



# Starpath newsletter

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Ameria Retimana (Head Girl), Stephen Fordyce (Principal) and Michael Bickers (Head Boy)

## Size no obstacle for one of Starpath's newest partners

Ruawai literally means 'two waters'. The small Northland town, located 30km south of Dargaville, sits between the Kaipara harbour and Wairoa River in Northland and has a population just shy of 500 people. Ruawai College is the hub of this small town and serves rural communities as far north as Tokatoka and Tinopai in the south.

As one of 16 schools that joined the Starpath Project in 2011, Ruawai College is the smallest and most rural partner school. Approximately 85% of the 200 students attending the college travel to school by bus and, for some, the journey takes as long as an hour each way.

The school's small size and rural position was definitely no obstacle for principal Stephen Fordyce. Stephen jumped at the opportunity to become a Starpath partner school after hearing about the Project from a Tai Tokerau colleague who had been involved with Starpath as a pilot school in Phase One. "I had heard positive feedback from principals of schools already part of the Project which affirmed the results I had read and heard about," reflects Stephen. "I believe students at Ruawai should benefit from the best educational opportunities on offer despite its small size and rural location - just as students in urban state schools do."

With small cohorts of students in each year level the college experiences fluctuations in performance from year to year that would not be seen in larger schools. "We have an expectation that the minimum qualification for any students completing their secondary education at Ruawai College is NCEA Level 2," says Stephen who is proud of the fact that all

Year 12 students at the college gained NCEA Level 2 in 2010. "Our overall objective is to increase grade quality at all levels of NCEA."

The geographic distance from the school for many students and their families creates unique challenges for parent/whānau engagement. "The college is very much a community institution and the focus of the immediate Ruawai community," says Stephen. "The school serves an extensive hinterland and we are aiming for greater engagement with these parents/whānau in the important decisions regarding their children's learning and educational programmes."

In its first year as a Starpath partner school Stephen says they have become more aware of what they can, and need to do in relation to data gathering and retention.

This year the school is implementing Starpath's Data Utilisation, Academic Counselling and Target Setting (DUACTS) Programme across the senior school. Stephen hopes to enhance the precision and quality of their target setting at all levels and foresees that their earlier experience with academic counselling and students' use of Reflective Learning Journals will link well with strategies in Starpath's programme.

"As a Starpath school we hope to employ our growing expertise in the interpretation of student achievement data and target setting, as well as in the academic counselling of our students, to more truly meet the learning needs of each one of them as embedded in the wonderful New Zealand Curriculum."

## Going for growth



As Starpath enters the second year of its second phase, its aims seem even more important than they did when it began in 2005. The programme is about achieving better educational outcomes for Māori, Pacific and other students from low

and mid-decile secondary schools. It aims to increase the number of students who make it from school into degree-level studies and thus provide a platform for their careers and personal growth.

There are a number of programmes which have similar goals. Improving educational performance is seen as crucial to the future of thousands of our young people and to the social and economic development of the country. What does Starpath offer that is distinctive and how does it help to achieve these aims?

The first phase of Starpath carried out research in pilot schools to identify what might be preventing students from achieving their educational goals. It discovered that the data schools have on students were seldom adequate for setting realistic goals, monitoring progress and checking that students were performing to expectations. Students did not have good information about NCEA requirements for their chosen educational paths and families were often unaware of what their students wanted to do and how they might get there.

Starpath works with schools to collect, organise and analyse student achievement data and to base individual student profiles, targets and plans on these data. These data are critical for schools to identify where they can make significant improvements and lift the performance of whole groups of students. The implementation of Starpath strategies supports schools to advise on students' educational pathways and introduce processes for communicating effectively with students' families. In its second phase, Starpath will also be working with schools to improve students' literacy and numeracy and the way schools lead and manage change.

Starpath is an advocate for better transitional processes when students progress to degree study. It recognises that students need encouragement and support in a challenging environment. The work does not end when a student reaches a tertiary institution.

As a project of The University of Auckland in partnership with the Government, Starpath wants to make a difference. Our key goal in the next four years is to show that we can do this.

**Raewyn Dalziel**  
Chair, Starpath Board

# Strategies for success

## Starpath's Data Utilisation, Academic Counselling and Target Setting (DUACTS) programme at a glance

Statistics show that one in five New Zealand students leave secondary school with no qualifications, for Pacific students it is one in four and for Māori, one in three. The Starpath Project has developed a systematic, whole-school programme which aims to raise student achievement and reduce disparities in educational outcomes for Māori and Pacific students and other students from low socio-economic backgrounds.

During Phase One, Starpath conducted extensive research and implemented strategies in partnership with five pilot schools. The results revealed dramatic increases in NCEA results in each school. One school has increased Level 3 NCEA results by 18%, while another has taken its Level 1 pass rate from 40% to 60% and its Level 2 rate from 40% to 58%.

The Project's redesigned parent-student-teacher conferencing has also had a significant impact, with parent attendance increasing from around 20% to between 70% and 86% in each pilot school and feedback from parents being overwhelmingly positive.

This essential research has been used to develop the whole-school Data Utilisation, Academic Counselling and Target Setting (DUACTS) Programme. The programme, which will be implemented in partnership with up to 40 secondary schools in Phase Two, includes five key strategies based on the research and evidence gathered in Phase One.

### 1. Establishing evidential databases

Allows for the systematic storage and management of real-time data by appointed and trained staff to inform decision making.

### 2. Ongoing target setting by a specially trained Student Achievement Manager

Uses longitudinal data to set individual academic targets and aggregate these with other data to set specific group and school targets.

### 3. Tracking and monitoring of student learning and academic progress

Uses real-time student achievement data to monitor student learning and academic progress. A 'traffic light' system records teachers' expectations in individual subjects as part of monitoring and aligning academic targets and progress to ensure timely interventions with students at risk of not achieving targets.

### 4. Academic counselling to support students' progress toward set targets

Provides the opportunity for students to meet with trained teachers two to three times each year to review their academic progress, goals and plans and the strategies required to achieve them.

### 5. Family engagement

Enhancing student-parent-teacher conferences provides opportunities to discuss progress with parents/whānau. Plans and strategies are reviewed using real-time data and other relevant information.



## Key people in the DUACTS programme

**Students:** Each student develops and works toward short, medium and long term goals. They are required to participate in academic counselling sessions and parent-student-teacher conferences.

**Parents/whānau:** Parents/whānau/fanau support their children and the school toward the achievement of specific goals.

**Academic counsellors/coaches:** Appointed by each school, academic counsellors work together with students to achieve their potential, update the database and use data to inform school-wide teaching and learning.

**Student Achievement Manager (SAM):** A designated staff member in each school maintains databases, analyses data, sets targets, tracks and monitors progress.

**School leaders:** School leaders manage the strategic allocation of responsibilities, priorities and resources and provide ongoing support for the whole school community.

## Implementation and research update



### A focus on science

Building on research conducted in Phase One, Starpath has identified Māori and Pacific Island student success in science as an avenue for further study. There is a particular interest in factors leading to lower decile student transition into tertiary courses that rely on a science background.

### Starpath original partner schools

In Phase One, Starpath research identified a number of factors that influenced the academic success of Māori and Pacific Island students. In Phase Two, Starpath is conducting deeper research into two of these factors – the NCEA Level 2 literacy barrier and the importance of data-driven leadership.

In 2011, as part of the Starpath Project, the Woolf Fisher Research Centre visited the five original partner schools to observe literacy practices in English, mathematics and science classrooms. From these observations an intervention programme will be designed for each school.

Last year also saw Starpath partner with The University of Auckland's Centre for Educational Leadership to investigate school and department issues in evidence-based decision making. Discussion with each school allows for development and monitoring work in 2012.

### Starpath Phase Two schools

Research in the first 16 new Phase Two schools started with a baseline survey and a data audit in 2011. The survey highlighted recent success and achievements, perceived difficulties and challenges, and the schools goals for the year.

In 2012 the schools will implement and refine the Data Utilisation, Academic Counselling and Target Setting (DUACTS) Programme that was developed with the help of Massey High School and the other Phase One partner schools.

Starpath will monitor the implementation of the academic counselling programme and the enhanced parent-student-teacher conferences as well as oversee the use of the evidential database in decision making and target setting. A full evaluation on these Phase Two partner schools is intended for 2013.

# Funding partnership supports project growth

Late last year the ASB Community Trust announced that the Starpath Project was the first to be awarded funding under stage two of its Māori and Pacific Education Initiative (MPEI).

Funding for Starpath is provided by the Tertiary Education Commission on the basis that The University of Auckland raises matched funding from the private sector. The ASB Community Trust has been a very significant

sponsor, providing Starpath with \$1.55m from 2005-2010, and has now has committed a further \$1.5m under MPEI. Professor Stuart McNaughton, Acting Director for Starpath, says: "We are extremely grateful to ASB Community Trust for its ongoing financial support because it has allowed us to work with more schools. This means we will be able to help more young people succeed at secondary and tertiary level."

## Insight: Professor Elizabeth McKinley

### Successful schools use data

Both the Ministry of Education and the Education Review Office emphasise 'evidence' and 'evidence-based decision-making' as essential in their shared goal of addressing equitable outcomes for all students. Regardless of the negative features of the data demands on schools by central authorities, there is huge potential for intensive data-use at school level to improve individual student outcomes. To realise this goal, the national perspective needs to be complemented by a school perspective on the use of data, where schools do not just contribute to the national database but also control their own data strategy. This is especially important because, although the achievement gap appears so widespread as to be universal, it nevertheless manifests itself differently in each school. As such, the response of each school needs to be an individual one. The dominant national perspective of the achievement gap also obscures the fact that collective efforts to close it still rely on the achievements of individual students.

Data use as essential to improved student outcomes is reinforced in international research studies. For example, for the last 8 years Janet Angelis and Kristen Wilcox<sup>1</sup>, from the State University of New York, have been studying schools that consistently performed above their predicted levels. Among their findings was that all the schools made decisions based on a variety of evidence from longitudinal data they had continually collected and analysed over many years.

We are all familiar with assessment data but the successful schools identified in the study collect other information to use. Data are collected from a variety of sources, formal and informal, including daily student interaction, surveys of students, teachers, parents, and community members, and from results of assessments generated by teachers, departments, and national examinations. The main purpose of collecting longitudinal data is to look for trends and patterns, such as spotting risk factors or identifying timely interventions. For this reason collecting data is an incredibly significant task to perform, particularly for students who need most support from the school to achieve to their academic potential.

Starpath works on the basis that it's important that schools are in charge of their own data collection process. Being in charge of the data collection allows you to focus on the context of teaching and learning in your school in addition to student outcomes. Data become part of a larger toolkit for understanding the school's current performance and formulating interventions. Properly managed databases in schools can be used to personalise learning, identify problems, formulate responses and interventions, improve policy and practice, evaluate effectiveness, promote accountability, and help you target your resources more effectively. In essence, it provides a basis for the continuous inquiry and monitoring of both teaching and learning as each school can evaluate their practices in light of the data. Good quality data is an empowering tool that can help show what Ruth Johnson calls "the difference between rhetoric and reality."<sup>2</sup>

Discussion of data, both school-wide and national data, with the whole staff and students is also valuable. For example, it can be used to bring



staff together as they gain a common understanding of each person's role in a team of professionals responsible for creating a culture of achievement in the school. It can also help staff to become dissatisfied with their current practice and debunk myths about some students being incapable of anything but low expectations. In addition, discussions can be useful to increase staff knowledge and skills around data.

Discussing each student's achievement data with them is essential. These discussions should not only include individual subject achievement data but also give them a perspective of overall progress towards their goals and aspirations. Schools need to consider discussing other data with students, such as income and qualification data, and employment data in an effort to motivate students and make them informed about their choices. Sharing this information with students can be done in academic counselling sessions, classrooms, or assemblies.

Lastly, it seems to me that subjecting school and classroom data to continual analysis can be difficult for all concerned, including board members, principals, teachers, students, and parents particularly if people are not used to the intense scrutiny. It is important for school leaders to anticipate and address issues that will arise and gather strategies for change management. If schools are monitoring student and school progress and performance then change will be inevitable. It is important to ensure people get plenty of opportunities to be involved with data collection, analysis and use. In the end, the use of data is about improving student achievement and ensuring more equitable outcomes, particularly for Māori and Pacific students, and sometimes what the data say runs counter intuitive to our perceptions.

<sup>1</sup> See <http://www.albany.edu/nykids/>

<sup>2</sup> Johnson, Ruth (2002) Using data to close the achievement gap. Thousand Oaks, CA, Corwin Press.



# Getting to grips with data: Six cautionary tales

Starpath's Senior Research Fellow and data expert, Earl Irving, shares his insights gathered from working with the new partner schools in Phase Two.

During the latter half of 2011, Starpath began working with the new partner schools to collect and collate a range of data into a single evidential database that can be used to build a comprehensive academic profile for every student in the school. Together we learned much about the data that schools have, how they are stored, and from that, a number of cautionary tales that other schools might take heed of if they wish to improve student achievement through an evidence-based approach.

## Cautionary Tale #1: Use the SMS to store all achievement data.

Establish a school-wide policy that all achievement data is stored on the SMS. Too often we found many pockets of data around the school, none of which could be accessed to create a comprehensive academic profile for any given student. Departing staff often means departing data.

## Cautionary Tale #2: Always use and retain the student's unique ID

Accurate data matching can be done fairly easily electronically, but this requires the use of a unique ID for each student. When downloading a list of students to record achievement data, or saving the Tabular Report of an e-asTTle assessment, always include and retain the student ID or NSN in the saved record.

## Cautionary Tale #3: Store all original data files in a data archive file

Data uploaded into the SMS often updates a student's status, but does not retain the actual data entered. Level 1 credits obtained this year are usually added to and over-write the Level 1 credits from last year, so the actual number of credits earned last year are "lost". Retaining the original files in an archive file helps when you wish to analyse the number of Level 1 credits obtained in a given year.

## Cautionary Tale #4: Check data for integrity

Make sure that the data that are entered in the SMS match the original data file – transfer errors are possible. Also, are they valid values? A PAT stanine entry of 19 in the SMS is probably a typographical error for 1 or 9, which are worlds apart in terms of that student's achievement.

## Cautionary Tale #5: Avoid missing data

To build a comprehensive academic profile for a student, you will need as much achievement data about that student as you can possibly obtain. Follow up on students who are absent for assessments, and make sure that all



Ruth Luketina and Rochelle Pikaahu from Mangere College attended the first professional development day for Phase Two Student Achievement Managers (SAMs) held in November.

completed assessments are marked and recorded. It was not unusual for us to see an e-asTTle assessment assigned to 301 students, of whom 256 had completed the test, but the number of marked assessments was 238. This meant that a fifth of this cohort did not have results for that assessment. If possible, seek achievement data from a student's previous school to help complete their academic profile, and be prepared to share your data with other schools when a student leaves your school.

## Cautionary Tale #6: Changing the school's SMS is a time for carefully planned change management

A number of secondary schools have recently been faced with the option of changing their SMS as a result of one provider moving their operations off-shore. In the absence of on-the-ground support, many of these schools have chosen to switch to a New Zealand based provider.

This change requires careful planning to ensure that all records are successfully migrated from the old system to the new, and that all of the staff who use the system have adequate and timely training to make the best use of the new SMS. This requires a clearly articulated change management plan, which includes widespread consultation to ensure that all aspects of the change are considered and are able to be addressed.

## Publications

### Understanding NCEA A short and useful guide for secondary school students and their parents

Irena Madjar and Elizabeth McKinley



Written for year 9 and 10 students and their parents, this book explains in plain language just how NCEA works - everything from standards, levels and credits to subject choice. With real-life stories from over 100 students this book sets out how to make the best possible subject choices, avoid potential pitfalls and successfully prepare for further education or training.

There is also a chapter specifically for parents, which guides them through supporting their child through NCEA.

This book is currently being translated into Samoan and will be available from May 2012.

**Price:** \$20.50 incl. GST plus postage

### Unibound? Students' Stories of Transition from School to University

Edited by Elizabeth McKinley and Irena Madjar



There is nothing like a good story to capture the imagination and help us engage with other people's experiences. This book is made up of fifteen such stories, written by young New Zealanders as they look back on their individual journeys from school to tertiary education. They come from rural and urban schools located mostly in economically disadvantaged communities, and many are the first in their family to embark on university studies.

Students tell of their dreams, experiences and lessons learned along the way.

This book is essential reading for students considering university study as well as teachers, parents and mentors. Sometimes funny and at times painfully honest, these stories go beyond the glossy brochures and university guidebooks to provide a real glimpse of what it is like to leave the familiarity of school, family and community and embark on university study.

**Price:** \$27.60 incl. GST plus postage

**Both publications can be purchased online or direct from Kohia Education Centre:**

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The Starpath Project for Tertiary Participation and Success, is a partnership between The University of Auckland and the New Zealand Government. The Project works in partnership with schools to transform educational outcomes for students who are currently under-achieving at secondary school and, as a result, under-represented in tertiary education.

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