Expectations: Raising Achievement

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Introduction: teacher expectations

The influence of teacher expectations on students has long been recognised. Expectations have been shown to have a measurable effect on outcomes, and while some research has shown these effects to be small, effects for vulnerable students have been found to be large. Such findings would seem particularly important given that in New Zealand, large numbers of students appear to underachieve, leaving school as soon as they are able and without any formal qualifications. As recently as 2007, 35 percent of Māori and 26 percent of Pasifika school leavers left school without completing Level 1 NCEA. It has been shown that if, when students first enter primary school, teacher expectations are either too high or too low in relation to student potential, student achievement will align with teacher expectations. Thus, it would appear that students internalise teachers' expectations and begin to behave accordingly. When this occurs, it can have a sustained effect on expectations, with teachers failing to challenge students and students feeling under-challenged or inappropriately challenged, ultimately leading to under-achievement.

To date, the emphasis of research designed to enhance academic achievement has almost exclusively focused on academic variables and instructional practices, with varying levels of success. Yet the teacher expectation research suggests that the socioemotional variables, including the role of teacher expectations, which are at play in the classroom can have as much, if not more, effect on student outcomes. High teacher expectations are associated with specific teacher beliefs and practices, which lead to significantly enhanced outcomes for students (Rubie-Davies, 2007).

Here in New Zealand, Professor Russell Bishop and colleagues (Bishop et al., 2003) have shown that Māori secondary school students attribute their lack of success at school in large part to poor relationships with their teachers, coupled with teachers' low expectations of Māori. A key component of the Te Kotahitanga programme, which these researchers have developed, has been to focus on changing teacher expectations for Māori students, and to enhance the socioemotional environment by introducing cooperative grouping and greater student autonomy. These factors have been identified by leading expectation researchers as practices used by teachers with high expectations. To date, the results achieved by Te

Kotahitanga have been impressive, with greater numbers of Māori and Pasifika students in schools where the programme has been introduced achieving a greater number of NCEA standards than had done so prior to its introduction.

Interestingly, the early teacher expectation research was almost exclusively conducted in primary schools; it suggested that girls were more susceptible than boys to teacher expectations, as were younger, relative to older, students. Given such findings, it was assumed that middle school (intermediate) and secondary school students would be less vulnerable to teachers' expectations, and so this phenomenon was rarely investigated in these contexts. However, relatively recently, the belief that teacher expectations do not affect the outcomes of older students has been questioned, and a number of researchers have begun exploring expectations beyond the primary level.

Such studies have suggested that, while the effect of expectations may level out across the primary school years, their impact increases at points of transition. For example, in one study, teacher expectations were found to significantly impact on student motivation and academic outcomes when students moved from primary to middle school. Similarly, other researchers have shown that teacher expectations affect student achievement on standardised tests at Grades 9 and 10, the point at which students are transitioning from middle to high school, or, in New Zealand, from intermediate to secondary school. Further, when students move to secondary school, teacher expectations suddenly become more important than students' own expectations in predicting student achievement.

Student expectations

While teacher expectations of students have been extensively studied, students' expectations for their own academic outcomes have received little attention. Certainly, the research does suggest that teacher expectations have more effect on student outcomes than student outcomes have on teacher expectations (Rubie-Davies, 2008), but this is a different question. We could locate only one study which examined secondary school students' expectations of themselves. The researchers (Tavani & Losh, 2003) found strong correlations between student expectations and motivation, and similarly strong correlations between student expectations and self-confidence. Tavani and Losh argued that the power of self-belief should not be underestimated, and that they had shown strong relationships between student beliefs and academic performance.

The fact that we could locate only this one study examining student self-expectations points to the general lack of attention in research paid to the student voice. While it is clear

that teacher expectations have effects on students, asking students about their own expectations, particularly if these could be aligned to their teachers' expectations, would provide useful information. It could create a complete picture of the pathway of expectations from teacher to student, to student outcomes, to student self-expectations. Such a study has not, however, been conducted. The only study that approximates such a proposal is one completed by Rubie-Davies (2006), in primary rather than secondary school, in which she showed that student self-concept, rather than students' expectations of themselves, in maths and reading altered considerably over one year when students were in classes with teachers who either had very high, or very low, expectations for all their students (high and low expectation teachers). Predictably, the self-concept of students with high expectation teachers was enhanced, while that of students with low expectation teachers declined considerably. Similarly, students whose teachers had high expectations made significant academic gains over one year, while those students whose teachers had low expectation often regressed.

Parent expectations

Another group whose expectations have been little investigated is parents. It is accepted that parents can have large effects on their children's schooling outcomes. Indeed, some teachers attribute students' poor performance to their home background (i.e. they see parents, rather than teachers, as needing to take responsibility for students' lack of success). It therefore seems surprising that the effect of parent expectations on their adolescent children has received little attention.

Ma (2001) has contended that parent expectations have a far greater effect on student university aspirations than teacher expectations. Other research (van der Hoeven-van Doornum et al., 1993) has found a relationship between parent expectations and young adolescents' mathematics achievement, particularly for girls. However, this study did not control for prior achievement or teacher expectations, so the results may simply reflect teacher attitudes or expectations that align with previous student results. This is because it is difficult to unravel the effect of previous performance on subsequent achievement (known to be highly correlated) from parents' expectations. Hence, although there are widely held beliefs that parent expectations influence student expectations and outcomes, the evidence appears sketchy, suggesting this is an area worthy of further research.

Looking more closely at expectations

It is interesting that in the current climate, we hear a great deal, particularly from government agencies, about the need for high expectations (generally meaning high teacher expectations); yet the number of researchers working in this interesting area has been steadily dwindling. There is an assumption that there is nothing new to find. However, the overview above has identified several areas in which there are important questions still to be answered.

Further, given the more recent focus on the importance of teacher attitudes (of which expectations are but one aspect) for student learning, it appears timely to look more closely at the relationship between teacher expectations and the socioemotional environment of classrooms, and what effects this has on student outcomes. We know a lot about what constitutes the effective teacher in an instructional sense, and about practices associated with high expectation teachers; but we know very little about teacher attitudes, characteristics and beliefs that can significantly moderate achievement outcomes for students.

Clearly, effective and non-effective instructional practices have large effects on student achievement. However, when teacher characteristics, such as teacher expectations, have been considered in research, the resulting outcomes for students have been quite startling. For example, McKown and Weinstein (2008) explored the role of classroom context in moderating the relationship between child ethnicity and teacher expectations. They found that in classes where students reported high levels of differential treatment by teachers towards high and low achieving students, teacher expectations for White and Asian-American students were between .75 and 1.00 standard deviations higher than they were for African-American and Latino students, despite similar achievement. In other classes where the differentiation by teachers was not obvious, teacher expectations were based on achievement, not ethnicity. In the high differentiation classes, teacher expectations accounted for up to .38 standard deviations of the end of year ethnic achievement gap.

Clearly, not all teachers are the same. Just as effective instructional practices have been extensively investigated, it seems clear that teacher attitudes, beliefs and expectations, and how these then frame the socioemotional environment of the classroom, is worthy of far more attention and investigation than it has received so far. While it is true that developing students' abilities to self-regulate and to set themselves high expectations offers exciting possibilities in terms of promoting student achievement, the power of the individual teacher to create extraordinary progress within whole classes of students cannot be ignored. The clear need for additional research into individual teacher beliefs, attitudes and characteristics that promote student learning offers many exciting possibilities.

The BELA project

The Beliefs and Expectations about Learning and Achievement (BELA) project, which is funded by the Cognition Education Research Trust, has enabled the research team (led by Associate Professor and Director of the Centre for Child & Family Research, Dr Robyn Dixon; Associate Director, Dr Deborah Widdowson; Dr Elizabeth Peterson, Department of Psychology and Dr Christine Rubie-Davies, Faculty of Education) to explore some of the ideas presented above. During the initial phase of the project, the team conducted focus groups with teachers, parents and students in Years 9 and 10 from three secondary schools (one low, one middle and one high decile) from across Auckland, to determine each group's beliefs and expectations about schooling. We were also interested in the expectations each group had of the others in the triangle: teachers, parents and students. One exciting finding from the study was the importance teachers, parents and students all placed on the teacher-student relationship as being critical to student success. A further finding was the positivity expressed by students and parents about schooling, and its potential to enhance the future of students.

The collective perceptions of teachers, parents and students enabled us to create questionnaires for each group which were then distributed to a representative national sample of New Zealand secondary schools. We are currently analysing these results, which will provide extremely rich data about the beliefs and expectations of the three groups, and enable us to identify similarities and differences within and across the groups.

Since we know that expectations and achievement are interdependent, we turned our attention this year towards the question of whether we can empower students to ameliorate the impact of negative expectations, and/or the possibly conflicting expectations of their teachers and parents. One potential means of achieving this might be to teach students to monitor their own expectations and achievement, and thus regulate their own learning. We believe this should be possible if students are given the opportunity to set achievable goals in line with their prior achievement, and to self-evaluate their progress using objective data. The asTTle system provides a means by which this might happen: students sit an asTTle test, and the Individual Learning Pathway that results from the test provides clearly stated learning outcomes that can be used to assist students to understand what they need to do to enhance their learning.

Currently, most schools either have not seen the potential of asTTle to become a self-regulatory tool for students, or have chosen not to allow students access to their own achievement data. Yet it offers the potential for students to diagnose their weaknesses and

select goals to achieve, based on the learning outcomes stated in the Individual Learning Pathway report. Students can then monitor their progress towards their goals, and set and sit further tests.

To this end, we are currently conducting an intervention study in three Auckland secondary schools. In the first instance, students and teachers in two Year 10 classes (an intervention class and a comparison class) at each school, as well as the students' parents, are completing the questionnaire used in the national study. This will allow us to match teacher and parent data to that of specific students, something we were unable to do in the national survey. Students then sit an asTTle test, and those in the intervention class are then invited to set their own goals, using the information provided in the Individual Learning Pathway report. Subsequent tests result in the generation of new Individual Learning Pathway reports, which are used by the students to monitor their outcomes in relation to goals set, and then set new goals for the next unit of study. To date, students appear to appreciate the opportunity to engage with this information.

Finally, there are already plans afoot for a further project involving a teacher expectation intervention designed to raise teachers' expectations, while teaching them about the beliefs and characteristics of high expectation teachers. The possibilities in this stimulating area are endless.

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