

Symposium Title:

Designing more effective instruction and pathways for student success

Symposium Chair: Prof. Linda Tuhiwai Smith, University of Waikato

Symposium Discussant: To be confirmed

Introduction

In New Zealand, as in many other countries, there is a need to design and implement more effective instruction and more enabling schooling trajectories for 'minority students', to increase their access to university. In 2002, Aotearoa New Zealand was named as having the second highest rate of educational inequality in an OECD report. In particular, the large gap between students at the bottom and those in the middle of school achievement (commonly referred to as 'the tail') was highlighted. Our education system works well for some students, but has failed badly for a large number. Among those worst affected are the indigenous Māori and immigrant Pacific Island populations. In a small and relatively intimate society such disparities are not sustainable.

A number of research and development programmes being carried out at the University of Auckland have been analysing key barriers and developing interventions in collaboration with primary and secondary schools and tertiary institutions, to change achievement patterns and pathways. All the research programmes from which the following papers are derived seek to transform educational outcomes for students from low socioeconomic schools with high numbers of Māori and Pacific students through the use of evidence-based methodologies. The papers in this symposium describe critical aspects of these programmes that can help change student outcomes.

Paper 1

A case study of academic tracking of high school students from low-mid socioeconomic schools in Aotearoa New Zealand

Elizabeth McKinley, University of Auckland (Presenter)

Samantha Smith, Massey High School

Establishing what students will aim to achieve in their courses rather than just which courses they enrol in, and establishing school-wide targets for groups of students takes educational planning a stage further. The literature on academic counselling does not generally emphasise setting targets for student achievement, but it does contain frequent references to the potential for academic advising to enhance student goal setting and motivation. These references indicate that these processes – academic counselling and target setting – have a natural affinity and could readily be brought together. In 2007 a New Zealand high school (NZHS) designed and implemented a *Guided*

Academic Target Setting and Counselling Programme involving all students and significant staff. The goal was to monitor student achievement and subject choices over the course of their school career, and to provide students with individualised academic advice in order to improve their academic performance. Early in 2007 the school set up specific targets in each achievement standard for Year 11 students in English and Mathematics based on previous achievements of individual students. Deans were released to provide academic counselling to all students several times over the year, and began to compile individual portfolios based on academic performance. These portfolios were then used as the basis for academic progress review involving Form Teachers, parents and students.

A mixed-method stakeholder evaluation was carried out using semi-structured interviews, focus groups and questionnaires. Data were collected through individual interviews of significant participants (n=9), focus group interviews of teachers (n=40), and parent (n=139) and student (n=167) responses to the questionnaires. The findings indicate that overall teachers, parents and students were pleased with the intervention. While a number of teachers had concerns regarding workload, the results from the target setting suggest the whole intervention significantly accelerated achievement of both specific groups and the overall school qualification results. In this paper we will outline and critically evaluate the intervention and its overall impact on all stakeholders.

Paper 2

Choosing success: the role of subject choice in success in Aotearoa New Zealand high schools

Irena Madjar, University of Auckland (Presenter)
Seini Jensen, University of Auckland

The primary aim of the study was to determine how Māori, Pacific, and other high school students choose specific National Certificate of Educational Achievement (NCEA) subjects, or have such choices made for them. A further aim was to identify potential areas for intervention that could assist students and their advisers to actively select more informed and strategically more appropriate programmes of study for the NCEA qualifications. The NCEA is a standards-based assessment and qualification system introduced in all state high schools in New Zealand in 2002. It provides three levels of qualification that parallel the last three years of high school education, as well as a separate University Entrance (UE) qualification necessary for enrolment in undergraduate university courses. Among its various features, NCEA allows students to undertake a range of 'academic' subjects (such as history or calculus) as well as more 'vocational' or skill-based subjects (such as customer service or sports performance). To obtain a UE qualification students must meet four major criteria (in terms of subject choices, levels of study, accumulated credits, and levels of achievement). Inappropriate choices can lead to students failing to meet entry requirements for university or other

tertiary study, limiting their post-secondary education and employment options, or leaving school without any formal qualifications. Research to date has indicated that students from schools located in economically disadvantaged areas and from some ethnic groups tend to choose (or are guided into) less “academic” subjects, making it less likely that they will obtain UE or be able to compete for admission to limited-entry university programmes. Inadequate understanding of the NCEA by parents also impacts on students’ choices and planning for further education. The reason for our study was to uncover *how, when and by whom* NCEA course choices are made and how clearly the *implications* of these choices are understood by students, parents, and teachers.

A cross-sectional qualitative study was conducted using semi-structured individual interviews and follow-up focus groups. Data were collected from individual interviews with 32 teachers, 87 students, and 42 parents (n=161), six follow-up focus groups involving 28 students and 9 teachers, and participating students’ records of academic achievement. The findings indicate that the complexity of the system and its implementation in particular schools leads to structural barriers to students’ achievement and can limit their future options. Schools and individual teachers exercise significant influence over the options available to students, including what content is selected in individual subjects, what forms of assessment are used, and what levels of achievement can be attained. Lack of detailed understanding of the NCEA system and its implementation in particular schools by the parents often limits their involvement in their children’s subject choices and course planning. The NCEA system affects how students experience their high school education, how they engage in their learning, how well they achieve, and what options are available to them in terms of further education or job opportunities. Freedom to choose from a wide range of subject options does not in itself guarantee that students will end up with the most appropriate choices. Greater engagement between schools, students, and parents, based on clearer understanding of the NCEA system and its implications for the students’ future is needed.

Paper 3

A model of school change for culturally and linguistically diverse students in New Zealand: evidence from systematic replication

Stuart McNaughton, University of Auckland (Presenter)

Mei Kuin Lai, University of Auckland

A model of school change has been designed and implemented in a systematic replication series. Key principles are that teachers need to be able to act as adaptive experts; that local evidence about teaching and learning is necessary to inform instructional design; that school professional learning communities are vehicles for changing teaching practice; that educative research – practice – policy partnerships are needed to solve problems; that instructional leadership in schools is necessary for community functioning and

for coherence; and that effective programmes in schools are built by fine tuning existing practices. A three stage model has been tested across three clusters of schools: two groups of urban schools serving Māori and Pacific children from low SES communities and a third group comprising all the primary schools in a rural and remote region of New Zealand. The model has been extended since its initial testing, to different academic areas (writing as well as reading) and to secondary schools. The research and development model has been very successful in raising achievement levels for Māori and Pacific children in urban schools. In the first cycle of implementing the model gains in reading comprehension of almost a year in addition to expected gains over three years were made in two clusters of schools. Sustained gains in achievement over several cycles of research and development have meant that there are schools whose average levels of reading comprehension in years 4-8 now have improved to national levels. The intervention in the more remote rural schools has been equally influential. Gains in reading comprehension to significantly above national levels have occurred and in writing Māori children are achieving as highly as other children in years 4-8 (significantly above national levels).

Paper 4

A model of professional learning successful in accelerating progress for low achievers in literacy

Judy Parr, University of Auckland (Presenter)

Helen Timperley, University of Auckland

This paper describes a literacy professional development project that has in two successive cohorts of schools (N = 200) reduced the achievement gap for students experiencing difficulties in reading and writing. Effect size gains in both cohorts were large (.8 for reading and 1.2 for writing) with students in the lowest 20% of achievement gaining at twice the average rate each year of the project. Two premises underpin the project: coherence within and between the multiple levels of the schooling and educational administration systems, and a focus on evidence-informed inquiry into effectiveness at each level of the system. The paper illustrates how these premises interacted in ways that led to ongoing problem identification with solutions actively and collaboratively sought at all levels including how students understood their learning, how teachers and school leaders taught these students, how professional development facilitators changed their approaches and how the project leaders and policy makers developed new systems for learning. Research data were collected throughout the two years of each cohort and included assessment of student literacy in reading and writing, participant observations of the project leadership operations, interviews with principals, literacy leaders and teachers, scenario responses, interviews with facilitators and recordings of their feedback sessions to teachers following classroom observations. Examples of learning at all levels of the project are provided. The analyses of these instances identify the conditions that need to be created to enable such systemic responses to solve identified problems.