships he might be eligible for is still as clear as mud."

Whānau

Systems and processes: discussion and recommendations.

By joining the Starpath Project schools agreed to take on a stretch target for improving UE attainment rates. This placed an emphasis on ensuring viable course design, providing opportunities to gain UE Literacy requirements, quality academic conversations, finding the best possible timetable options, as well as designing robust systems for tracking student progress. The most effective academic conversations that the Starpath team observed paired strong relationships and support with conversations that used data to set medium and long-term goals regarding things like credit attainment, endorsement, and UE attainment.

We identified considerable variability of practice amongst the partner schools regarding internal systems with course design, timetabling, and withdrawing students from achievement standards. Those

schools which do have established processes need to ensure that regular compliance checks take place. Some schools were aware of gaps in their systems and expressed a desire to create sustainable practice.

In our interviews, there were a few new ideas about operational changes that might benefit students on a university pathway, but most of the suggestions were related to strengthening existing practices. The strongest comments were about consistency. Participants in several schools were not advocating a change in assessment practices but they wanted a consistent application of existing policies on reassessment and late submissions. It was perceived that opportunities for reassessment were largely dependent on the individual teacher and individual subjects. There was also concern that lenient rules did not align with university practices and that first-year university students would be disadvantaged under a stricter regime.

There were a number of requests for different timetabling options, such as concerns that the school was not able to offer the course a student wanted. This is a difficult issue as schools need to balance resourcing and staff expertise along with student demand. Schools have become adept at keeping options open for as long as possible, particularly by offering multilevel classes and trying to cater for individual needs by use of distant learning options. Increasingly schools will be offered on-line opportunities and will develop individual support for online learning. One school has been able to offer senior physics because of an online teaching and tutoring programme. Development of online resources may also help to overcome another problem identified by students - that of missing lessons due to absence.

"There are some classes that got cancelled because there weren't enough students taking it. And I think that's stupid, because in uni it's required certain subjects and they just cancel it because there's not enough students. It's not fair on the students that do want to take it. I understand that one teacher has to be among the number of students."

Student

The effective use of data in Starpath schools has significantly increased in recent times but the comments below demonstrate that further work needs to be done to embed evidence-based processes within teacher practice. This will include a deepening of staff capability and the strengthening of school wide systems.

"One teacher is very good at using data but he is probably the only house leader who regularly puts it out there in front of teachers."

Leader

> *"I think they [dashboards] are very good, excellent resource, but we've got to get more people using them, we've got to get them more institutionalised, structurally utilised."*
>
> *Leader*

There were a number of new ideas put forward by students in our interviews. These mostly related to ways schools could support students to transition to tertiary study. Some students were keen for their Year 13 classes to be more like university - with lectures, guided study, and study groups. There was also a suggestion that assignments be managed under university conditions.

> *"Maybe try and make Year 13 like first year uni. Maybe do lectures instead of the teachers teaching us, do it like a lecture scenario."*
>
> *Student*

> *"Year 13s should be given a study period instead of having double periods, we should be given a study period, it will allow us to study effectively, especially in groups, it will help us develop skills for university. I have been told various times by my teachers that in university you need to develop a study group to succeed. But if you don't develop it in school how are we going to do it at uni?"*
>
> *Student*

There is still work to be done to maximise the potential for students to gain UE and in emphasising the importance of opportunities to learn for UE Literacy through course design. Schools should check that achievement standards which contribute to UE Literacy are in fact being delivered to students in Years 12 and 13. We appreciate that the UE requirements are complicated and the criteria changed a few years ago. Evidence from the Starpath interviews suggests that a number of teachers and middle leaders are struggling to fully understand UE requirements. This impacts on the understanding students and their families have. Whilst such gaps in knowledge exist, this area will remain a barrier for students of UE potential.

4. Schools need to provide opportunities for students to be inspired.

In a school system that views NCEA Level 2 attainment as a requisite level of educational success (The New Zealand Government Better Public Service Target, State Services Commission; 2013), it is often a challenge to raise expectations to UE level, and more so when there is not a background of tertiary study in the student's family. McKinley and Madjar (2014) have pointed out that for many Māori and Pasifika students the path to university may not necessarily be an assumed or known pathway, and can consequently be imbued with tensions and uncertainty – particularly with respect to the academic

standards required, as well as the practical supports needed to manage the costs of study and living while not in employment. These barriers can be such that many Māori and Pasifika students may have difficulty seeing themselves as future university students. Thus, it is especially important that students have access to people and pathways that inspire them to envision a reality that includes higher education. Both ERO (2013), and the New Zealand Curriculum, have put the responsibility for career and pathway education squarely at the secondary school door. In the broadest sense this should mean an opportunity for all students to at least consider university study.

Mentoring programmes provide an opportunity for such consideration. The concept of 'success for people like me' is the basis of many mentoring programmes offered in schools. Mentoring programmes in secondary schools have generally been designed to support and encourage students to manage their own learning in order to maximise educational opportunities, realise their innate potential, develop their skills, improve their performance, and reach their personal and academic goals. One mentoring programme in place in Starpath schools, although not the only one, is Mentoring And Tutoring Education Scheme (MATES) which deliberately recruits successful university students as mentors for secondary students. The MATES programme Director, Shana Malio-Satele (2016) has stated that:

> "*MATES provides them with the confidence to see what is possible. Having university students as mentors means that mentee perceptions about success start with a real person in front of them who is doing it, helping them in their journey.*" (New Zealand Youth Mentoring Network, 2016, p. 19).

MATES is not strictly focused on degree-level study, but more broadly tertiary study and is a programme of regular mentoring and tutoring sessions for Year 13 students. It is essentially aimed at transition for those who have decided on further study, including those who have already formed an ambition to attend university. Despite the obvious benefits of programmes like MATES, there are relatively few external mentoring programmes that identify and guide students of UE potential from an early stage in their secondary schooling (New Zealand Youth Mentoring Network, 2016). Other opportunities to inspire students come from exposure to tertiary study and tertiary life, such as trips to universities, and university roadshows or visits.

Research points to the importance of campus orientation visits as part of the information gathering process students need to transition successfully from high school to university. Participation in university visits can help with the development of a higher education learner identity which is essential to student achievement (Briggs, Clark & Hall, 2012). Such visits are critical for all students, but induction into the expectations of higher education is an especially important matter for first generation university students. Petty (2014) has argued that tertiary institutions should intensify the transition

programmes that connect secondary schools and universities. Our data show that the process should start in Years 9 and 10 rather than in Years 12 and 13.

In addition to sound transition programmes students also seek information about financial support. In their article on information, financial aid and access to college, Tierney and Venegas (2009) acknowledged that students need help from adults in applying for financial support to attend university. This is because the process can be confusing and involves a range of activities over an extended period of time. They recommended the creation of a "systematic and longitudinal framework for information about financial aid" (Tierney & Venegas, 2009, p. 384). Tierney and Venegas (2009) also argued that access to tertiary education for low socio-economic status (SES) students is likely to increase if students are provided with better information in a timely manner. Additionally, Kim's (2004) study into the effect of financial aid on students' college choice found that most "students were more likely to attend their first choice institution if they received grants or a combination of grants with loans" (Kim, 2004, p. 43).

Furthermore whānau provide support and inspiration for students. Whānau are of critical importance to the educational wellbeing of students – particularly for Māori and Pasifika students. There is evidence that the behaviour and attitudes of whānau towards education can be very influential and this influence is not lessened by socio-economic circumstance or familial backgrounds (Harris & Goodall, 2007). A New Zealand synthesis found that "regardless of ethnic or SES background, families with high levels of educational expectations have the most positive effects on their children's achievement at senior school levels" (Biddulph, Biddulph & Biddulph, 2003, p. 25). Similarly, Sylva et al (2004) found that what parents do matters more than who they are. Moreover, Claxton (2016) and O'Connor (2017) recently found that Māori students believed that whānau encouragement and role models were key to their educational motivation and success.

Opportunities to inspire: evidence from Phase Three.

Many students and whānau discussed inspiration as a key driver for academic motivation and engagement. From our evidence, there were a number of sources of inspiration for university study, which included peers and whānau:

"[My family] really encourage me. They're really supportive and if I wanted to be a lawyer they would say, 'Yeah, go for it'."

Student

"She's got an aunty that works at UOA so she was the one that put her on the path."

Whānau

For many students in the Starpath schools, however, the inspiration came from university visits, school visitors/speakers, encouraging teachers or school-based mentoring programmes.

"Having role models, or have speakers coming into the school based on, I guess stories… stories have a powerful effect on you and it kind of motivates you".

Student

Opportunities to visit university campuses and advice and guidance about financial scholarships were mentioned in interviews with students, whānau and leaders in the schools. Leaders talked about universities ensuring that information is communicated effectively to secondary school students. Whānau appreciated the university information evenings schools offered stating that "having things like this [university evening] is very helpful for Pasifika, we got to learn about different things". The leader interviews also highlighted the importance of university visits and bridging programmes. They mentioned visits to Open Days as being important for 'bridging the gaps'. University visits gave students the opportunity to experience the university context first-hand.

"Through science I got the chance to go onto Auckland Uni's medical facilities in Grafton. That trip was awesome, we got to go inside a place that only second year students get to go. We got to do some science and chem work in the labs."

Student

One school reported a specific partnership agreement they had with one university. This agreement allowed for guaranteed placement for a number of students on a mentoring programme, an organised forum for parents, and a number of financial scholarships. At this school, most students viewed the university in question as their university of choice. They valued being seen as 'priority' students and appreciated the effort that the university made in welcoming them on to the campus.

"Offering strong programmes for Māori and Pacific students. When I went to Otago Uni they had specific programmes, like a Māori unit and a Pacific Island unit. They assign students to help new students throughout university. Those kind of programmes attract students and make them feel like it is their own family there... I think that if they don't already all of the unis should adopt that approach."

Student

School leaders and students talked about visits from universities in positive ways: "We have all the universities out and they get two chances to talk to our kids. We invite every university out and they do an overview, it's one period and the students elect to go to whichever one they want to go to." Some students and whānau members suggested it would be a good idea to start school/university relationships earlier in the secondary school years (if not in intermediate), to inspire students from a younger age.

"I think they should start at intermediate. Start talking to students when they're younger, like Year 11. I think that's when they should start getting universities in, because that's more encouraging and it can lead them to where they think they want to go instead of leaving it so late. I think they should start it earlier, promoting it in the schools earlier. You should catch it really early."

Student

Our data show that schools understand the importance of finding ways to inspire students to a university pathway but often the focus is at Year 13.

"What I thought about the whole trip last week (uni trip) is why are we going in Year 13? It's too late. I came back and I said next year take a busload of Year 12s. And I'd like to push that for my Year 11s as well. I thought they need to come down sooner."

Leader

Starting earlier than Year 12 or 13 was also mentioned in terms of financial scholarships. One student said "[t]hey try and get you thinking about scholarships even in Year 11". Leaders talked about the opportunities for their students to apply for and gain financial support for tertiary study and the support they give to families: "We do try and help those whānau that are whakamā about applying for scholarships. Or for the financial assistance". Students were encouraged to apply for several scholarships each and to make the effort with their applications, as "those that do [put the effort in] inevitably get something". The careers advisors we interviewed talked in detail about the ways scholarships were promoted to students and the use of the Generosity NZ website to enable students to find out which scholarships they could apply for. The careers advisors were often regarded as being an enabler to Māori and Pasifika student success.

Three Starpath schools were part of the MATES programme and a number of students commented that they benefited from the experience of university student mentors. However, the resource is limited and schools had to make a choice about which students were invited to participate. One school reported that although they managed to double the number of students involved in a mentoring programme there was still disappointment when some students felt they were left out.

"MATES is helping me so much with that insight from a uni perspective - where they can help me with my work. And it's so helpful. And I know that everyone that takes MATES is so thankful. We want it like twice a day."

Student

"I have three students in my Year 13 Samoan class that I know that's their dream and their subjects are all achievement standards so there is no way they can't go and do MATES, because I know they feel they have been left out. The kids never protest and they hardly ask questions but one of their mates are there so that's why they said 'oh how come [I'm] not there but my old friends are in that class?'"

Leader

Opportunities to inspire: discussion and recommendations.

Starpath findings suggest that for universities to attract and retain Māori and Pasifika students they may need to consider beginning relationships with schools earlier than Year 12 or 13. School leaders, students and whānau were positive about visits from universities to schools and trips to campus open days. Students and families also indicated that they would like more opportunites to engage with tertiary providers and this is one of Starpath's key recommendations to universities. Students also had suggestions on how universities could interact more with secondary students:

"I think universities need to get more involved with the school so people know what to expect. Because I think there are a lot of people that don't really know about university. Like AUT have come for conferences for Year 13s which is really good. So up until then I didn't really know what to expect."

Student

Our findings also indicate that Starpath schools have tried to develop programmes that support and inspire students into university study. They recognise that for many of their students, even the highly motivated ones, the university pathway is daunting and uncertain. Therefore, they have encouraged their students to see themselves in the university setting and devised ways to build confidence, particularly during the transition phase. However, often the inspiration came during Year 13, when students had already decided a future course. We recommend that schools and universities work together to start 'inspiring' students earlier:

"If we can see what the study will offer us in the end, the benefits we'll have after we finish studying, after we get to that higher qualification, that would definitely open up the eyes of the Pasifika people for them to see that this is the pathway to a better life."

Student

Adults, including whānau, play a key role in preparing young people to transition from secondary school to tertiary study. They can also be very influential guides for helping students to navigate the financial cost of university study and the support systems available by way of scholarships or student loans. Careers advisors in schools had a heavy workload in this area. They were invaluable to students and whānau for the advice and knowledge they shared which helped students to make scholarship and

student loan applications, seek suitable accommodation and undertake the university enrolment process. Sharing information about scholarships with students prior to Year 13 is strongly recommended. It is important for schools to find ways to develop 'Tuakana Teina'-type mentoring programmes that will help young Māori and Pasifika students to see themselves as worthy of opportunities to continue their education in a tertiary setting.

5. Students need multiple opportunities to learn and achieve.

Opportunity-to-learn as a theoretical framework has its origins in the early 1960s United States of America. It became popular with researchers investigating inequitable outcomes for particular groups of students in the American education system. Opportunity-to-learn is the relationship between students' exposure to subject content in school (their 'opportunity-to-learn') and student performance (Schmidt, McKnight, Houang, Wang, Wiley, Cogan, & Wolfe, 2001). Robinson (2011) linked opportunity-to-learn to quality teaching. She regarded this approach as one which "provides a broad set of principles rather than a behavioral checklist and thus allows many different styles and pedagogical strategies" (Robinson, 2011, p. 93).

A decade ago Linda Darling-Hammond (2006) argued for the introduction of opportunity-to-learn standards in the American education system. She advocated that such standards would provide a basis for legal change or intervention in cases where opportunities-to-learn were not properly funded as well as being a lever for school advancement and equity reform. More recently, Wilson, Madjar and McNaughton's (2016) Starpath-related work examined opportunity-to-learn in senior English lessons in a range of low, mid and high SES schools and is one of the few pieces of research in New Zealand to use the opportunity-to-learn framework. Their findings showed the extent to which students from low SES schools were given fewer opportunities to participate in literacy rich learning opportunities and assessments (Wilson et al., 2016).

Opportunities-to-learn: evidence from Phase Three.

Additional opportunities-to-learn, both in and out of the classroom, were mentioned by students, whānau, and leaders as an area where schools could improve. In one school, a leader suggested they needed to do more in terms of preparing students for university through encouraging student engagement in additional extra-curricular opportunities, such as hobbies, sports and personal interests. Another leader suggested having some kind of pre-trade division in the school for students who were talented in practical areas. In smaller schools, students commented on the limited choice of courses available to them due to timetabling or because of what subjects the school was able to offer.

> *"There is a perception … that the writing standard is really quite hard to achieve. But UE Literacy can be achieved across a range of subjects… we are not looking across all of our learning areas – looking at pathways that can include UE Literacy."*
>
> *Leader*

Students and whānau appreciated the efforts some teachers went to in order to ensure students had one-on-one tutoring, exam practices, and extra catch up or reassessment opportunities – especially if they contributed towards the UE Award. In more than one school, students and whānau said they would like to see more consistent opportunities for reassessment for all students across a range of subject areas and clearer policies to do with reassessment and late submission of assessments. They also appreciated the opportunities students were given to learn a range of skills during their time at school and suggested other ways in which learning could be extended. These included homework and study clubs, more and better-timed preparation for examinations, extra tutoring, and further 'academy-style' learning opportunities. Additionally, leaders commented on the need for learning opportunities and programmes to be more aligned with students' interests.

> *"We appreciate the one-to-one tutoring our child has in Maths and English."*
>
> *Whānau*

Opportunities-to-learn: discussion and recommendations.

Schools must provide students with opportunities-to-learn, both in an academic context and in other areas such as vocational, leadership and extra-curricular activities. Leaders need to ensure there are robust systems in place for checking that all students have opportunities-to-learn and achieve, and that these are not compromised. One area where this can be improved is in the review of NCEA Achievement Standards offered in Year 12 and 13 courses for the literacy component of University Entrance. Whilst Robinson (2011) linked opportunities-to-learn to quality teaching, this devolves from quality leadership practices - at both the middle and senior leadership levels in a school. Middle leaders have immense power in regards to the provision of opportunities-to-learn for students through their influence on course design, departmental practices such as reassessment opportunities, and student placement.

6. Effective learners have a high degree of self-efficacy and self-belief.

Using Schunk and Pajares' (2010) model (but applying it to an educational context) self-efficacy can be understood as students' perceptions of their ability to learn or carry out tasks. Bandura (1997) – who coined the concept after conducting studies on self-belief – argued that self-efficacy determines

whether or not "coping behaviour will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles" (p. 191). Additionally, Zimmerman (2000) argued that self-efficacy is "a highly effective predictor of students' motivation and learning" (p. 82).

Because of the link between self-efficacy and an individual's ability to complete a task, components of self-efficacy are apparent in *The New Zealand Curriculum*. Indeed, self-efficacy links to the idea of confidence, which is associated with students' motivation and resilience (Ministry of Education, 2007). *Ka Hikitia* associates self-efficacy and self-belief with expectations, saying that confident Māori students who expect themselves to achieve have a higher chance of doing so (Ministry of Education, 2013a). Linked to the ideas of self-efficacy and self-belief is the notion of self-responsibility, where stakeholders support students to become invested in, and responsible for, their own learning. *The New Zealand Curriculum* included 'managing self' as one of its key competencies. This competency indicates the desirability of students managing themselves, taking risks, and developing strategies to help them with their learning (Ministry of Education, 2007).

Student self-efficacy and belief: evidence from Phase Three.

Phase Three of The Starpath Project provided evidence to affirm the idea that self-efficacy and determination is a key enabler for Māori and Pasifika students. In Starpath interviews, students, whānau, and leaders all talked about the impact that students' belief in themselves had on their ability to be successful educationally. Leaders said that once students achieve, their self-efficacy increases, which promotes further motivation to learn and achieve. The school's task, leaders argued, was to provide opportunities for Māori and Pasifika students to boost their academic self-efficacy. Some students talked about groups of friends working together to achieve. They said that this had a positive impact on their self-belief and their ability to stay motivated or as one student put it, "on track". The idea of motivation was also linked to determination, indeed, one student talked about determination by saying "there will be days when I am stressed, but when I overcome the stress, that is going to be the best". Students were cognisant that learning was not always easy, and that drive and perseverance were an essential part of achieving their educational goals.

"Those that get University Entrance tend to be more motivated. They've got more intrinsic motivation; they want to achieve."

Leader

"I want to be a person that has a legacy, if I got a chance I'd do every single degree to have different experiences. I think of myself as not doing only one thing, I'm actually really talented, I can do a lot of things."

As well as self-efficacy, many students and whānau members talked about the ideas of self-responsibility and internal motivation. Students talked about ownership of their learning and their responsibility to themselves and to their whānau to be academically successful. Students and whānau mentioned frequently that while schools have a role in terms of motivation and driving learning, the individual student also has a part to play.

"It is only you that can pick it up, the teachers are available at any time, but as the teachers would say 'once you come in here the door is always open but it all depends on you'."

Whānau

"I reckon the support is there, but it just depends on the students. If they want to do something they need to seek the support they need."

Student

"Teachers cannot make you... they motivate you enough. You should try to pick it up yourself and do things yourself."

Student

Leaders talked extensively about the school's role in helping students come to a point where they believed in themselves. A number of school leaders suggested that there were many students who had negative beliefs about their academic abilities.

"But we need to change the way they think. They need to start believing that they can do something. That's what we need to change."

Leader

"Self-belief is the biggest barrier. Students knowing that they can do it and seeing themselves in a position where they can do it. And being supported by the people around them in that belief, and travelling that journey. And that's really tricky because a lot of that is quite hidden. Kids are good at hiding their lack of self-belief, they work a lifetime of doing that."

Leader

Many students talked about not wanting to appear "dumb" or a "know-it-all" which links to student self-belief (as well as school and teacher pedagogy and practice). They said that this hindered them by

causing them to not contribute their views in class, they were less likely to ask questions, and less likely to engage in group conversations with teachers. Many of the students also talked about "being too scared to ask for help" because asking questions might reflect poorly on their intelligence. Some students and whānau members said that fostering self-belief was achieved through asking questions, and overcoming the idea that it will make students appear "dumb". They also acknowledged, however, the teacher and the school's role in terms of creating a safe environment for students to engage in class.

> *"[When asking the teacher questions] they are ashamed or whakamā."*
>
> *Whānau*

Student self-efficacy and belief: discussion and recommendations.

Starpath data confirmed that self-efficacy and self-belief was a key enabler to Māori and Pasifika students' academic success. Starpath data suggested that schools must establish an environment that supports and enhances student self-efficacy because this is an important step to educational engagement and achievement. Conversely, leaders also talked about low self-efficacy as a barrier for *some* Māori and Pasifika students. Many of these leaders claimed that the actions their schools took fostered high self-efficacy. However, they also acknowledged that students needed to address self-belief and efficacy as well. For some students, a lack of self-efficacy and self-belief can manifest in an unwillingness to participate in class, or engage with their teachers. The Starpath Project acknowledges that this may have implications for school and teacher practices and pedagogies, as well as students' self-efficacy. Students with a strong sense of efficacy are more likely to challenge themselves with difficult tasks and be intrinsically motivated. Self-efficacious students put forth a high degree of effort in order to meet their commitments, and attribute failure to things which are in their control, rather than blaming external factors. Self-efficacious students also recover quickly from setbacks, and ultimately are likely to achieve their personal goals. Classroom pedagogies for improving self-efficacy can include: establishing specific, short-term goals that will challenge the students, yet are still viewed as attainable (Schunk and Pajares, 2002); and helping students to design a specific learning strategy and have them document their plan. As students proceed through the task, teachers should ask students to note their progress and verbalise the next steps (Schunk and Pajares, 2002); and compare student performance to the goals set for that student, rather than comparing one student against another or comparing one student to the rest of the class.

7. Tracking and monitoring of Year 9 and 10 students for UE is important.

It is not surprising that the first years of secondary schooling, Years 9 and 10, are seen as foundation years for life beyond school and further learning (MOE, 2007; ERO, 2012). However, in the high stakes environment where the focus is on NCEA, it is of concern that the junior years get little attention and few schools have well-established processes for using assessment information to help students progress (ERO, 2012). To some extent assessment in the junior school has been hampered by limited standardised subject assessment tools. Standardised tests have focused on literacy and numeracy with no options in other compulsory core subjects such as social science, languages, the arts, physical education, or technology. More recent developments in assessment tools have improved the situation. The *Learning Progression Frameworks* (MOE, 2016) allow teachers to use benchmarked examples in a number of subjects, across curriculum levels, although again the emphasis is on literacy and numeracy rather than other skill development.

The 2012 ERO report on the national use of achievement data in Years 9 and 10 was damning regarding schools' attention to Years 9 and 10 programmes and learning. In fact, the then Chief Review Officer, Graham Stoop, stated on NZ Radio that Year 9 and 10 were the 'forgotten years'. The report found that the process of planning, implementing, and reviewing programmes in relation to Years 9 and 10 students was not happening as needed (Daly, 2012). Yet Groundwater-Smith, Mitchell and Mockler (2007) argued that the middle years can be a fertile ground for curriculum innovation, negotiation, and integration. There is a freedom away from the high-stakes assessment of senior school and an opportunity to develop metacognition and learning-to-learn skills. Despite *The New Zealand Curriculum* (Ministry of Education, 2007) clearly stating the expectation that Year 9 and 10 students should have opportunities to achieve to the best of their abilities across the breadth and depth of subjects, it seems that schools miss the opportunity to do so:

> *Only a few schools demonstrated that they used information to cater for students who were gifted and talented beyond the streaming and banding provision. It is important that all students' needs and strengths are identified early and programmes adjusted to cater for them. (ERO, 2012, p. 15)*

Groundwater-Smith (2007; 2009), and others, contended that the middle years are vital in the development of a young person's identity. Adolescence is also the time when students develop a strong picture of themselves as learners. Notions of success as a learner or failure as a learner are clearly established by the end of Year 10. Webber (2008) also stressed the importance of the school environment in establishing the conditions in which the learner belongs. Schools need to be proactive to contest the view held by some students that 'students from our school don't succeed'. Webber

(2011) also warned that Māori students who have a strong academic identity are more likely than others to be negatively impacted by stereotypes that tell them that "Māori are not academic" (2011, p. 232). As such, it is the responsibility of educators to reduce the impacts of negative stereotyping, starting from Year 9, in order to help students realise their intellectual potential as they make their way to adulthood.

Tracking and monitoring of Year 9 students: evidence from Phase Three.

Schools need processes for identifying students of UE potential.

When posed with the question of identifying Year 9 and 10 students of UE potential there were two main types of responses depending on the school's policy about streaming. The schools that streamed responded that they had a gifted and talented programme or a high achievers class. Placement in that class or group was typically based on a beginning of the year test although some schools mentioned that they relied on information provided by contributing schools.

In schools that had a non-streaming policy there was little evidence of early identification of students on a university track. When asked if they would see students who were performing at curriculum level 4 at the end of Year 9 as a priority group on track for Merit and Excellence certificate endorsement in NCEA, not one school was able to affirm that they saw students of UE potential in that way.

"In my mind, I would see them [Years 9 and 10 students of UE potential] as a priority group, but in practice there's nothing special happening."

Leader

Students' self-image is important.

Interviews with senior students in our study indicate the importance of self-image as a source for UE aspiration (also discussed elsewhere in this report) but there were also comments that indicated that the foundations of an academic identity begin in junior school (or before). Leaders perceived that some students in Starpath schools found it difficult to maintain their self-image as a high achieving student.

"The biggest constraint is aspiration, they are constantly told they are from a decile one school, '[school name] is no good, you've got to go elsewhere, [school name] is not your first choice of school, you need to go somewhere else for a quality education', if they avoid all those put downs and still have university aspiration then I think they are doing quite well."

Leader

A number of schools were concerned that a barrier to UE aspiration was the poor self-image students held of themselves as academically able. There is plenty of evidence that schools support a successful cultural, sporting and leadership image but little evidence that this happens in an academic sense. None of our schools mentioned that peer tutoring took place for Year 9 and 10 students, or that these students would know the high achievers in their own school.

There is a need for regular tracking of achievement.

All of the schools had some form of assessment data collection for Years 9 and 10, often Assessment Tools for Teaching and Learning (asTTle) or Progressive Achievement Tests (PAT), but in most cases they were used summatively rather than formatively. Schools were likely to keep to three assessment points over the two year junior period: typically two in Year 9 and one in Year 10. This type of assessment regime is sometimes used to justify countering assessment 'fatigue', but more often it is the result of assessment being scheduled for all classes during the same time period. This practice limits effective tracking of academic progress in the junior school. A number of the schools in the study discussed the benefits of benchmarking and *The Learning Progression Frameworks*. They were considering how they could introduce the *Frameworks* to the school, however by December 2017 no school had adopted the practice.

One school had devised its own progress tool: a junior diploma. In this school, as with NCEA, students achieved points throughout the year. These points were based on assessment of skills and knowledge devised by teacher. They were based on curriculum levels but were not part of a standardised testing scheme. The diploma allowed students, teachers and parents to see progress across the year in preparation for NCEA style assessment. In another school, teachers used 'traffic lights' as a tool for discussion in two-way and three-way conversations. It is interesting to note that even in schools that streamed students, there was little evidence that talented Year 9 and 10 students were specifically tracked for UE potential in senior school.

A number of schools clearly expect their deans to track student achievement. In one school the Year 9 Dean indicated that matters related to behaviour and pastoral care dominated his allocated dean's time

and there was not enough time for academic conversations. He also felt that if an academic conversation occurred it was not usually with a successful student. In schools where the deans indicated that they were able to spend time having academic discussions with students it was overwhelmingly focused on students who were having difficulty reaching the basic curriculum levels.

A number of schools also expressed an expectation that junior achievement data was discussed in core group or departmental meetings:

> *"There are core group meetings and an expectation that achievement data is discussed there. There is also an expectation that departments discuss data and use the Student Management System to see student aspirations and progress."*
>
> *Leader*

One school recognised limited staffing resource as a major barrier to providing highly effective assessment practices in the junior school. This school hoped that the additional resourcing available through their participation in a community of learning would be used to focus on junior academic achievement.

Minimal evidence of differentiation in programmes.

It was difficult to see evidence that students in the streamed classes received any different programmes than other students:

> *[Interviewer - Do the students in the top stream class get anything different from other students?] "I think they get the better teachers, they do get to go away on camps, leadership stuff."*
>
> *Leader*

> *"I think sometimes people think 'Oh they are the top class, well-behaved, they will get on with their work'."*
>
> *Leader*

A number of schools included NCEA standards in Year 10. In one of the schools the 'gifted and talented' class had a focus on literacy (for one term) and numeracy (for the second term) with the idea that these students would gain NCEA Level 1 Literacy and Numeracy in Year 10. This practice, however, is not universally adopted, and some schools are deliberately opposed to such a policy. It is felt that while gifted and talented students would gain NCEA Achieved at Year 10 it would be at the cost of gaining Merit and Excellence grades, which are seen as the foundation for UE attainment in senior years.

In schools that do not stream, there was little evidence of additional support for academically talented students. One school did, however, talk about an extra programme they offered gifted and talented students. This was described as an afterschool club-type extension activity offered on a Friday afternoon. For this activity, places were offered to students from all classes. Some schools, both those that streamed and those that did not stream, talked about special programmes they were being offered by tertiary institutions. One such programme, about robotics, was seen as a positive way of shifting student aspirations and motivating future thinking. In our study, we did not conduct classroom observations and were therefore unable to determine the differentiation practices of individual classroom teachers.

All Starpath schools saw the importance of activities that support student leadership development, although they saw these programmes as providing opportunity for those students who were inclined to pick up this opportunity rather than tailoring programmes to promote leadership in junior school or to develop specially identified individuals.

8. Effective data utilisation is crucial for students' success.

Data collection and utilisation are important in schools as they inform evidence-based decision-making, enabling schools to make knowledgeable decisions about the current state of student achievement. They also provide evidence to inform next steps and possible areas within the school which may require further PLD and support (McKinley, Madjar, van der Merwe, Smith, Sutherland & Yuan, 2009).

Given the research and development work undertaken in Phases One and Two, Starpath schools in Phase Three demonstrated increased capacity in their understanding and use of school-wide student achievement data. Schools were able to analyse and compare their longitudinal NCEA data, confidently identifying the trends and patterns. Schools often used these findings to estimate the percentage for the next year's achievement targets. Starpath saw this as an opportunity to work with schools to establish and set evidence-informed targets based on individualised student achievement. That work required schools to disaggregate student data to an individual level to enable teachers to set evidence-informed 'stretch' targets for Māori and Pasifika students to attain UE. Stretch targets are challenging and aspirational achievement goals that encourage school leaders to set a high bar for Māori and Pasifika UE student outcomes.

The complex nature of UE provided Starpath with a clear idea of the particular student achievement data that should be tracked and monitored. The UE Literacy requirement comprising at least five reading and at least five writing credits, was often mentioned by leaders as a major barrier for students in attaining UE. Despite these claims, schools were not tracking these data to support their hunches.

Supporting schools to track and monitor the UE Literacy achievement throughout the year has been one of Starpath's key recommendations.

Previously, the UE Award at the subject level required *two* subjects at 14 or more credits at NCEA Level 3, plus one other composite subject which could comprise standards with 14 or more credits. From 2014, students have been required to achieve 14 or more credits in *three* or more approved subjects consisting of specific UE approved achievement standards. It was also suggested by leaders that this was a major barrier to students attaining UE, yet 14+ credits in approved subjects were not being tracked. Starpath recommends regular tracking and monitoring of student achievement to ensure that students achieve 14 or more credits in three UE approved subjects.

Starpath worked alongside schools in target-setting meetings to create evidence-based aspirational targets. Through the use of student achievement data in target-setting meetings, Starpath was able to help schools identify students of UE potential who would form the target group. We used student achievement data, such as overall NCEA Level 2 achievement and students' current UE Literacy status, to identify students of UE potential. It was also necessary to examine whether students were enrolled in viable UE-approved courses. We then established evidence-based targets consisting of students who had opportunities to attain UE.

Another positive change made with schools was to enable Student Achievement Managers (SAMs) to access subject level credit achievement. In our first visits, we identified that there were only two of the nine schools that had SAMs who knew how to access these data from within their student management system (SMS). By working alongside the SAMs and providing PLD where necessary, all nine Starpath schools are now accessing an inbuilt export from within their SMS. Leaders were also shown how this export can be used to see, at the individual level, how many credits in each subject a student currently has. This export can easily be used to track Māori or Pasifika students' achievement in their UE approved subjects.

Three of the schools participated in PLD which focused on establishing a more consistent data management system across all departments. PLD was also offered to help departments set up the KAMAR SMS Markbook Summaries in a school-wide consistent manner. Markbook Summaries were set up to show the total credits attained, followed by the credits each student attempted. This enabled teachers to easily and quickly identify students who needed additional support when an assessment had not been achieved. Additionally, it ensured teachers and HODs were consistent in their tracking of student achievement within their own departments and across the school.

Starpath schools experienced UE success for their students who had achieved NCEA Level 2 with Merit or Excellence endorsement in the previous year. Students who achieved Merit or Excellence had a UE

success rate of approximately 70% and 92%, respectively in 2016 (see Figure 10). Surprisingly, the data showed us that students who attained NCEA Level 2 with Achieved overall, attained UE at significantly lower rates (approximately 7%) compared to those who attained Level 2 with Merit or Excellence endorsement. Māori and Pasifika students of UE potential who were in this achievement category for Level 2, and those who wished to attain UE, needed to be supported by more frequent tracking and monitoring and targeted interventions. Starpath also recommends that tracking and monitoring is supported by an effective academic counsellor.

Students from our nine Starpath schools who attained an asTTle reading level of curriculum Level 5 or 6 at the end of Year 9, often went on to attain UE with success rates of approximately 68% and 100%, respectively. Starpath also found that approximately 40% of the students who achieved curriculum Level 4 in asTTle reading at Year 9 went on to attain UE. It is therefore important that schools do not limit the learning opportunities provided to students based on their Year 9 asTTle results (see Figure 11).
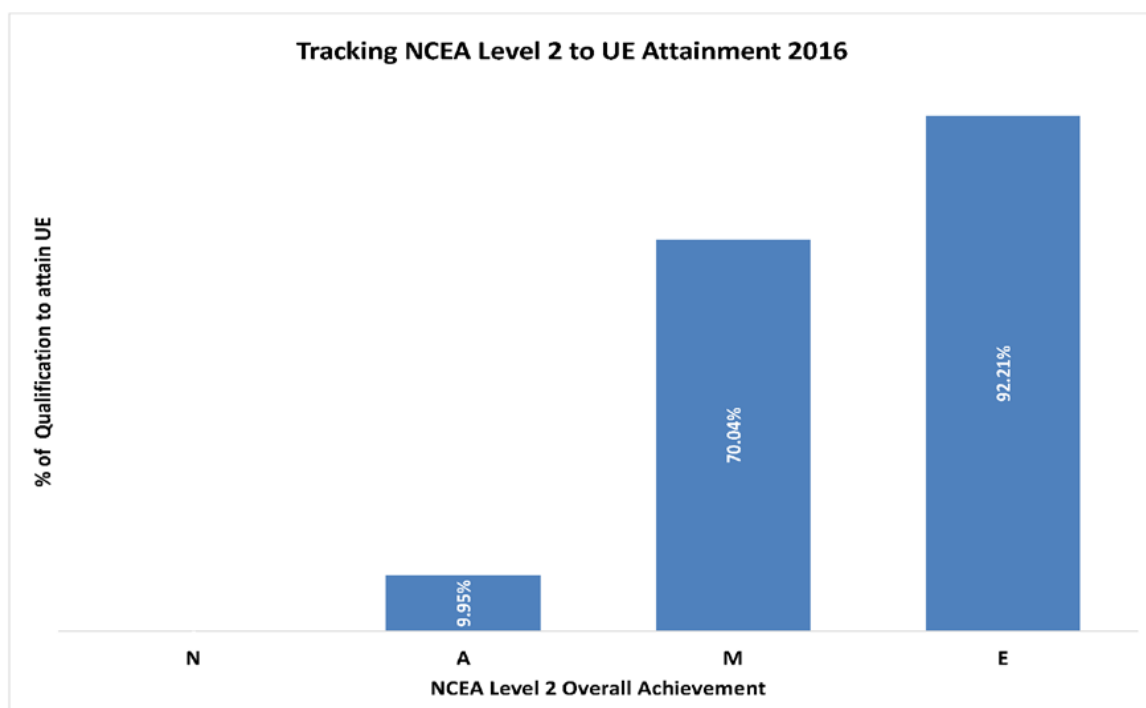
Figure 10: Tracking NCEA Level 2 to UE Attainment 2016
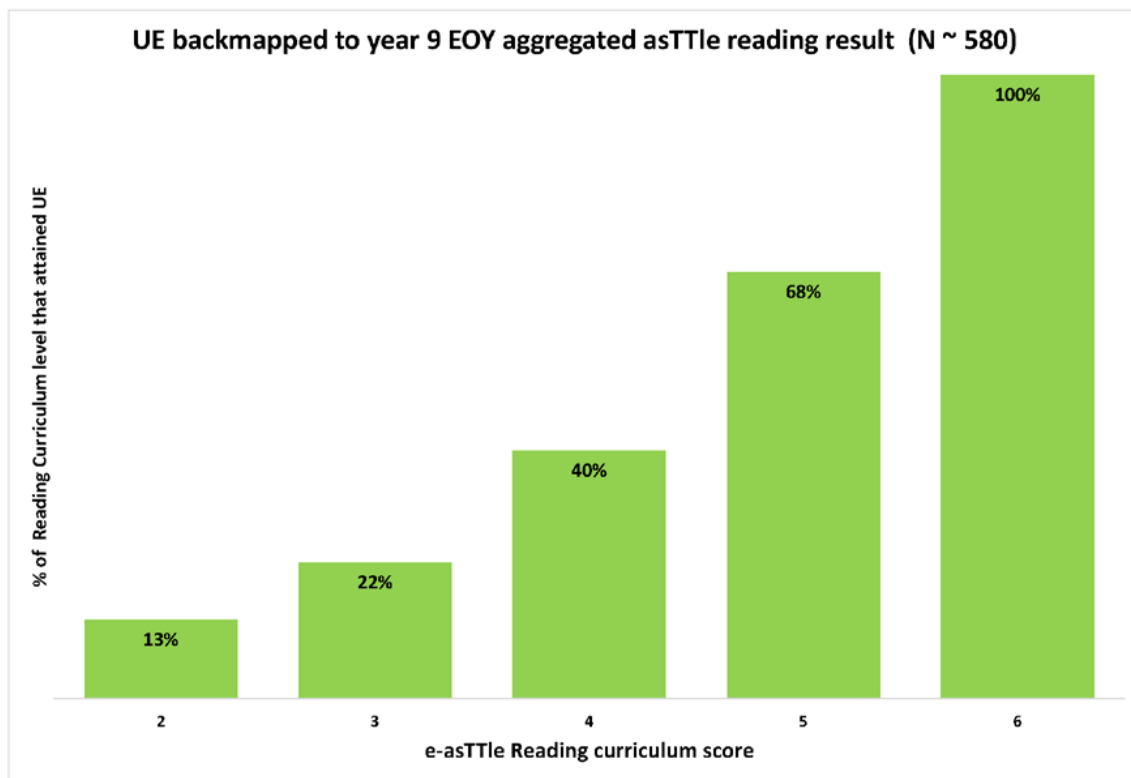
Figure 11: UE backmapped to Year 9 EOY aggregated asTTle reading result

One of the barriers observed in the tracking of student achievement data was that some teachers continue to be slow at entering internal assessment grades. Starpath tracked student achievement data across terms one *and* two and observed students with zero credits recorded. There was no shift in these students' recorded grades across the two terms. This might be explained in some instances where students are enrolled in portfolio-type subjects. Additionally, some subjects deliver courses which consist almost entirely of externally-assessed achievement standards. Time and capability were also barriers for tracking. Many SAMs were tracking and monitoring student achievement *only* when prompted by Starpath. This indicates that the tracking of student achievement is irregular and is not being used to inform next steps for teaching and learning.

Data driven target lists of UE potential students have been developed for many of the Phase Three schools Starpath worked with. However, these data are not always distributed to all staff. If teachers are unaware of the students on this target list, such lack of knowledge could potentially become a barrier to student achievement for UE.

Starpath recommends that schools articulate clearly the complicated nature of achievement required for UE, especially regarding the number of credits being offered in courses. Every assessment in every UE approved subject is important. When a student fails to achieve an assessment in a course, the

classroom teacher needs to recognise the impact this may have on the student's overall achievement for the UE Award. Many schools have lowered the number of credits being assessed, however one consequence of this is that it could compromise the student gaining 14+ credits in a UE approved subject. In one school, a course risk assessment showed only three courses out of 20 offered enough credits for a student to fail one assessment and still progress to achieve UE. This emphasised the high risk nature of the course design within the school.

Starpath recommends the following data practices:

- Create a 'data wall' for tracking student achievement for the target list of students. This needs to be clearly visible to staff in a confidential space. It would include student photos/identifiers and current student achievement data. This could be managed by all staff who are contributing to a student's achievement (for example, an academic mentor, dean, subject teacher, senior leader).

- Regular meetings with a focus on student achievement that include at least one expert in data analysis and interpretation. School leaders should meet at scheduled times to discuss student achievement data. These meetings should identify progress towards achievement milestones and also indicate where intervention is needed. Academic interventions, including re-submission, reassessment, or new assessment opportunities, should be implemented in a timely fashion.

- Offer professional learning opportunities regarding data literacy. Many schools have the ability to analyse data, but lack the expertise to decide on the next steps required. Staff would benefit from frequent opportunities to engage in data-driven conversations to gain 'data' confidence. This would help enrich teacher student discussions in the senior school.

- Students who have UE potential, but have attained their NCEA Level 2 certificate without endorsement, would benefit from closer tracking alongside careful academic counselling. This would help to ensure these students progress towards UE. The viability of their courses and the proportion of internal to external credits should also be looked at carefully early in the year. This will enable schools to intervene via timetable and course changes as needed.

- Establish a school-wide expectation that students will achieve 14 or more credits in every subject. This will ensure that every department is contributing towards students achieving their desired qualification. A simple table (it could be 'traffic lighted') to identify courses with high, moderate, and low success rates would be useful. This information could be used to keep departments accountable to the overall achievement goals.

- At key times throughout the year, create a list of students who need specific support to progress towards the UE requirements (for example, students who still need UE Literacy at the

beginning of Year 13). This list needs individualised student information and achievement data so that appropriate 'next steps' can be actioned.

Phase Three: Findings for Universities

The long-term performance of the university system depends on its ability to recruit, retain and teach a diverse range of students, whilst adapting to demographic shifts occurring as a result of social mobility, migration and immigration. A persistent issue for universities is that Māori and Pasifika school leavers, who tend to be clustered in low-decile schools, are less likely than any other ethnic groups in New Zealand to transition into degree-level studies, to succeed in their first year, and continue with their studies. A students' experience of transition should begin while they are still at high school, continue over the following summer, during their initial months at university and stretch beyond the first year. However, according to McKinley and Madjar (2014) we still know little about what the process of transition is like, especially for Māori and Pasifika students and those who are the first in family to attend university. It is critical that we better understand the experiences, enablers and barriers to student transition because as McKinley and Madjar have posited, "At its heart it [transition] is about learning, change and self-transformation" (p. 243). McKinley and Madjar's (2014) study concluded that many Māori and Pasifika students find the transition to university problematic because of "the lack of adequate academic preparation and guidance at school, absence of adequate mentors, lack of clear goals and failure to be challenged to perform to their potential rather than settle for the minimum needed to pass" (p. 250). They argued that many universities overlook how overwhelming it can be for Māori and Pasifika students to move into a university campus where few people look or sound like them.

The findings presented here relate to student, whānau, and leader perceptions about what universities and tertiary training providers do, don't do, and should do – to encourage and enable young people with UE potential into academic study. We asked interviewees specifically about what aspects of university encourage or discourage them from attending, and what they would like universities to change to enable more Māori and Pasifika from low-decile schools into tertiary study. The findings presented here relate only to comments from participants that believed they knew enough about tertiary study to make specific comments. Most of the participants we interviewed *did not comment specifically about enablers or barriers at the university level*, because they indicated that they had never attended university and did not understand enough about how the system worked. This is in itself a major finding.

What Enables Students Considering University Study?

1. University visits and talks.

Participants indicated that the greatest enabler to entry into tertiary study from universities or other training providers were provider talks in school and visits to the institutions through open days or school-led 'camps':

"We've had some people from different universities come to present at school and tell us what they have to offer, what opportunities they have for all students, and they give us advice for what we need to do and how to get there. I heard that it's really hard to get into the second year of medicine."

Student

"I went down to Otago University and looked at study around marine biology, psychology, sport sciences and law. I was there for a whole week."

Student

"People come here from various universities - and they often are a young group of current students at university and they are Māori or Pasifika - and they talk to our Level 2 and 3 students about the university experience, how to enrol, and give them lots of literature and information about what the procedure is... They get really inspired, they just really want to go to university after that."

Leader

It is important to note that not all comments were about the University of Auckland. While most students and leaders at Auckland schools indicated that the University of Auckland had come to their school for a visit, some participants were unaware as to whether they had come or not. More importantly, very few students and leaders from Northland indicated that the University of Auckland had been to visit their school.

The University of Otago was the university that was most often explicitly named as enabling students to see a pathway to tertiary study, and students and whānau perceived that they were actively recruiting Māori and Pasifika students. As one student put it:

"It speaks volumes that I chose Otago. Auckland is only three hours away whereas Otago is in the South Island. It must be really good if I want to move all the way down there considering I could go to Auckland and only be three hours away from my family."

Student

2. Providing financial scholarships.

Financial scholarships were the second most often cited enabler across all schools in Auckland and Northland. Financial scholarships influenced students' decisions about which university to attend, and whether or not to attend university at all. In fact, most students indicated that they were more likely to attend universities that offered them financial scholarships.

This theme only relates to students' understandings about scholarships from information provided by universities. Information about scholarships in general (for example, "they tell us that scholarships are out there") was usually provided by the school careers adviser and was often mentioned as a school-level enabler, and is reported above (Section 3 - The importance of effective systems and processes around NCEA, UE and scholarships).

3. Cultural affirmation.

Cultural affirmation was often cited by students as an enabler to considering tertiary study. Three of these comments were in relation to The University of Otago's initiatives for Māori students. Representative comments included:

> *"Lately they (the University of Auckland) have been targeting Māori and Pasifika students into doing stuff out of school, there was a camp just out of Auckland and they were targeting young Māori students. I like the support because it shows that our culture is now coming up - they always think of Māori and Pasifika as a little bit dumb - but they base everything around us now and it helps a lot."*
>
> *Student*

> *"Otago and Waikato are really responsive. One of Otago's priorities is communicating that there is a strong Māori presence there."*
>
> *Student*

> *"What I liked most at Otago was they had a kaumatua and a kuia there that run the programmes, and that feels like that is your nan or your koro."*
>
> *Student*

> *"Māori kids need someone there to look after them, and in a Māori way."*
>
> *Leader*

4. Clarity of pathways and a range of course options.

Students, whānau and leaders all mentioned the clarity of pathways through to tertiary as a key enabler to considering tertiary study. These individuals talked about being able to see the pathway through degree-level study and into jobs at the end of it. Leaders also discussed the importance of bridging programmes and other supports.

> *"We want our kids to know what's out there. Because as teachers, we don't know what is out there. And it's such a changing environment. Are they going to get jobs? Because it's very important for them to know that there are going to be jobs to go to."*
>
> *Leader*

Some students also mentioned the course offerings at university as enablers to degree-level study at specific institutions. One student mentioned that he would go to Massey University ("I have to go to Massey, because that's the only place that does aviation") and one student mentioned that she might study dance at the University of Waikato:

> *"We checked out a few universities to see if they had one (a dance department). Waikato had one, but for a minor not a major. (Researcher: You can do a degree in dance at the University of Auckland, did you know that?) No, we didn't end up going there."*
>
> *Student*

What Discourages Students Considering University Study?

1. Financial considerations.

The expense of tertiary study was mentioned numerous times as a major barrier. Students, whānau and leaders alike were concerned about the costs of course fees, books, and other expenses associated with tertiary study. The cost and availability of accommodation and travel to university was also mentioned – particularly for students without whānau or connections in big cities.

> *"University is not a pathway that they [this community] look at because of the expense. It just costs too much. And they don't want to see themselves loaded with debt. And well - they can't afford it for a start."*
>
> *Leader*

2. Universities are not welcoming.

Universities were described as unfriendly, impersonal, or 'not present' by many students, whānau and leaders. These participants indicated that universities are not doing enough to actively engage with high achieving students and their communities. Some typical comments included:

"I've been told you're not really supported... and I don't want to hear that. I want to hear that I am going into something that will do me good, and I will get some support. I don't want to be lonely for my whole university life."

Student

"We know that universities are a business and they like to make money and the only way to make money is to get bums on seats. We know this. That's life."

Whānau

"...It's a hard thing because [some universities are] just not going to change any time soon in terms of their demographic, why would you, you get lots of money from your international students, why would you change that?"

Leader

3. Negative perceptions about academic study.

Perceptions about academic study were mentioned many times as a barrier to degree-level study. Students and whānau particularly talked about the types of study and learning they might have to adapt to, and had concerns about the competitive nature of tertiary study – especially when compared to NCEA. The following is a typical conversation under this theme:

Researcher: "So - for your peers that aren't going to go on to university study - why do you think they have chosen not to go?"

Whānau: "Maybe the thoughts around university are too scary?"

Student: "Yeah especially Auckland. Because we hear there's lots of competition."

Whānau: "See, that's the message that these kids hear, there's too much competition at Auckland. Why not just go to MIT or AUT. But you should work hard to get there... But the unis are getting the message out that there's too much competition, before they even get there."

4. Concerns about job opportunities post-study.

The cost relative to benefits in terms of future employment, and clear pathways into employment were also mentioned. Students and whānau particularly were worried about encumbering themselves with debt and then not being able to find work, or not being able to find suitable work, after their studies.

"As an employer, I interview a lot of people with degrees that can't find work. So my question for the providers is, why would you get funding to provide courses for students if they aren't learning the things employers need?"

Whānau

"For me, it's about visibility of pathways. We're good at creating a lot of documents, but I think visibility is the key. And sometimes a picture or a diagram or something speaks a lot of words. So to give you an example - Kia Ora Hauora does that very well with their booklet. When you open that up, the first thing that students and parents look for is how much does the surgeon get paid. And then they have the base salaries there. And you have a look through there and it says what you need to study - so it actually shows a pathway. And I think we need to do a lot more of that, around providing a better glimpse from beginning to end. And yes, we will tend to look at the salary first. So that is what I think the education and employers need to work on."

Whānau

5. Insufficient information, concerns about transition and cultural affirmation.

A lack of information about the systems and supports available was often cited as a barrier. For example, one student commented: "There's no information - about student loans and stuff like that. Because if you go for a student loan, it's just you. You have to do it yourself. And it's a daunting task." In addition, students felt unprepared for the transition to university and were not aware of any supports available to them to ease the transition. Finally, participants stated that a lack of cultural appreciation was a barrier to tertiary study. One student particularly mentioned racism ("there's such a level of racism at universities"), while one whānau member commented:

"I came from a kaupapa Māori setting where we all work together. University isn't like that, university is separate. When I went to university, I was thrown out into the big wide ocean."

Student, Whānau, and Leaders' Recommendations for Universities.

1. Provide more opportunities for students to experience university life.

More open days, visits to universities, and the need for universities to be present earlier were mentioned by students, whānau, and leaders, as a change that would enable more students to see a pathway into degree-level study. Specifically, students thought that there was a need for courses to assist with transitioning to tertiary study, for example, 'being a university student for a day'. A few representative comments included:

"I reckon they should have workshops for us to participate in, that would be mean. That would be good just to give us a more clear insight into how things are going to be... I think it was a few weeks ago, a group of students went down to Otago, they got to go to some workshops down there. And I reckon - yeah, that just made me question why couldn't we do that kind of thing at Auckland."

Student

"I reckon if they had a week for us to go and experience how lectures are done... and it would be great if they could introduce - briefly - the courses that you are interested in, for example, what's the difference between bio-medical science and health science?"

Student

Participants also indicated that they felt that introductions to university study needed to start sooner, and continue on a regular basis throughout students' years at secondary school. Representative comments included:

"I reckon they should come in more. Not just the one time, it's not enough to encourage students. And start in Year 10."

Student

"If you can get them even earlier, and start planting the seed, I think you'll get a big tree at the end of it."

Whānau

2.   Provide more information about financial scholarships available.

Students and whānau need more information about scholarships. Many individuals mentioned that they did not have enough information about what financial scholarships were available, and suggested that that information should be more accessible:

"Scholarships should be pushed a lot more. I knew there were some Māori ones but I didn't know about the Pasifika ones and there is a good chance that a lot of people don't know."

Student

"I don't think there's enough advertisement for scholarships, even for college students. As a parent I would like to think that those things are available - in the Polynesian sector - and because I'm a single income mum."

Whānau

3.   Lessen the financial burden.

Leaders, students, and whānau specifically said that universities needed to lower their fees, or provide more financial scholarships to families in need. These individuals all commented on the major financial burden of tertiary study, with many commenting that they were not sure tertiary study was even an option due to the cost, or that the cost of study would be a major contributing factor in their choice of institution.

"We are a Decile 1 school and we have some really great students here, but it's a stressful thing. Like I've got a lovely student, wants to be a social worker. Lives with his grandma, dad's in Australia, doesn't have much to do with his mum. Has a tumultuous relationship with his nan. He'd be such a good social worker, he's a very sensitive boy. And you'd think if anyone needs a scholarship, he does. He's got no money, no family earning any money. He wants to be a social worker. We are short of social workers. We are short of male, Māori social workers."

Leader

4.   Provide more information about pastoral support at university.

Students and whānau commented about needing more information about the pastoral support available at university. Many individuals, usually whānau, raised concerns about the wellbeing of their rangatahi, especially if they were travelling away from home for their study. Schools also commented

on a lack of support systems, for example, Studylink no longer visit schools to explain the processes for obtaining student loans or allowances.

> *"What options are available for accommodation if they have to move out of home? What pastoral supports are available? I wouldn't be there to make chicken soup when she is sick. These are the things I think about, as a mum."*
>
> *Whānau*

> *"An hour some time where people talk about that, dealing with Studylink, so we can learn about that if that's what we are wanting to do."*
>
> *Student*

5. Ensure that tertiary options are available across regions of New Zealand.

Students, whānau, and leaders from Auckland and Northland were concerned about daily travel and distance issues. In Auckland schools, participants commented on the difficulties of getting into the city: public transport; parking costs; and time spent travelling were all commented on. To this end, all participants suggested that a free or subsidised bus from South Auckland would be a major enabler. Many of these participants also commented that AUT was an attractive option because of the South Auckland campus. In Northland, participants commented on the potential transformational power of an academic institute based in Northland, particularly one further north than Whangarei.

> *"Try and bring institutions up here, in the Far North. Because there are a lot of families up here, and not many will have family in Auckland. Up here [Kaikohe] or Paihia, Kerikeri."*
>
> *Student*

> *"It feels quite isolating, because it feels like all the tertiary providers are in Auckland. And we're here. If there was something here, it would absolutely go off. Families wouldn't need to worry about a boarding situation, and all the other issues that big cities bring. It would go off…"*
>
> *Leader*

6. Mentoring and connections with students, whānau, and communities.

Finally, two additional suggestions were made for improvements to universities that may enable more Māori and Pasifika students to consider tertiary study. The first was that the mentoring programmes

within schools offered by universities were very important to students' academic success, and that they would like to spend more time with their mentors. Secondly, students and whānau talked about the importance of making connections with communities and the visibility of Māori and Pasifika students at university.

"In these communities, you do need to inspire the parents, because if the parents aren't on board then it's not going to happen… They need to know what is going on, what is possible. They come from very different life expectations. We need more from Auckland University to show up. Show their faces. Get together in the hall, maybe. I know MIT [Manukau Institute of Technology] is more accessible. They do more things - with food!"

Whānau

"Families should be involved in those talks. They're the ones that are going to be supporting their children to get there."

Whānau

Conclusion

Starpath Phase Three has taken a strengths-based approach to research across the two years of the project. Students, whānau, leaders, and our own observations have indicated positive ways in which schools and universities can enhance outcomes for Māori, Pasifika, and low-income students. Our findings indicate that schools need to continue to develop systems and processes that allow students to thrive in their learning environments by developing independence, being inspired to succeed, and having multiple opportunities to be successful.

Overall Recommendations for Schools

Develop independent learning.

During interviews, students, whānau, and leaders often mentioned 'spoon-feeding' as a barrier to student learning and achievement. Teachers were often faced with the dilemma of how much support to give students. It is important to strike a balance that provides students with appropriate levels of support, while allowing them to develop effective self-management skills. These skills include: helping students to develop a 'can-do' attitude; an ability to establish personal goals and plans and make them happen; and high expectations for their own learning. Teachers need to understand when, and how much, to remove support structures (albeit gradually). This is necessary to allow students opportunities to practice strategies for dealing with unfamiliar situations, such as external examinations. To this end, teachers need to utilise deliberate actions that encourage students to grow into independent, life-long learners.

Provide opportunities for students to be inspired.

The notion of *being inspired* to go to university was one of the earliest findings to come out of the first interviews with students and whānau at the end of 2016 and continued to be discussed regularly by students, whānau and leaders in 2017. 'Inspiring' experiences included visiting universities; attending lectures and experiencing a taste of campus life; talks from universities; and local events such as careers days or roadshows. Our data suggest that schools should:

- Begin *inspiring* earlier, even as early as Year 9 and 10. All parties lamented the process beginning in Year 13. This is too late for some students.
- Open the door to as many students and whānau as you can, even those students who are not currently targeted for UE. All students need positive experiences to enable them to consider university or higher study as a viable option. Include whānau whenever possible.

- When possible, invite ex-students from your school to speak to current students and whānau about their experiences. In interviews, students indicated that this is particularly powerful.
- Increase the frequency of *inspiring experiences.*

Ensure consistency of academic conversations.

Observations of two-way conversations indicated that there is variability in the quality of academic conversations within schools. We recommend that the practice of regular academic conversations is maintained, and that new staff are given PLD on what effective academic conversations look like. Schools can determine when and how regularly these conversations take place, although Starpath recommends that they happen at least once a term for all students; and more often for those that need more support. We also recommend that conversations are one-to-one to ensure that the discussion is specific to the individual student's goals and learning needs. If necessary, conversations could follow a scripted format so that all aspects are covered. Conversations also need to be allocated an appropriate amount of time to allow for deep analysis and reflection. Below are some important elements of effective conversations:

- Gather relevant data prior to meeting.
- Begin the meeting positively.
- Set the agenda – purpose and content.
- Joint analysis and reflection of current and historic achievement data.
- Review or establishment of long term goals.
- Ensure current pathway is appropriate to long term goals.
- Co-construction of SMART (Specific, Measurable, Achievable, Realistic, and Timely) goals.
- Discussion of next steps for learning and specific short term goals.
- Review discussion confirming decisions made.

Refer to the Starpath Toolkit www.starpathtoolkit.auckland.ac.nz for more detailed information.

Develop authentic relationships with students and whanau.

Positive and genuine relationships were mentioned by students, whānau, and leaders as one of the most enabling factors to student academic success. It is important that attention to improved relationships goes beyond the student and teacher. Schools should continue to cultivate a climate in which whānau feel comfortable to initiate involvement in their children's education, and should provide them with the appropriate opportunities to do so. Building relationships and taking a strengths-based

approach to interactions with Māori and Pasifika students and their whānau are key factors to students enjoying and achieving educational success. Māori and Pasifika whānau engagement in schools depends on them being treated with dignity and respect. During three-way conversations, it is important that school processes and classroom practices add to whānau practices and not oppose them; that structured and specific home-teaching strategies are shared (rather than just general advice); and that whānau have opportunities to be involved in their children's education, especially through informal contact. Finally, culturally relational and responsive pedagogy can raise the achievement and improve the schooling experiences of Māori and Pasifika students. It is imperative that Māori and Pasifika students achieve highly at school, without forsaking their identity, language, and culture.

Ensure effective tracking and monitoring practices are consistent.

It is important that all teachers understand they have a fundamental role in improving school achievement rates. Effective tracking and monitoring of student data can have a significant influence on student outcomes, especially in narrowing the gap in achievement for Māori and Pasifika learners. A school's capacity to engage with data, learn from, and effectively evaluate the next steps, depends on its own capacity to model best practice. This includes how to 'track and monitor', lead opportunities to support staff data literacy and capability, and provide appropriate data analyses to all stakeholders within the school and wider community.

Recommendations for effective tracking and monitoring of student data include data teams who:

- Actively lead PLD and manage the data tracking, monitoring and analyses for all levels of school achievement.
- Create a school wide data tracking calendar to ensure data are regularly analysed and appropriate action plans are developed for all year levels.
- Lead and support robust tracking and monitoring processes at the classroom level.

Provide opportunities to learn and succeed.

For students to achieve the UE Award, they must have plenty of opportunity to be enrolled, and do well academically, in more than three approved subjects, as well as have multiple opportunities at NCEA Levels 2 and 3 to attain UE Literacy credits. One of our findings is that there are sometimes large gaps in teacher knowledge about the complexities of NCEA and UE. We think that this is a barrier to student

success. We also encountered teachers and students using terminology incorrectly, for example students reporting that they "already have UE" as early as May or teachers referring to "UE English".

Starpath recommends that schools:

- Engage in regular, timely and robust review of course design to ensure opportunities-to-learn for UE. For example, courses provide sufficient credits for students to gain 14+ credits from achievement standards (not unit standards), be entered for externals and achieve subject endorsement.

- Courses at NCEA Levels 2 and 3 offer students achievement standards for UE Literacy wherever possible, so they can gain the 10 credits needed; 5 credits in reading and 5 credits in writing.

- Have senior leaders regularly audit NCEA Level 2 and 3 courses for opportunities-to-learn in UE Literacy, and engage in follow-up conversations with middle leaders as necessary.

- Keep academic pathways open prior to Year 13.

- Continue to provide opportunities for senior students to study a wide range of subjects. For the smaller schools, this might mean providing support, such as Far Net Learning and Correspondence School, when a subject may be hard to staff in the school.

- Provide individualised support for learners.

- Better prepare students for university which may include opportunities to experience tertiary style teaching such as lectures, independent and guided study.

- Ensure students have opportunities-to-learn and develop skills both in and out of the classroom.

Pay attention to Year 9 and 10 students.

'Spark a light' early.

The data suggested that students would benefit from being introduced to the idea of university in Years 9 and 10. This would ensure that they have *all* of their secondary school years to reflect on whether or not they want to go to university. For those students who do have university ambitions, they could set goals from an early age. The data promoted the importance of making sure that information about university is presented in an easily digestible manner for junior school students. One parent suggested using mediums like cartoons or short stories to convey information about university to junior students.

Break down negative stereotypes.

The data showed that many Māori and Pasifika students encounter stereotyping and racism at school. Schools could consider taking deliberate actions to counter negative stereotyping. These actions in the

junior school could enhance self-belief and self-efficacy from an earlier age. Starpath recommends that schools promote a picture of Māori and Pasifika students as successful learners. Some specific strategies include allowing students to see 'students like me' and 'students from my area' who have gone on to be successful at university. This might be achieved through inviting former students, who now attend university, to come and speak at school. It is important that some of these students are Māori and Pasifika, as this reinforces that Māori and Pasifika students can be successful in an academic context.

Ensure that academically advanced students are extended and supported.

The data showed that despite many schools streaming students, few of these schools had specific strategies or differentiated programmes for academically advanced Year 9 and 10 students. In these schools, Starpath recommends that students have access to appropriate acceleration and extension programmes to keep them engaged. This acceleration and extension would provide support for academically advanced students, rather than assuming that their capabilities will automatically translate into academic achievement. Given the mixed-ability nature of classes in schools that do not stream, Starpath recommends that schools and teachers develop practices that ensure students are given differentiated support.

Overall Recommendations for Universities

This section of our report outlines the most frequent comments from interviews with students, whānau, and leaders concerning pathways to university study. Within this section there are general comments about degree-level opportunities but many students, whānau, and leaders named specific universities and the support they offered. The participants recommended:

Universities continue to provide financial support and assistance.

A large number of comments related to the costs involved in university study. Some form of financial assistance, for example scholarships, was cited as an important enabler, particularly for low-income students, and the participants had suggestions regarding further financial supports that would be helpful, for example, the lowering of fees. There were also concerns that the cost/benefit of university study was not always clear to either students or whānau. Many students and whānau from Northland cited concerns with transition issues, accommodation costs and their fears about 'big city living'. Students living in Auckland expressed concerns about the costs of transport and access to campus and study facilities.

Ensure effective communication channels.

Students mentioned the importance of university visits but they also offered ideas about how communication between the institution and whānau could be improved, for example, whānau could also be invited to university presentations. There were a number of comments relating to how a student might better 'fit in' to the university setting, particularly in terms of cultural affirmation. Their statements made it obvious that students are careful about which university they choose to enrol in, basing their ideas on perceived strengths of support or course options. They also expressed their own fears about the nature of university level study and were looking for programmes that ease the transition.

Connect with schools and students early.

Like McKinley and Madjar (2014), our Phase Three findings support the assertion that focused preparation at school and a range of support services at university can provide important stepping stones for Māori and Pasifika students. What appears to need additional attention, is the critical 'early' connections between whānau, universities, and secondary schools, and the relational aspects of the transition process. There is still a need for more explicit information sharing between the secondary schools, universities, students and whānau, and there is clearly a call for these relationships to begin well before Year 13. It is important that students who transition to university feel confident, competent, and connected to others going through the same process.

Feedback from Starpath Schools

In concluding conversations with Starpath, schools reflected on the strategies they felt would make the most difference to Māori and Pasifika student success for UE success. They suggested that all schools:

- Set simple, specific, student attainment targets of *at least* 14+ credits for every course at every level of NCEA.
- Develop a robust system for the regular review of course design, timetables, and assessment procedures with UE requirements in mind. For example, checking course viability for UE and checking opportunities for students to gain UE Literacy credits.
- Assign responsibilities related to achievement. For example, appoint a data manager or data team.
- Maintain a strong induction programme for new staff and hold focused PLD sessions so that effective data utilisation and academic counselling practices are sustained.
- Continue the practice of high quality academic counselling (both two-way and three-way conversations). Every student should have a significant adult who knows them well and can help them to develop an effective and individualised learning plan.
- Develop a school culture that values UE as an 'end of school' goal. This includes encouraging Year 9 and 10 students to think of UE as an achievable goal, and discussion about UE in Year 11 and 12 conversations.

Schools also commented on the benefits of participation in projects such as Starpath. They valued:

- Sharing new ideas and effective practices with other schools in the project.
- The feedback mechanism built into the research programme. These discussions helped schools to critically reflect on their practice.
- The unrelenting focus by Starpath on issues related to UE attainment. This focus reinforced the value of UE as an attainment goal and pushed schools to keep UE on their agenda.
- The development of resources, such as the Starpath Toolkit.
- The data support provided by the project. This has helped schools to improve their data systems and utilisation of data for tracking and monitoring the academic progress.

School leaders also had some specific recommendations about UE, in particular the complexity of requirements for entry to university. Schools urged the New Zealand Qualifications Authority and the universities to align their requirements to reduce complexity and confusion.

Closing Statement

Starpath has worked hard during the two years of Phase Three to support schools to improve the academic achievement of Māori and Pasifika students so that they can achieve their UE potential and progress successfully to degree-level study. We have further developed a research approach that has contributed positively to schools using a more data-driven and data-informed approach to tracking and monitoring student achievement. We are proud of the ways Phase Three Starpath schools have committed to refining their school systems and processes to better serve Māori and Pasifika students and whānau. As evidenced by the findings of this report, universities and other educational organisations have much to learn from students, whānau and school practitioners. Starpath has strived to maintain a robust approach, whilst being committed to mutually beneficial relationships with schools. We hope this report contributes to future discussions about the ways we can better address the challenge of increasing equity and excellence in educational outcomes for Māori and Pasifika students.

School improvement is complex and difficult at the best of times and the deeper the educational issue, such as the redistribution of opportunity and success, the more resistant it appears to be to make lasting change. Without exception, Starpath schools have collected a large amount of data about students but we have found that they did not always use them to best, or in some cases, any effect. Substantial professional development is still needed in relation to data collection, data storage and use, UE Award criteria, and using data to facilitate parent-student-teacher conferences and conduct academic counselling. While some schools had staff with strengths in this area, the vast majority of schools continue to need significant external input and professional development. Attending to school-wide data literacy skills in terms of accessing and using data, and increasing teacher understanding of the value of longitudinal student data with respect to enhancing student performance, is an ongoing concern.

We encouraged schools to collect and use a wide range of data to: set high goals (targets) for individual students and groups of students; determine the curriculum content (and rigor) the students were getting; monitor students' progress allowing for timely intervention; and inquire into teacher and school practice. While the Starpath team could assist with developing ambitious UE targets for individual students and groups of students (school targets), the conversion of these targets into the strategies required to achieve the targets proved far more difficult. Most schools were excited about being able to set targets, and enjoyed demonstrating how they could use their own data to do it. The 'teaching' consequences of tracking and monitoring, however, were often not well thought through. In particular, many schools did not know how to scaffold student learning to reach these targets or design

school-wide acceleration programs to lift Māori and Pasifika student achievement. Ensuring Māori and Pasifika students attain the UE Award can only be realised if the structural barriers (such as course design) are removed, and pedagogical practices are made more responsive to identified students' needs.

Appendix A: AC and PST Observation Template

Date:				School:			Observer:						Please Tick	
Student Yr:				Session #:			Teacher:							
Academic Counselling Observation ☐							Parent-Student-Teacher Observation ☐							

	Record conversation		Achievement/NCEA:		Student Goals/Aspirations: ST / MT / LT SMART Goals? ☐		Targets Set: ST / MT / LT		Attendance:	Subject Choices:	Academic Counsellor led Conv.	
Block 1											Student led Conv.	
											Parent led Conv.	
			Prediction / Estimates Used? ☐ Data-Based Conversation? ☐								UE focus	
			Feedback: Eval / Desc / Gen		Questions asked? S / AC / T / P		Actions: S / AC / T / P		Engagement	% Talking AC	Internals / Externals	
										S	Scholarship	
											Merit/ Excellence	
										P	Prob. Solve	
			Expectation Statements: S / AC / T / P				Other Comments:				Next Steps	
											Transitions	

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