Starpath
A University of Auckland Partnership for Excellence

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

The Starpath Project
Annual Report 2009

On the cover: The Starpath Team

Top: Rolf Turner, Irena Madjar, Yoshiko Kawasaki, Seini Jensen, Elizabeth Clarke, Liz McKinley, Georgina Stewart.

Bottom: Meisong Li, Alice Van Der Merwe, Sam Smith, Johnson Yuan, Marianna Deynzer.

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From the Chair

As Chair of the Starpath Board, I am privileged to introduce the Annual Report for 2008-09. The work of Starpath – to carry out research and design initiatives to enhance the participation and achievement of students from groups under-represented in tertiary education – is of the utmost importance to New Zealand.

Over the last year, Starpath and the Starpath partners have concluded important research projects into the impact of subjects taken for the National Certificate of Educational Achievement on educational pathways and how target-setting and counselling can lift student aspirations and achievement. Educational agencies, the media and schools have been interested in these findings with attention focusing on the importance of information, understanding and appropriate choices at school. These are not individual issues – they involve families, students, teachers, government and the community.

Governments and citizens internationally recognise the desire to access higher education among groups that have traditionally found this difficult and the need for successful participation as the platform for social and economic advancement. Higher education has been a means of fulfilling individual and community goals in New Zealand for well over a hundred years but not for everybody. With a global emphasis on the expansion of higher education, we need to ensure that all young people in our country have the chance to consider their options and make informed decisions about the paths that will be right for them.

For the Board, one of the best aspects of the last year has been the enhancement of the research and development capacity of the Starpath team and the strong relationships it has built with its partner secondary schools and Manukau Institute of Technology. The enthusiasm and commitment of the team and the partners are best demonstrated in partner days when the current research findings are presented and debated.

The financial support of the ASB Community Trust, the West Coast Development Trust, The University of Auckland, the Tertiary Education Commission and individual sponsors is important to the Project. Their support enables Starpath to contribute to our knowledge of the educational dynamics in low and mid decile schools in New Zealand.

We are entering the last period of Stage I of the Starpath Project. Work continues in demonstrating the effectiveness of the interventions used in partner schools and how these might be sustained over time and across a wider range of schools. We look forward to making the case for this important work to be extended into Stage II when its benefits may be made available to more schools and more of our young people.

Professor Raewyn Dalziel
Chair, Starpath Board

From the Director

Welcome to the Starpath Project Annual Report for 2008-09. When Starpath began in 2005 the key objective was to identify the aspirations and approaches that will lead many more students from under-represented groups into higher education. Starpath has been charged with delivering strategies and initiatives based on research evidence that will transform current patterns of underachievement. The work this year continues to gather research evidence to improve our understanding of the barriers to tertiary success for different groups. At the same time we have evaluated an initiative trialled in one partner school with promising results. Currently we are working on the transferability of the intervention to other schools and the sustainability of it in the original pilot school. We hope to be able to report on the results of these projects next year.

Starpath continues to enjoy the support of schools and many other individuals if the requests for interviews and information I receive are anything to go by. The Starpath report Towards university: Navigating NCEA course choices in low-mid decile schools received a significant amount of publicity and created widespread discussion in the media and community. With the release of this report I carried out three television interviews, six live radio interviews, and numerous print media interviews on issues of ethnicity and NCEA results, and took part in a panel discussion on open entry to university for Māori students. Furthermore, schools and community groups

contacted Starpath for further information. It is important the NCEA issues raised by this report are discussed in the public arena and that Starpath contributes to this debate.

The NCEA assessment system has many strong points including its greater flexibility, enabling it to cater for a wide range of student ability. However, with flexibility in course choices comes an increased level of complexity. Many of the interviewers I spoke to identified parental understanding of NCEA as an important issue. Research shows that students look to their parents for guidance with their subject choices and so educating parents and caregivers must be a priority for schools and the New Zealand Qualifications Authority (NZQA). This is not to say that schools and the NZQA have not been attending to this task. However, this research suggests the efforts need to be intensified. The complexity of NCEA also means it is important that schools take on responsibility for providing detailed and ongoing guidance to students. Starpath has been involved with trialling an intervention in one partner school that sets achievement targets and addresses academic counselling needs, which is showing promising results. We have begun work on scaling the intervention to other partner schools.

With Māori and Pacific students achieving, on average, below their counterparts across all deciles, it is important that any interventions for these students accelerate improvements for them. Last year only 53 percent of Māori students and 48 percent of Pacific students passed NCEA Level 1, and the figures are even lower for Māori and Pacific students in Auckland (48 percent and 44 percent respectively). While there have been some gains in achievement for both groups, we need to send the message to schools and other institutions that the results are far from acceptable and the rate of progress is too slow. However, our ability to measure the effectiveness of school-based interventions has been hampered by the national data available. This year, for the first time ever, NZQA released details on ethnicity and NCEA pass rates of all the nation's secondary schools. This new NZQA reporting will enable Starpath to further our data analysis to examine whether the interventions being trialled are helping to close the achievement gap for Māori and Pacific students.

Last year Kaitaia College joined our other four partner schools in Auckland and Whangarei. Kaitaia College, a decile 3 school, is the Far North region's largest school with 850 students. The school is predominantly made up of Māori (67 percent) and New Zealand European/Pākehā (28 percent) students. In this report we feature one of their students, who tells their story of making the transition from a rural secondary school to a big city university.

There have been a number of staff changes in the last 12 months. We welcomed back Mrs Samantha Smith from Massey High School as a researcher with the Project. Sam spent 12 months with Starpath in 2006. Dr Earl Irving, Dr Debbie Dunsford and Ms Charlotte Burgess have also recently joined the team. Dr Georgina Stewart was recently farewelled and we wish her well in her new position at the New Zealand Council for Educational Research. Starpath has enjoyed a stable core of staff for the last two-and-a-half years and I wish to take this opportunity to thank everyone for their continued hard work and support.

Lastly I would like to thank the members of the Academic Review Groups. The function of peer review is extremely important in providing rigour and robustness in all aspects of the projects, from conceptualisation to publication. The members of these groups give their time in the interests of good research. This year we wish to thank Distinguished Professor Dame Anne Salmond, Professors Alison Jones, John Hattie, Alan Lee, and Chris Wild, Associate Professor Brian McCardle, Drs Melani Anae, Mary Hill, Margie Hohepa, Te Tuhi Robust, Peter Keegan and Eve Coxon, and Ms Margaret Taurere (all University of Auckland) and Dr Gavin Brown (Hong Kong Institute of Education) for the insights they provide.

As Starpath moves forward into 2010 we are well placed to consolidate our work and test the sustainability and scalability of the interventions. This work will provide the evidence base for any programme we recommend for rollout more widely.

Associate Professor Elizabeth McKinley
Director, Starpath Project

School-tertiary research partnerships

The Starpath Project has worked collaboratively with schools and tertiary institutions to enhance the academic performance of Māori, Pacific and other students from low decile schools through a systematic, longitudinal, whole-school approach to student performance and achievement. In the four-and-a-half years since Starpath Phase 1 began, the Project has worked in close collaboration with 12 schools and two tertiary education institutions, enrolling approximately 9,500 secondary and 50,000 tertiary students each year. This has included approximately 2,500 Māori secondary and 4,700 Māori tertiary students, and 2,350 Pacific secondary and 7,500 Pacific tertiary students.

Research on teacher professional development and capacity building indicates that the way in which agencies external to a school, such as Starpath, work with the school will help determine if interventions get taken on board and are sustained. The Starpath Project has developed a successful model for practice-research collaboration and produced a significant body of research and examples of practice initiatives that have been tailored to specific situations. Fundamental to this has been:

- developing capability in the schools so that staff have the knowledge and skills to carry out specific roles

- building collaborative and mutually beneficial relationships between schools and Starpath, and

- developing trust and accountability between partners.

Starpath has used a "science of performance" approach within a research and development (R&D) process. The general approach is to use evidence about the "problem" on the ground to develop and test changes collaboratively. In this way capability is built in the schools to sustain changes. The R&D model is collaborative and has three components.

1. An evidence-based problem-solving component where teachers and researchers examine evidence from students' learning and teachers' and/or school practice.

2. A very detailed and specific fine-tuning of practice, designed from the evidence. Professional development with all the teachers then provides knowledge and practices to make actual changes in interactions with students.

3. Building the research and development process into the schools' everyday activities so that teachers and schools can sustain the process.

Included in the R&D approach adopted by Starpath is a focus on the ecology of the school. That is, any development is adapted to the unique circumstances of the individual school, tapping into existing strengths, developing areas of identified need, and empowering schools to flexibly use interventions in response to local circumstances. This ensures that interventions are aligned with other school policies and practices.

In the following, the Principal of one of our partner schools talks about his school's partnership with Starpath.

Bruce Ritchie
Principal of Massey High School

One early shift that occurred as a result of Massey High School becoming a Starpath partner school in 2004 was a change in the way the school managed students' records of learning. "We had a database unique to Massey which had been set up to manage data rather than to look at the students' individual achievement," Bruce says. Changing data management systems and knowing how to use data to the best advantage has been at the heart of the school's academic counselling programme, introduced in 2007. Having a teacher on board with enhanced skills in data use is a further bonus according to Bruce. He credits Massey's Student Achievement Manager, Sam Smith, who has spent time working on the Starpath team and as a teacher at the school, with increasing Massey's capacity to work with evidence-based research. "As well as a structured professional development opportunity, having Sam work both in a university and a school is a great model for secondary teaching."

Bruce describes how areas of concern have also been identified by Starpath. "There is a trend of under-represented groups at tertiary choosing 'soft options' in NCEA – here Starpath was instrumental in getting the school to look closely at student choice on our database, revealing which students were at risk of not gaining credits." Every New Zealand school should gain from having research happening inside it, according to Bruce. Such partnerships, however, can only flourish "when there is leadership to formulate support with release time worked in, so that eventually the research becomes embedded as core practice".

Navigating NCEA

Earlier this year, Starpath released the findings of a major study into how NCEA course choices are made by Māori, Pacific and other students in low and mid decile schools, and the effects of those choices. Titled *Towards university: Navigating NCEA course choices in low-mid decile schools*, it reveals why and how many academically-able students are choosing or ending up in subjects that limit their chances of entering and succeeding in tertiary study.

Previous Starpath research has shown that Māori and Pacific students and students from low decile schools are more likely than other students to take fewer subjects and standards from the approved subject list for the UE qualification, take fewer achievement standards, be assigned to the less academic versions of core curriculum subjects such as English, Science and Mathematics, and be enrolled in subjects made up solely of unit standards.

The study progressed this further by seeking to understand why and how this was happening. To do this Starpath interviewed more than 160 students, parents and teachers from low to mid decile high schools in Auckland and Northland about NCEA subject choices.

Findings indicate that teachers, parents and students are generally positive about NCEA, in particular its ability to meet diverse student needs. However, the system's flexibility (which allows schools to offer a very wide range of courses), and its complexity (which makes it difficult for stakeholders to fully grasp all they need to know about the implications of particular course choices), can act as barriers, preventing some students from achieving their potential at secondary school and getting the best preparation for their post-school plans.

Parents in particular lacked confidence in their understanding of the NCEA system. They understood some of its basic characteristics, such as the three levels of certificates and the accumulation of credits through internal assessments and external examinations. But they were also aware that there is a lot more to the NCEA system and how it is implemented in schools, and that much of it was a mystery to them. Specifically, parents were unclear about the following areas:

- understanding their children's NCEA results (including common abbreviations, how many credits were needed to "complete" a subject and the significance of external versus internal assessment)

- understanding the difference between alternate versions of subjects and the significance of their children being allocated to one of these

- the difference between unit and achievement standards, their link to different versions of subjects and their relevance to advanced study

- the requirements for the University Entrance (UE) qualification and what subjects and credits are needed to enrol in a university

- the difference between UE and more specific programme entrance requirements (eg, Engineering, Arts, Law, etc) set down by individual universities.

As a result, parents did not feel confident in their ability to advise and support their children in their subject choices and in planning the most helpful and appropriate programme of study in preparation for tertiary education, even though they reported that they wanted to be involved in guiding their children through NCEA and had taken time to try and understand it. Importantly, parents said they needed more help from schools and teachers to understand NCEA, and appreciated personal, informal discussions with teachers that allowed them the opportunity to ask specific questions relevant to their child's situation.

Students, on the other hand, tended to be "street smart" in their knowledge of NCEA. In other words, they knew how to maximise returns for the effort they put into their school work, but did not necessarily appreciate the impact of particular choices on their long-term future, or the costs of cutting off educational options too early. Students knew enough to be able to pick subjects that would give them more credits for less effort, to be able to avoid external examinations by gaining credits internally during the year, and to know when they had fulfilled the minimum requirements

for a qualification without striving to do more or to test their abilities to their full potential. However this could lead to students not meeting the prerequisites for more advanced study, missing out on important content areas in a subject, or jeopardising their chances of gaining the UE qualification or the level of achievement needed for tertiary study in a field of their choice.

The study also found that knowing how the NCEA system works is a necessary but not a sufficient condition for students being able to enrol in subjects of their choice or in subjects that would provide the best preparation for future study. The findings indicate that subject choice is not necessarily student-driven but that schools play a very strong mediating role, determining which subjects are available and how they are timetabled, which standards within individual subjects are selected, which pre-requisites have to be met for progression to more advanced study, and how students are selected for different versions of subjects. Even though it has to be accepted that schools work within externally imposed frameworks and often with limited resources, it was of concern to see how easily some students (particularly Māori and Pacific students) were "talked into"

or allowed to take subjects in which they were not interested, or which did not provide the strongest possible foundation for tertiary study in the field of their choice.

Key recommendations from the study are summarised below.

- There is a need for greater transparency in distinguishing between academic and vocational subjects in NCEA and their intended uses.

- For students intending to go to university, there is a need for clearer identification of subjects they should not take, or should take only in addition to, rather than in place of, essential academic subjects.

- Schools need to be better resourced to provide quality academic counselling and subject/course advice to students and their parents.

- It is important schools identify the critical points when students with academic potential find themselves falling behind, or make inappropriate subject choices, and make timely corrections to their study programme.

In their own words

The following statements made by parents, students and teachers during the Towards university study illustrate some of the confusion and frustrations around NCEA.

"Yeah, that's mind-boggling. I still don't understand about it to this day. All I know is you've got levels... that you need to go through - Level 1, Level 2, Level 3, is this all part of the NCEA?" (Parent)

"It's very hard for me because... I didn't finish school... Last year we went to the school and... she [daughter] told me that she select her subject for this year for the NCEA... including... social studies and accounting. And she didn't do... the computer, but she was the top in computer last year. We came and asked the teacher 'Why?' And the teacher said '... because if she take computer she can't take history or social studies. She had to take another choice'. I told him 'Why?' I just ask because I don't know why she was the top in the computer last year and this year... they didn't give her a chance to continue on... Then teacher said 'No, if she take computers she has to left accounting, take the computer and history'... I need someone to help her... Choose the right subjects... No one helps... I feel, I made a mistake [suggesting a particular subject], but like I said, [the teacher] just told me... 'if she take that subject, it will go together with that subject, not that subject...' Right now, I don't understand..." (Parent)

"I'm not sure this year how it works... Everyone says you get credits from last year, but I'm not sure how it works." (Student)

"I don't really know how it all fits in. All I know is that you got to have certain amounts of credits... to get into uni and I'm just looking to get as much credits as possible, like excellence ones." (Student)

"It would be good if they told us, 'you need that, and that, and that, to get that qualification', but they don't tell us...It's a bit too late getting into Year 13 and saying 'Oh what do I need to get into this?' and they say 'You need that and then that'. We don't have it, because it's too late for us to get it." (Student)

"I'd probably say 50 percent actually understand how this whole system works, whereas some other students just look at the individual credits. Just say they need 80 to pass Level 2, or something like that. All they aim for is just 80. They don't worry about whether it's excellence or merit or achieved." (Teacher)

"[Students] get halfway through the year and they realise they're going to do a Commerce degree [at The University of Auckland] and they need 16 credits in their subjects and, 'Oh hold on, I'm not doing that' or 'I decided last term I wouldn't do that assignment 'cause it was too hard, and now I'm stuck'." (Teacher)

"I think people have got so hung up on the total credits that they have forgotten about the subject pass... I had a father and daughter that I had enrolled at the start of the year where I said 'Yeah she might have her 95 credits... but she wouldn't be able to do this subject because she's only got eight [credits] in that particular subject, so we wouldn't consider that she could go on in that subject', and they hadn't even thought of that aspect of it." (Teacher)

Using data to close the achievement gap

Building student achievement databases in schools

It is fundamental to Starpath's work that schools keep good longitudinal data on student participation and performance. Schools collect and store a great deal of data related to student attendance, performance, and achievement. Mostly the data are used for official reporting purposes, and are presented in the form of cross-sectional snapshots of a school's year-by-year profile and performance, such as how many students passed NCEA Level 1. Data are sometimes used to place students into ability groupings for year groups and/or subjects. Teachers also collect data on students' performance in individual subjects to inform their own practice.

Currently there do not appear to be standardised ways to store, check and analyse data in schools. Nor is there a consistent system for assuring the quality of school databases. Difficulties with data quality and organisation that Starpath has encountered include:

- **data being kept manually** eg, on paper in workbooks or folders

- **data not being kept in a centralised manner** eg, being kept in teachers' back rooms or offices

- **a lack of systems to ensure complete collection of data**

- **data being incompletely recorded** eg, variables (fields) being omitted in class records, or certain test results completely missing for a particular class

- **data being incorrectly entered** eg, being entered with two columns of figures under a single column heading

- **incorrect structuring or formatting** eg, one student being assigned two different ID numbers; ethnicity being inconsistent across years

- **lost data** eg, one partner school lost the PAT scores for 2005; another lost all their records due to changing Student Management Systems (SMS).

Starpath has discovered that student data are seldom stored longitudinally in a way that allows for tracking of students' performance over the duration of their secondary school careers, or for systematic interventions that would ensure they reach their full potential. Moreover, we have found that the data managers in schools are often unaware of the usefulness of data for educational purposes. As a result, the capacity for schools to appropriately analyse data varies considerably.

A fundamental need is for accurate, detailed and well-documented longitudinal databases to be established so that patterns of progress and achievement can be monitored and used by schools for instructional purposes. Such databases need to encompass students' records throughout their high school careers. In order to set up such databases, it is vital for those who collect the data to be able to track students from context to context (ie, from year to year, from class to class etc). That is, it is vital to be able to match student records accurately and, for this, unique identifiers are required.

Starpath has begun to work with partner schools to develop and pilot better data collection and storage practices in order to build and organise a longitudinal evidential database of student achievement in each school. There are a number of organisational issues that need to be attended to. These include the appointment of a student achievement manager and the initiation of a committee to deal with issues of data management and use. This committee should include senior management members and other staff. The Principal needs to be fully informed and supportive even if he/she is not a member of the team.

School-specific protocols need to be developed but there are general tenets by which we can operate. These protocols need to include school-specific procedures for:

- identifying relevant data to collect, and their sources

- establishing quality assured systems for data collection

- establishing school wide systems for collation and collection

- developing policies around data, and

- establishing the use of the evidential database.

This process takes up to two years before achievement targets can be set using specific school data. There is an urgent need to develop databases in schools more widely if evidence-based decisions about the educational progress of individual students are to be made.

Putting in place the capability to collect, manage and systematically interpret rich school-specific data in Starpath's partner schools has allowed patterns of student progress and achievement to be monitored and school and student needs to be identified. This evidence then provides the basis for targeted interventions and professional development to effect improved student outcomes. Longitudinal student performance databases also allow such interventions to be rigorously evaluated in terms of their impact on student outcomes.

Academic Counselling and Target Setting (ACTS)

At Massey High School, the establishment of a comprehensive longitudinal student achievement database has formed the basis for an Academic Counselling and Target Setting (ACTS) programme that has been in place since 2007. This initiative was designed to increase the school's academic performance through a systematic, whole-school approach to student achievement; improve communication between the school and parents/caregivers about their child's learning; and provide appropriate advice to students on academic pathways based on their academic achievement records and aspirations for the future.

There are three aspects to the intervention:

- target setting, including the setting of whole-school achievement targets (eg, for the percentage of Māori, Pacific, female, male and all Year 11 students achieving NCEA Level 1), as well as individual targets for each Year 11 student in their Mathematics and English external achievement standards

- academic counselling, which involves a meeting between each student and their Dean two or three times in the year to discuss their academic progress, aims, and plans, and

- restructured "parent-teacher" evenings, in which parents/caregivers (along with their child) meet with their child's form teacher for 20-25 minutes for an in-depth overview

The Starpath annual report for 2008 reported some promising results from this programme, namely significant improvements in the school's NCEA results, as well as a dramatic increase in the turnout of parents/caregivers at the parent-teacher evening. Since that time Starpath has completed a stakeholder evaluation of the programme, which looked at the experiences and impact of the ACTS intervention on the 2007 Year 11 student cohort, their parents, their Mathematics, English and form teachers, the school Deans, and certain other key staff. Focus groups, interviews and questionnaires were used in the evaluation.

Key findings from the evaluation are summarised below.

- Target setting for the school has been successful in that eight out of the ten school targets were achieved, and significant gains were made in the two targets not attained.

- Setting individual achievement standard targets for NCEA Level 1 English and Mathematics had a positive effect on student outcomes, both in the quantity of NCEA credits gained and the quality of performance in those credits as measured by NCEA grade point average (GPA). The gains were statistically significant for:

  » males when compared to the national student body and the national decile 6 student body, and

  » the MHS student body when compared with the national decile 6 student body.

- Seventy-seven percent of parents/caregivers and 63 percent of Year 11 students said the programme should continue, while only one percent and five percent respectively thought it should not continue. Positive comments made by parents and students included that the programme helped students to set and realise their goals, let them keep track of where they were at with their studies, showed them where they needed to improve, helped to motivate them, helped them to decide what subjects to take, gave them direction and focus by encouraging them to think about what they might like to do in the future, and allowed parents/caregivers to be more involved in their child's education.

- There was resounding support from all staff for the restructured "parent-teacher" interview despite the fact that the preparation for it increased teacher workloads.

- All stakeholders reported the whole intervention helped them establish better relationships with each other.

  » Form teacher-parent/caregiver relationships improved because parents identified one point of contact in the school that was able to give them a personalised and in-depth assessment of their child's academic performance, and teachers came to know the students and their parents/caregivers better.

  » Dean-student relationships became more positive and focused on achievement rather than behaviour. This was particularly good in times of student crises as it immediately allowed Deans to construct their talk more positively.

  » Mathematics/English teacher-student relationships improved with the discussion of individual targets for specific external achievement standards.

  » Form teacher-student relationships improved as a result of improved relationships with their parents/caregivers.

  » Staff relationships strengthened as a result of working together to implement the programme and communicating more around student achievement.

- The building of comprehensive individual student academic profiles took staff a lot of time, especially the preparation for the parent-teacher meetings; however staff agreed the "pay-off" exceeded effort. The availability electronically of the individual student longitudinal data profiles allowed everyone (eg, Principal, form teachers, subject teachers) to access them easily and at any time (eg, to allow students to view their credits in form time).

- Staff reported an increased awareness of and appreciation for a school-wide approach to data management and academic performance, which was evident in the amount of information they had on which to base their discussions with parents/caregivers, and the target setting.

- Increased student engagement with their academic progress created a culture in the school of students being aware of, talking about, and competing over their credit totals, which augmented the school's focus on academic achievement. Staff also reported students taking ownership of what they wanted to get out of school.

- Staff said the programme has intervened where poor and inappropriate NCEA choices were being made early in students' school careers, and has also helped students understand the NCEA system better.

Starpath is now working with four other partner schools to implement the ACTS programme in these schools. This is only possible because of the previous work Starpath has completed in these schools to improve their data management practices.

Transitioning from school to university

A major research report is soon to be released by Starpath on the findings of a prospective, longitudinal, qualitative study on the process of transition from secondary school to university for students from currently under-represented groups.

The study interviewed 44 students up to five times between October 2007 and August 2008, starting when they were in their final year of high school and planning to attend university the following year. Twenty-nine students remained in the study until its completion (with the remainder withdrawing part way through the study because they did not end up going to university, left their course during the first semester, or became uncontactable). Students were also encouraged to submit journal entries and photographs relating to their transition experiences throughout the study. The participants were drawn from schools in West and South Auckland and rural Northland.

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Key findings from the study are summarised below.

- There was considerable variability among the students both in their academic preparation for university and in the clarity and firmness of their goals. Some had firm personal career and study goals, while others were influenced by family or community aspirations for them to attend university.

- For some students, there was a major disconnection between NCEA subjects and standards they completed at school, their career aspirations, and the programmes they wanted to take, or enrolled in at university. Students who had not completed the most relevant subjects at school (sometimes because of external factors such as inadequate information and inappropriate advice) were often not accepted into the programme of their choice or found they were inadequately prepared for their university course once it began.

- Many students across all groups experienced considerable difficulties with enrolment procedures and StudyLink, such as with using online and other automated services, finding out if they had been accepted for limited entry programmes, understanding what financial assistance they qualified for or applying in time for the start of the first semester.

- Few students attended the academic orientation activities provided by the universities in which they had enrolled. Those who did attend found small group orientation activities conducted by an older student, and smaller faculty or school-specific sessions, more useful than large, general sessions which left most students feeling overwhelmed by the amount of information provided.

- Some students, especially those from West Auckland, as well as some from Northland, and a few from South Auckland, had a sense of readiness for university study and even unexpected experiences did not worry them. Their first encounters with university lectures and tutorials were generally positive. They were excited by their new environment and able to cast a critical gaze on their lecturers, tutors and other students, and reflect on what they needed to do to be successful at university. This contrasted markedly with the experience of most Pacific students in the study, who reported feelings of disconnection and discomfort in the university environment.

- Although starting with good intentions, many students found themselves falling behind with required readings and study. Some also began to miss classes, although most tried to modify their behaviour.

- There was a group of students for whom the transition to university proved particularly problematic. These students needed (but did not always receive) help to become academically engaged. They often missed some of their early classes because they were not organised enough, could not locate venues, or were distracted by other activities. Negative experiences, such as being put on the spot and not being able to answer a question directed to them by a lecturer or tutor, resulted in some of these students choosing not to attend any further classes in that subject. In other cases students described being bored by the content, or missing a class and not being able to fill in the gaps. Some students were also easily swayed by others to miss classes.

- Very few students initiated contact with learning support services, and many were also reluctant to approach their lecturers and tutors for help. It was more helpful when academic support was built into regular classes or where attending organised sessions (eg, on literature searching) was a class requirement. Students were able to get to know their tutors and had less hesitation in approaching them with requests for help. A system of "peer tutors" linked to individual courses at one university received positive comments, as students found the tutors approachable and could go to the same person each time they needed help.

- Most students managed to make new friends and establish a social network, although the depth of friendships varied considerably.

Overall, this study has highlighted:

- the need for students to plan early, develop clear goals, and stay on the most relevant NCEA pathway at school

- the need for schools to assist students to leave with a strong academic record and learning skills

- the need for universities to recognise the nature and level of support which different groups of students are likely to need

- the need for universities to facilitate early academic engagement for all students, and

- the need for universities to provide more learner-centred support services that are integrated with the core curriculum.

Starpath is now looking at developing and trialling a comprehensive and integrated whole-curriculum approach to supporting first-year university students.

Starpath is also compiling a book of transition stories written by some of the students who took part in the study. The book will be distributed to schools and universities as a resource to other students making the transition.

Feature: Student Story
My Journey

The following is a shortened version of a piece written by one of the participants in the transitions study for the book of transitions stories Starpath is planning to publish.

I come from a small rural town in the Far North. Although it's a beautiful place, life is very laid-back and many of my peers didn't bother with university. This is a story about the journey I made from Kaitaia to Auckland, from secondary school to university and from the country to the big smoke.

When I was at school I didn't really know what I wanted to do when I grew up. My career path changed several times, and even in my last year at school I wasn't sure what my focus should be at university, or beyond, so I made sure I took a wide range of subjects.

Receiving a scholarship from The University of Auckland that would pay my fees and help with the cost of accommodation was what ultimately made up my mind to study at The University of Auckland. I was also lucky to have an older cousin who went from Kaitaia College to The University of Auckland and took up a conjoint degree in Commerce and Arts. I decided to follow her into the same degree, drawing on her knowledge and experience.

The task of organising my transition to university, including accommodation at O'Rorke Hall, was slightly daunting, and I remember the endless process of filling out application form after application form for various things. I was always apprehensive that I had filled them out wrong.

In mid-January I received a letter from NZQA with all of my Level 3 NCEA results. I had got the credits I needed to get into Commerce and Arts at Auckland Uni, so I was now able to enrol in my first semester classes. My all-knowing cousin enrolled me into three compulsory papers for Commerce, and I chose a Political Studies paper for my Arts degree as my first choice of Arts paper (Philosophy 105) was already full and my second choice (Māori 106) wasn't offered in Semester One. I also found out I would qualify for a Student Allowance, which was a big help.

February came and went all too quickly, and suddenly it was time to make the trip to Auckland. I moved my stuff into O'Rorke a day early to avoid the masses of people trying to do the same thing the next day. At the official O'Rorke open day the following day I quickly found some brown boys that I could talk with about sports and Manu Korero, so I was happy. I had my first O'Rorke meal with three hundred other O'Rorkians and then my first sleep in my new room. We were woken early the next morning for a toga breakfast (sheets and pins anyway). O-week[1] had started.

In the first few weeks of the semester, every lecture was packed with 600 keen and expectant freshers, half of them with Chinese or Indian faces. This was a new sight for a boy from the Far North. After a few weeks many students stopped coming to the lectures and empty spaces became more evident.

The first essay I wrote at university, I rated as worth an "A grade". It came back as a B+, something that annoyed me immensely. But after reading some 'A grade' essays I soon realised which strategies were most successful. "Keep it simple" and "spell it out" – two rules of thumb that I will hold onto for the rest of my studies. As I progressed through the first semester, I gradually got higher grades for my essays until I got my first A+ at the end of Semester One. The longer I spent at uni, the more tricks I learned, especially in terms of essay writing, study techniques and exam strategies. For me, these lessons were learned through experience and, sometimes, through failure.

The other dominant aspect of being at university is the social life. There are many social clubs on campus, and of course the Auckland nightlife. I signed up for a few different clubs in Semester One, but the one that I got right into was Ngā Tauira Māori (NTM), a group of Māori students who nurtured me through my first year. I finished my first semester with solid grades (B+ average) and a good understanding of how I could improve for Semester Two.

The second semester started much more intensely than the first. Even the O'Rorke parties were more intense. I took on a few more commitments in Semester Two, and coupled with a girlfriend there was no time left for idleness or boredom. I worked hard and started studying for exams early since my final exams were all crammed into one week. After two semesters at uni I had got into the full swing of things, and finished Semester Two with two A+s and two B+s. I vowed never to take an Economics paper again, and to focus instead on Commercial Law and Accounting – two subjects in which I had excelled. I also decided to double major in Arts – with Political Studies and Māori Studies. I thought that this would give me a wider appreciation of how the world functions politically.

Overall, my transition to university was really important for my development. My lifestyle completely changed, as well as my sense of fashion, and my acceptance of others. Living in a hostel in Central Auckland brought me closer to a wider range of people, each with unique ideas and values.

It's when I see my school mates, still in Kaitaia, working in low-wage jobs or doing apprenticeships that makes me glad I left. And they are aware of it too. Many ask me about uni and say they wish they too had left rather than staying in their hometown. Hopefully their children will make the move to take their education past secondary school, because the spin-off effects are definitely worth the few extra years of slaving over books and sitting in lectures.

Note: Having realised "the benefit of having a Law degree over a Commercial Law major" this student is now pursuing a conjoint degree in commerce and law – BCom/LLB.

[1]O-week refers to the Orientation Week during which students are given information about their courses and university services, as well as engage in a range of organised social activities.

Building effective literacy practices in secondary schools

The Woolf Fisher Research Centre (WFRC), Starpath Project research associates, is currently conducting an innovative large-scale research and development programme in collaboration with seven secondary schools on the West Coast (South Island). Its overall aim is to raise achievement, particularly in literacy, in these schools. The project arose from a concern at an apparent mismatch between the relatively high achievement levels of West Coast students at the end of Year 8 and the relatively low achievement of West Coast students in all three levels of the National Certificate of Educational Achievement (NCEA).

The research and development model used in the programme involves gathering and analysing evidence in order to describe the problem; developing possible explanations for the problem and testing these hypotheses against the data; using the findings to develop a professional development plan; and monitoring its impact on achievement. By analysing both student achievement data and observations of 31 classroom lessons, the Centre has now developed and tested several hypotheses around the possible effects of transition to secondary school, pathways in the first two years and the quality of instruction.
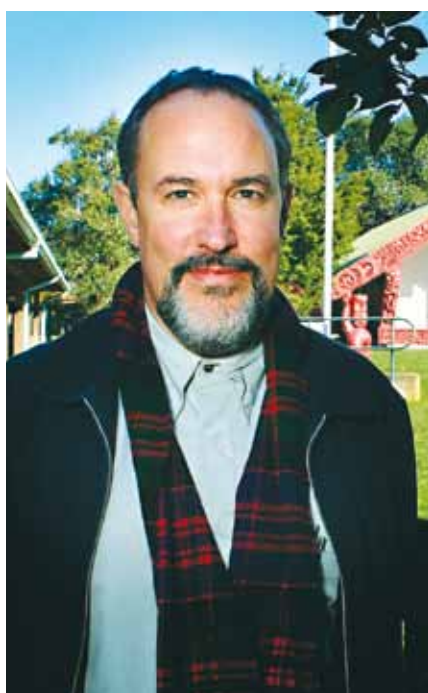
Key findings from this phase of the project are summarised below.

- It has been confirmed that the achievement of West Coast students in NCEA, and the proportion of students staying at school and attempting NCEA Levels 2 and 3, is lower than national averages, and lower than would be expected from students' reading achievement at the end of Year 8.

- This does not appear to be due to an immediate transition effect on entry to secondary schooling. Achievement of students at the beginning of Year 9 was significantly above national norms. Nor is it due to higher achieving students leaving the West Coast for secondary school, or lower achieving students coming into the West Coast area for secondary school.

- Rather, there is evidence that the causes for the drop in student achievement relate to students' experiences of secondary schooling. Student achievement generally worsened against national norms throughout both Years 9 and 10. At the beginning of Year 9, students were achieving above national norms but by the end of Year 9 were achieving below national norms. At the beginning of Year 10 students achieved below national norms and were further below national norms by the end of Year 10.

- Specific aspects of classroom practice likely to contribute to existing patterns of student achievement, identified through analysis of classroom observations, include:

  » a lack of explicit literacy instruction across the curriculum (explicit reading instruction and explicit writing instruction were each evident in only around a quarter of lessons, and vocabulary instruction, while more common, was mainly restricted to subject-specific terminology and to receptive, rather than productive vocabulary)

  » a lack of alignment between students' academic ability and levels of academic challenge provided by teachers (evidenced by teachers' tendency in the observed lessons to ask closed rather than open questions and the infrequency of requests for students to elaborate on answers given)

  » teacher-student relationships that are not sufficiently academically focused (for example, while numerous exchanges that demonstrated that teachers knew and respected their students as individuals were observed, there were relatively fewer teacher requests for students to improve the output or quality of their work).

A professional development plan to improve instruction in the areas indentified, with a particular focus on fostering effective literacy practice, has been developed in consultation with school principals. Workshops, along with video conferences, are now being held with school leaders and literacy leaders. The content of workshops so far has focused on discussion of research findings to date, principles of effective adolescent literacy instruction, and how to use data (particularly asTTle data) to inform instructional decision-making.

The literacy leaders are now beginning to deliver a professional development programme to teachers in their respective schools, using materials developed by the Woolf Fisher Research Centre, which they have been trained to use. Early feedback from these sessions is very positive.

In 2010, whole-school professional development will continue in a similar vein to 2009, but with the addition of a strand focusing specifically on content-area literacy teaching in the learning areas of Mathematics and English. Ongoing monitoring of student achievement will evaluate the effectiveness of the professional development initiatives.

Future directions

For the next 12 months Starpath will continue to build on the research findings and develop programmes currently being trialled. Building student achievement or evidential databases (EDB), academic counselling and target setting (ACTS), and building effective literacy practices are being targeted for particular attention in order to gather further evidence and develop rigour and robustness in the results of the initiatives.

A critical component of the next phase of the EDB and ACTS initiatives is to determine to what extent the improvements reported at Massey High School can be achieved in other schools. Therefore, Starpath has a research agenda that addresses a range of important questions relating to scalability, sustainability, the degree of automation of target-setting processes, the role of key personnel, capability in managing and using student achievement data, and any theories of change that underpin the implementation and how these inform action and impact on outcomes. The results of the Massey High School work have been promising and we have begun to transfer the ideas further afield to a cluster of partner schools.

The effective literacy practices in secondary schools initiative, being undertaken by our research associates from the Woolf Fisher Research Centre, will focus on further professional development to improve instruction in the areas identified in their baseline analysis. It has been found that the schools' underachievement in NCEA is most pronounced in those standards that require high-order reading and writing skills (particularly externally assessed standards),

and it is evident from classroom observations that rates of effective literacy instruction have been less than optimal. The further professional development being carried out will help determine if a literacy focus is able to act as a vehicle to address other needs identified in the baseline analysis, such as those related to instructional practices that appear to arise from teachers' low expectations of student academic attainment.

And lastly, Māori and Pacific student achievement in Science and Mathematics has been identified as an area of particular concern. While NCEA has significantly increased educational equity in New Zealand, with fewer students than before leaving school with no qualifications and improvements particularly evident in "target" populations, the achievement gap remains in the two key areas of Science and Mathematics. This is especially evident above NCEA Level 1, in external examinations, and in Merit and Excellence grades. Starpath is currently exploring opportunities for research in this area.

Project outputs

(1 July 2008 – 30 June 2009)

Technical reports

Madjar, I., McKinley, E., Jensen, S., & Van Der Merwe, A. (2009). *Towards university: Navigating NCEA course choices in low-mid decile schools.* Starpath Project, University of Auckland (126 pages).

McKinley, E., Madjar, I., Van Der Merwe, A., Smith, S., Sutherland, S., & Yuan, J. (2009). *Evaluation of an academic counselling and target setting intervention at Massey High School.* Starpath Project, University of Auckland (108 pages).

Journal papers

Lai, M. K., McNaughton, S., Amituanai-Toloa, M., & Turner, R. (2009). Can sustained acceleration of achievement in reading comprehension be achieved through schooling improvement? *Reading Research Quarterly*, 44, 30-56.

McKinley, E., Grant, B. M., Middleton, S., Irwin, K., & Williams, L. T. (2009). Supervision of Māori doctoral students: A descriptive report. *MAI Review, 1*(6). Online at http://ojs.review. mai.ac.nz/index.php/MR/issue/view/6.

McKinley, E. (2008). From object to subject: Hybrid identities of indigenous women in science. *Cultural Studies in Science Education, 3*(4), 959-975.

McKinley, E. & Keegan, P. J. (2008). Curriculum and language in Aotearoa New Zealand: From science to pūtaiao. *L1 – Educational Studies in Language and Literature, 8*(1), 135-147.

Shulruf, B., Hattie, J., & Tumen, S. (2008). Individual and school factors affecting students' participation and success in higher education. *Higher Education, 56*(5), 613-632.

Shulruf, B., Hattie, J., & Tumen, S. (2008). The predictability of enrolment and first year university results from secondary school performance. *Studies in Higher Education, 33*(6), 685-698.

Shulruf, B., Tumen, S., & Tolley, H. (2008). Extracurricular activities in school, do they matter? *Children and Youth Services Review, 30*(4), 418-426.

Shulruf, B., Hattie, J., Turner, R., Tumen, S., & Li, M. (2009). Enhancing equal opportunities in higher education: A new merit-based admission model. *Cypriot Journal of Educational Sciences, 4*, 15-32.

Shulruf, B., Turner, R., & Hattie, J. (2009). A dual admission model for equity in higher education: A multi-cohort longitudinal study. *Procedia - Social and Behavioral Sciences, 1*(1), 2416-2420.

Smith, S. & Timperley, H. (2008). Potential chokepoints in the National Certificate of Educational Achievement for attaining University Entrance. *New Zealand Journal of Educational Studies, 43*(2), 63-72.

Tumen, S., Shulruf, B., & Hattie, J. (2008). Student pathways at the university: Patterns and predictors of completion. *Studies in Higher Education, 33*(3), 233–252.

Papers in review

Shulruf, B. (in review). Do extra-curricular activities in schools improve educational outcomes? A critical review and meta-analysis of the literature. *International Review of Education.*

Shulruf, B., Hattie, J., & Tumen, S. (in review). The New Zealand standard based assessment for secondary schools (NCEA): Implications for policy makers. *Asia Pacific Journal of Education.*

Shulruf, B., Hattie, J., & Tumen, S. (in review). The relativity of success: Measuring achievements of tertiary education students within a modular qualification system. *Applied Measurement in Education.*

Shulruf, B., Tumen, S., & Hattie, J. (in review). Student pathways in a New Zealand polytechnic: Key factors for completion. *Community College Review.*

Shulruf, B., Li, M., McKimm, J., & Smith, M. (in review). Breadth vs. depth of learning: What is the best predictor of achievement in clinical and health science programmes? *Studies in Higher Education.*

Turner, R., Shulruf, B., Li, M., & Yuan, J. (in review). The impact of adjusting University Entrance criteria on the enrolment of population subgroups. *Higher Education.*

Chapters in books

McKinley, E., & Stewart, G. M. (in press). Falling into place: Indigenous science education research in the Pacific. In S. M. Ritchie (Ed.), *Science education research in Australasia.* Rotterdam, The Netherlands: Sense.

McKinley, E., & Stewart, G. M. (in press). Out of place: Indigenous knowledge (IK) in the science curriculum. In B. Fraser, K. Tobin & C. McRobbie (Eds.), *Second handbook of science education.* Springer.

McKinley, E. (in press). To the highest degree: Improving outcomes for Māori students in tertiary education. In L. Meyer (Ed.). *Proceedings of the Symposium on Tertiary Assessment and Higher Education Student Outcomes: Policy, Practice and Research.* Wellington, New Zealand: Victoria University of Wellington.

Invited keynotes

McKinley, E. (2008, November). To the highest degree: *Māori students' outcomes in tertiary education.* Paper presented at Ako Aotearoa Symposium on Tertiary Assessment and Higher Education Student Outcomes: Policy, Practice and Research, Wellington, New Zealand.

Research theses

Deynzer, M. (2009). *The transition to university of Pasifika students from low to mid decile schools.* Unpublished masters thesis, The University of Auckland, Auckland, New Zealand.

Conference presentations

McKinley, E., Grant, B. M., Middleton, S., Irwin, K., & Williams, L. T. (2009, April). *To the highest degree: Māori doctoral students' experiences of supervision.* Paper presented at the American Education Research Association (AERA), San Diego, CA.

Presented at the New Zealand Association for Research in Education (NZARE) Conference, November 2008, Palmerston North, New Zealand.

Starpath NZARE Symposium 1:

Addressing student achievement in low-mid decile secondary schools

1. I. Madjar & S. Jensen: *NCEA course choices – Who is making them, how, and why?*

2. E. McKinley, S. Sutherland, S. Smith & B. Ritchie: *Academic counselling and target setting: A case study.*

3. R. Turner, M. Li & J. Yuan: *The effect of the availability of standards upon the success rate of students on NCEA Level 3 qualifications.*

4. J. Yuan & R. Turner: *Relationships between University Entrance success rate and school decile.*

5. S. Jensen: *"We want our kids to do better than us": Pasifika parents and NCEA course choices.*

Starpath NZARE Symposium 2:

Transition from school to university

1. I. Madjar & E. McKinley: *The journey from there to here is not the same as the journey from here to there: A prospective, longitudinal, qualitative study of transitions from school to university.*

2. M. Deynzer: *Great expectations and new territory: The transition of Pasifika students to university.*

3. B. Black: *Becoming an engineer: A critical review of literature on first-in-the-family students and their experience of the first year of university study.*

4. E. McKinley, R. Turner & I. Madjar: *Limited entry and equity: A discussion on universities' undergraduate students admission policies.*

Conferences attended

- ICSEI (International Congress on Schooling Effectiveness and Improvement), January 2009. Vancouver, Canada (A/P Elizabeth McKinley).

- FYE (First Year Experience) Conference, February 2009, Brisbane, Australia (Dr Irena Madjar, Marianna Deynzer).

- KAMAR conference, March 2009, Rotorua, New Zealand (Sam Smith, Johnson Yuan).

- ACSPRI (Australian Consortium of Social and Political Research Inc), June-July 2009, Brisbane, Australia (Sam Smith).

Other presentations and seminars

Deynzer, M. (2009, April). *Lost in transition: Pasifika students' transition from school to university.* Presentation to the Pasifika Fono, Ministry of Education Northern Region, Auckland, New Zealand.

Madjar, I. (2009, February). *Research ethics.* Presentation to the Faculty of Education staff, The University of Auckland, Auckland, New Zealand.

Madjar, I. (2009, April). *The Starpath Project: Helping to identify and overcome barriers to educational success for students from groups currently underrepresented in degree-level education.* Presentation to the Pasifika Fono, Ministry of Education Northern Region, Auckland, New Zealand.

Madjar, I. (2009, May). *Qualitative research methods: Principles and an example from Starpath research.* Presentation to Master of Education students, Faculty of Education, The University of Auckland, Auckland, New Zealand.

McKinley, E. & Madjar, I. (2008, November). *From today's schools to tomorrow's workforce: Ten ways to make it happen for our tamariki.* Presentation to staff of the Rangatahi Programme, Auckland District Health Board, Auckland, New Zealand.

McKinley, E. & Irving, E. (2009, May). *Ethnicity and achievement.* Presentation to "EDUC211: Race, ethnicity and education" students, University of Auckland, Auckland, New Zealand.

Ministerial meetings and visits with Starpath

- *Mr Ezra Schuster*, National Manager for Pasifika Education and two team members, Ministry of Education, July 2008.

- Starpath representatives invited by *Hon. Chris Carter* to attend launch of Pasifika Education Plan 2008-2012, August 2008.

- *Mr Thomas Haapu*, Senior Advisor, Economic Development/Vision Mātauranga, Ministry of Research, Science and Technology, October 2008.

- *Mr Perēri Hathaway*, Strategy Manager, Māori Research and Innovation, Foundation for Research, Science and Technology, October 2008.

- *Mr Conrad Herewini and Mr Tokanui Ihaka*, Te Mana, Pouwhakataki, NCEA Presentation, Ministry of Education, December 2008.

Project media coverage

(1 July 2008 – 30 June 2009)

Type	Date	Media	Title	Details	Link
Print	Spring 2008	Ingenio Magazine. (p12).	"Campaign, Our Donors: ASB Community Trust".	Starpath mentioned in profile of the ASB Community Trust	www.alumni.auckland.ac.nz/uoa/home/alumni/af-benefits-and-services/af-publications/af-ingenio
Print	08-14 Nov 2008	The Listener (Vol 215, No 3574, pp20-24).	"Double standards: Is NCEA widening the gap between Māori and Pākehā achievement?". By Leah Haines.	Cover story	www.listener.co.nz/issue/3574/features/12204/double_standards.html
Print	09 May 2009	Weekend Herald	"A place among the world's elite". By Catherine Masters.	Starpath mentioned in profile of Anne Salmond	www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10571257
Print	13 May 2009	New Zealand Herald (pA5).	"Race gap exposed in NCEA results". By Jacqueline Smith.	A/Prof McKinley is interviewed on ethnicity and NCEA results	www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10571960
Radio	14 May 2009	Radio NZ (Checkpoint).	Waatea News update.	A/Prof McKinley's NCEA comments included	www.radionz.co.nz/national/programmes/checkpoint/20090514
Print	15 May 2009	New Zealand Herald (pA2).	"Pass rates are higher for less traditional academic subjects".	A/Prof McKinley provides follow-up comments on NCEA subjects	www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10572430
Radio	15 May 2009	Radio 531pi	Morning talk-back programme.	Live interview with A/Prof McKinley	N/A
Radio	15 May 2009	Waatea News	Paakiwaha segment.	Live interview with A/Prof McKinley	http://waatea.blogspot.com/2009/05/ethnic-data-helps-maori-education.html
TV	15 May 2009	Māori TV (Te Kaea)	Clip is 12mins in.	A/Prof McKinley comments in NZ Herald repeated as a news item	www.maoritelevision.com/Default.aspx?tabid=278&pid=151&epid=1388
Radio	15 May 2009	Radio NZ (Morning Report)		A/Prof McKinley NCEA comments included in Waatea News update	www.radionz.co.nz/national/programmes/morningreport/20090515
Radio	18 May 2009	Waatea Radio	Current affairs programme.	A/Prof McKinley is interviewed by Willie Jackson	N/A
Print	23-29 May 2009	The Listener (Vol 218, No 3602, pp	"League players" Standards count and so does counting standards.	A/Prof McKinley is quoted in Editorial	www.listener.co.nz/issue/3602/columnists/13331/league players.html
Radio	02 June 2009	Radio NZ (Nine to Noon)		Feature interview with Liz as a result of Towards University media release	www.radionz.co.nz/national/programmes/ninetonoon/20090602
TV	02 June 2009, 4.00pm 03 June 2009, 5.36am	TV One, Te Karere	Current affairs programme.	Lead story, interview with A/Prof McKinley on results of Towards University	http://tvnz.co.nz/te-karere/2009-tuesday-video-1028654

Type	Date	Media	Title	Details	Link
TV	04 June 2009	TV One, Breakfast	Features in Breakfast reporters' regional round-up.	Starpath research and A/Prof McKinley mentioned in news piece	http://tvnz.co.nz/breakfast-news/breakfast-thursday-4-june-2767490/video?vid=2768408
Print	04 June 2009	NZ Herald (pA2).	"Minority groups in dark over NCEA". By Jacqueline Smith.	A/Prof McKinley is interviewed and quoted in the article	www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10576322
Print	05 June 2009	NZ Education Review	"NCEA courses – choose wisely".	Brief piece on Starpath	http://archive.educationreview.co.nz/?iid=25932
Print	08 June 2009	Education Weekly	"Concern for disadvantaged students making poor NCEA choices"	Article from Towards University media release	N/A
Print	11 June 2009	Northland Age (p9)	"Many nobbled by poor NCEA choices".	Article based on Towards University media release	N/A
Print	12 June 2009	NZ Education Review	"System failing students, studies show"	Longer article on Towards University media release, tied in with Waikato study	http://archive.educationreview.co.nz/?iid=26176
Radio	18 June 2009	Radio NZ (Nine to Noon)	"Open access for Maori to University"	A/Prof McKinley joins live interview panel to discuss open entry to university for Māori	www.radionz.co.nz/national/programmes/ninetonoon/20090618