Rural Outcomes of Schooling Research Project Report

Some preliminary findings from Case Studies





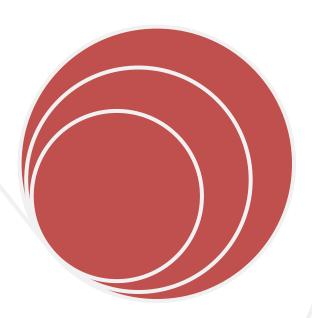












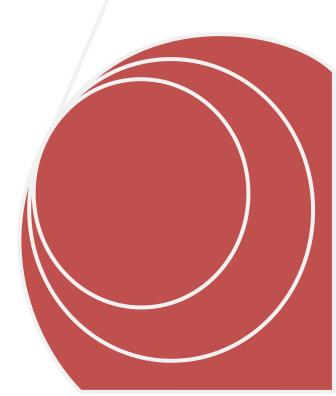
Rural Outcomes of Schooling Research Project Report

NSW DEPARTMENT OF EDUCATION AND TRAINING

Educational Measurement and School Accountability Directorate

This report outlines the successful strategies found during case studies in 14 rural schools at which performance on statewide tests was high relative to other rural schools with similar socio-economic status and accessibility/remoteness.

Ann Daly, Project Co-ordinator August 2010



The Educational Measurement and School Accountability Directorate acknowledges the financial and in-kind support of the School and Regional Operations Directorate, particularly the leadership of case study teams by principal liaison officers and the participation within those teams by regional education officers. The generosity of the staff who shared their expertise was greatly appreciated by the case study teams when they visited the following 14 schools:

Bonalbo Central School Bunnaloo Public School Coonabarabran High School Coonamble High School Dorrigo High School Forbes North Public School Glen Innes High School Kempsey South Public School Manilla Central School Mudgee High School Narrabri Public School Narrandera Public School Quaama Public School The Henry Lawson High School

NSW Department of Education and Training

ISBN 9780731386925

SCIS 1477128

Report on Rural Outcomes of Schooling Research Project

Conducted by the Educational Measurement & School Accountability Directorate
Supported by Regional Principal Liaison Officers, School & Regional Operations Directorate,
NSW Department of Education and Training

Abstract

The Rural Outcomes of Schooling Research Project conducted case studies in 14 rural schools that were performing well on state-wide tests relative to a measure of their remoteness combined with socio-economic status. The aim of the project was to identify the strategies employed by the schools and how they were implemented or maintained. The project has found that the schools were characterised by both whole school strategies and classroom strategies that developed a school culture of success and supported student learning. Many of the strategies were about building positive relationships between all members of the school and its community and their implementation and maintenance relied on excellent leadership skills. All of the schools were focused on developing positive behaviour for learning and working with their communities. Many of the schools were focused on implementing quality teaching practices. The individual case study reports which accompany this overarching report outline in more detail how the schools implemented successful programs and strategies to meet the specific needs of their students.

Background

The Ministerial Committee on Employment, Education and Youth Affairs (MCEETYA) agreed in July 2001 to adopt the MCEETYA Schools Geographic Location Classification (MSGLC) for reporting nationally comparable schooling outcomes. The Accessibility Remoteness Index of Australia (ARIA) gives locations accessibility/ remoteness values between 0 and 15.3 based on the physical road distance to the nearest town or service centre. The higher the value is, the more remote and inaccessible the location.

Table 4.3 Categories of the MCEETYA Schools Geographic Location Classification Major Category Sub-category Criteria

1. Metropolitan Zone

- 1.1 State Capital City regions State capitals (except Hobart, Darwin)
- 1.2 Major urban Statistical Districts Pop. ≥ 100 000

2. Provincial Zone

- 2.1.1 Provincial City Statistical Districts Pop. 50 000 99 999
- 2.1.2 Provincial City Statistical Districts Pop. 25 000 49 999
- 2.2.1 Inner provincial areas CD ARIA Plus score ≤ 2.4
- 2.2.2 Outer provincial areas CD ARIA Plus score > 2.4 and ≤ 5.92

3. Remote Zone

- 3.1 Remote areas CD ARIA Plus score > 5.92 and ≤ 10.53
- 3.2 Very Remote areas CD ARIA Plus score > 10.53

The New South Wales Department of Education and Training used a combination of the ARIA classifications and socio-economic status information to identify its Like School Group

classifications of Metro A, B, C and D and Rural 1A, 1B, 2A, 2B and 3 which were further refined for national comparisons in 2009.

The Programme for International Student Assessment (PISA) for 15 year olds from 42 countries, including 31 from the Organisation for Economic Co-operation and Development (OECD), assessed 12,500 students selected randomly from 321 schools across Australia in 2003 (Thomson, Cresswell & de Bortoli, 2004). Only 3% of the schools were in remote areas of Australia, with 27% in regional areas and the remainder in metropolitan areas. The OECD mean score for reading literacy was 494 and the Australian mean score was 525. However, when the Australian results were analysed across geographic locations, the mean score for metropolitan students was 530, for provincial students 514 and for remote students 489. These differences were statistically significant at the p = .05 level (Thomson, Cresswell & de Bortoli, 2004). When Thomson and de Bortoli (2008) reported on the geographical differences in Australia for reading and mathematical literacy for the 2006 PISA the number of score points for the differences in reading literacy had increased:

In reading literacy, the average score of students attending remote schools was about 30 score points lower than that of students attending schools in provincial areas, and about 50 score points lower than those of students attending schools in metropolitan areas. Twenty-four per cent of the students in remote areas did not achieve Level 2, compared to 17 per cent of students in provincial areas and 12 per cent in metropolitan areas. Around 12 per cent of students attending metropolitan schools were achieving at Level 5, compared to eight per cent of those in provincial schools and seven per cent of those in remote schools.

In mathematical literacy, the average score of students attending schools in remote areas was 40 score points lower than that of students attending schools in provincial areas, and 58 score points lower than students attending schools in metropolitan areas.

Twenty-eight per cent of students in remote areas did not achieve proficiency level 2, compared to 20 per cent of students in provincial areas and 12 per cent in metropolitan areas. Around 18 per cent of students attending metropolitan schools were achieving at Level 5 or higher, compared to 12 per cent of those in provincial schools and seven per cent of those in remote schools. (Thomson and de Bortoli, 2008: 13)

In regard to the literacy achievements of younger students the National Benchmarks for reading in 2003, 2004 and 2005 for Years 3, 5 and 7 showed gaps widening by age between metropolitan, provincial, remote and very remote students. The percentage of Year 5 students achieving the reading benchmark compared with Year 3 students across geographic locations shows that,

...there is a general decrease in the proportion of students achieving the benchmarks over the four locations when compared to the younger cohort. This trend is exemplified again in relation to Year 7 students. (Pegg & Panizzon, 2007: 186)

These national figures are reflected at the state level. In view of the lower achievement in provincial and remote schools the Deputy Director-General, Schools, decided to conduct research in rural schools which have higher performance relative to other schools with a similar degree of isolation and socio-economic status.

Prior Research

The geographical differences in academic performance have been attributed to a range of factors. One of these is the school staffing profile in more remote and more disadvantaged areas where there is typically greater staff turnover and higher resignation rates and "a relatively higher percentage of new teachers than other locations, and the staff overall are younger and less experienced, including at the Executive level" (Green & Novak, 2008: 115). Disadvantage is relevant in a discussion of rural schools because "Vinson's (2004) analysis of locational social disadvantage in Australia found that in 2003, 14 of the 20 highest ranked disadvantaged postcode areas in NSW were located in rural areas" (McConaghy, 2008a). However, McConaghy, Maxwell and Foskey (2008) contend that rural social disadvantage is more complex than poverty and they state that, "What emerges is not a correlation between low scores and remoteness but rather schooling disadvantage linked to place as an aspect of complex socio-spatial dynamics." (p. 183). McConaghy (2008b: 327) contends that, "generic models of pedagogy are likely to reproduce rural social and schooling disadvantage" and she comments that each of the rural case-study sites investigated had developed local solutions to complex problems. She argues that, to intervene in complex forms of persistent and cumulative rural social disadvantage, rural pedagogies need to "undertake socio-spatial analyses" (McConaghy, 2008b: 332), in other words, they need to respond to the specific social characteristics of school communities and where they are located. McConaghy (2008b) is commenting on the Rural (Teacher) Education Project which examined the high quality relationships that existed between specific schools and their communities at 18 sites spread over the then 11 inland school districts of NSW:

"A crucial point to emerge from the research undertaken in R(T)EP is the critical significance of context, and relatedly of issues of location and community, and the need to reckon contextual considerations into account in all aspects and instances of policy and pedagogy, particularly with regard to rural schooling" (Green, 2008: 6)

The rural sector has been in general decline, in terms of population as well as economically, however, research based on ABS census data that covered all of inland rural NSW "suggests a fulcrum or threshold point of growth/decline in rural communities (LGAs) at about 12,000 people" so that, "for many small rural-regional and rural-remote communities across inland NSW, they are in decline, while the larger rural regional centres exhibit positive growth" (Wallace et al, 2008: 268). It is not clear whether the difference in growth is purely due to population size or whether growth in the regional centres can actually be detrimental to nearby towns because of a 'sponge' effect in the regional centres, for example,

"HSC data for schools in rural NSW shows that in general the academic profile of public schools actually increases the further they are located away from larger competing schools and towns ... Geographers call these places sponge cities because of the way they soak up

¹ The study area includes most secondary and central schools in Western, Riverina and New England regions with the exception of the most remote schools. Inland schools in North Coast, Hunter and South Coast regions are also included. The total number of schools is 140.

services and people, including schoolchildren, from their surrounds. Only when you get beyond commuting distance do you find the profile of the schools increasing again." (Bonnor, 2009: 6)

There has also been a significant loss of 20-24 year olds, especially in small communities and it has been argued that migration out is mainly by the more motivated and higher-achieving youth of higher socio-economic status. This suggests that a disproportionate number of disadvantaged remain, and that social filtering has occurred (Wallace et al., 2008: 270-271).

Another factor in rural education is the Aboriginal and Torres Strait Islander population which in 2006 was 455,000, or 2.4% of the total Australian population, but two states, New South Wales (29%) and Queensland (28%), contained over half the Aboriginal population (Australian Bureau of Statistics, 2009). In 2009, approximately 4% of students of students who sat the NAPLAN in NSW were Aboriginal or Torres Strait Islander. Prior to the inclusion of all Independent Schools in 2007 the percentage of students who sat the Basic Skills Test (BST) in NSW government schools was 6% but when this was broken down into geographic locations there were about 3% in metropolitan schools, about 10% in provincial schools and 30% in remote schools. In addition to these factors the Aboriginal population is growing, for example, in relation to the then Dubbo DET District, which had the highest population of Aboriginal people of any DET District in NSW, "across the 1991-2001 census collections, the total population of the District had held relatively steady, while the Aboriginal population had increased by approximately 11%" (Letts, 2008: 369) and it had doubled in the city of Dubbo between 1986 and 2001.

The Aboriginal population is much younger than the non-Aboriginal population of Australia, for example, in 2001 nearly 60% of the Aboriginal population was under 25 years of age compared with around 34% of the non-Aboriginal population (Calma, 2005: 28). Despite, or perhaps because of, being a younger population only 38% of Aboriginal students continued to Year 12 compared with 76% of non-Aboriginal students (Calma, 2005: 30). The reason a younger population could be a causal factor in lower educational achievement is that very young parents often have lower educational achievements because the parents typically leave school early to care for and support their children. The lower rates of completion of Year 12 might also be related to income statistics in 2001 showing that the average weekly income for Aboriginal people (\$364) was only 62% of that for non-Aboriginal people (\$585) and the 2001 unemployment rate which was 20% for Aboriginal adults compared with 7.2% for non-Aboriginal adults (Calma, 2005: 30). When parents have low incomes and cannot afford tertiary studies, their children might not perceive any value in completing Year 12.

SMART data (DET, 2009) shows that the differences in achievement between Aboriginal and non-Aboriginal students on national tests are much greater than the differences between geographic locations, and although the gap between NSW mean scores for Aboriginal and non-Aboriginal students on 2009 NAPLAN remains around 60 score points for Years 5, 7 and 9, the increase in average performance is smaller for each successive group, that is, it is smaller between Year 7 and Year 5 than between Year 5 and Year 3. The difference in the average scores in NSW between the Year 3 and Year 5 testing points for literacy is 77.6 and for numeracy is 95.3 score points. This means that effectively Year 5 Aboriginal students in NSW have a mean score for numeracy that is about 15 months behind and a mean score for literacy that is about 19 months behind the

progress for all Year 5 students in the state in 2009. The latter figure for literacy is the same number of months behind as in 2003 (NSW AECG & NSW DET, 2004: 21). The average growth from Year 5 to Year 7 across all students in the state for literacy was 42.1 for literacy and 55.2 for numeracy and from Year 7 to Year 9 it was 33.6 for literacy and 38.1 for numeracy. Therefore in 2009 by Year 7 the mean score for Aboriginal students was over two years behind and by Year 9 their mean score was over 3 years behind the level for non-Aboriginal students. These differences are compounded within provincial and remote locations both because of the problems associated with distance from services and because of the higher percentage of Aboriginal people in rural areas of New South Wales than in metropolitan areas.

Wallace, Boylan, Burton, French, Manton and Streckfuss (2005) report how community capacity in terms of education and traditional culture was built and a sense of being valued and respected was conveyed to Elders in the Brungle community by the local public school "actively encouraging the Elders and other community members to work within the school, to contribute to deliberations about curriculum, and to teach about Aboriginal culture" (Letts, 2008: 374). The old principal's residence was converted to the Brungle Cultural Centre and was a key place in the *Learnscape* program as well as offering a pre-school group, a play group and the first home for the Community Medical Centre. Another example of successful school-community interaction is from Narrandera Public School in regard to the impact of Aboriginal community members employed as in-class tutors:

"Aboriginal student literacy outcomes did improve. But there were a number of unforeseen consequences of this program that also occurred. These included the tutors being seen as role models by some children; the tutors assisting teachers in a variety of classroom duties; the tutors assisting all children with literacy needs, not just Aboriginal children; the personal and professional development of the tutors through their work; the tutors assisting in student wellbeing for Aboriginal children by liaising with families and caregivers; and a significant Aboriginal presence, language and culture in the classroom in explicit and validated ways." (Letts, 2008: 377-378)

The tutors provided both academic and non-academic assistance to children and community capacity was built both within and outside the school. This example shows the importance of initiatives that foster respectful school-community relationships.

It was noted in the Rural (Teacher) Education Project (Wallace et al., 2008: 287-290) that a central element to school-community relationships is the dynamics of *Quality Teaching and Learning* within rural communities, particularly in regard to:

- an expectation of high standards, for example, programs such as Failsafe;
- the monitoring of student success, for example, BST data informing redesign of the English curriculum in both Year 6 and Year 7 as a result of collaboration between primary and secondary schools; and
- authentic teaching and learning, associated with the reality of rural place, eg the *Learnscape* used to redevelop learning about Aboriginal culture at Brungle Public School and community-based VET programs in another school.

Gore, Ladwig, Griffiths and Elsworth (2007) found that in general practice there was differential distribution of pedagogy tied to teachers' expectations and high quality pedagogy was least prevalent where it is most needed in low-SES and high Aboriginal contexts, potentially adding to student disengagement. The *Systemic Implication of Pedagogy and Achievement in NSW Public schools* (SIPA) research "hopes to demonstrate rather than simply assert the efficacy of QT" (Gore, Ladwig and King, 2004: 4) and Ladwig's (2008) update into the SIPA research certainly does demonstrate the efficacy of Quality Teaching and Learning in reducing the gaps in achievement for ATSI and low SES students.

Ladwig (2008) presented SIPA findings from Amosa, Ladwig, Griffiths and Gore (2007) on 'closing the (authentic) achievement gap' for Aboriginal students. The researchers compared ATSI and non-Aboriginal student performance on tasks typified by high and low degrees of Quality Teaching elements in each of the three dimensions and Ladwig's (2008) graphs showed that:

- when Quality Learning Environment is higher, Aboriginal students overtook non-Aboriginal students
- for high Intellectual Quality tasks, Aboriginal achievement exceeded non-Aboriginal achievement for low Intellectual Quality tasks
- When compared with the Intellectual Quality and Quality Learning Environment graphs, task
 Significance was not as important for closing the gap between Aboriginal and non-Aboriginal
 students as was the intellectual rigour, high expectations and explicit quality criteria of tasks.

The SIPA findings for low SES students were as follows:

- when task Intellectual Quality is higher, low SES students overtake high SES students
- for high Significance tasks, low SES achievement exceeded high SES achievement for low Significance tasks
- for high Quality Learning Environment tasks, low SES achievement exceeded high SES achievement for low Quality learning Environment tasks.

It is clear from these findings that presenting students with authentic tasks that have intellectual rigour is important to both low SES and Aboriginal students. However, for Aboriginal students it is particularly important to have high expectations, explicit quality criteria, lessons that engage students and to provide autonomy and some ownership in the learning environment. It was also evident that non-Aboriginal students also improved their achievement on authentic quality teaching tasks but the Aboriginal achievement for high quality teaching tasks (just) exceeds non-Aboriginal achievement for low quality teaching tasks. However, the high SES students did not improve greatly when quality teaching authentic tasks were used (possibly because of a ceiling effect) and the overall gap between high and low SES students had almost closed.

Between 2001 and 2003 research carried out in over 40 NSW central and high schools for An Exceptional Schooling Outcomes Project (AESOP) found that the common factors behind outstanding outcomes for Years 7-10 students "included highly-qualified and experienced staff, well-structured lessons that maximise "time on task", a clear mission of high expectations for students supported by parents teachers and students alike, and teachers who care for students as learners and individuals" (http://www.une.edu.au/news/archives/000867.html). In 2007 the AESOP Series (Thomas, 2007) of seven booklets which outlined the findings in relation to English,

ESL/Literacy, mathematics and science education, equity and student welfare programs and leadership were sent to all secondary schools in NSW. Equity programs are obviously very important in circumstances where students are disadvantaged but the researchers stated, "it seems clear from exemplary AESOP sites that improving Equity programs depends not so much on the operations of the programs themselves or even their coordination, but rather on the school culture in which the programs are situated" (Graham, Paterson & Stevens, 2007: 89). They also emphasised that both exceptional Equity programs and student Welfare programs were focused on effective student learning within a positive school culture (Graham, Paterson & Stevens, 2007: 80-81).

Professor John Hattie (2009) conducted a study in which he synthesized the effects of influences on student achievement from over 800 meta-analyses. Hattie (2003: 2-4) found that teachers account for about 30% of the variance and he points out that the effect size of teacher feedback is greater than student prior cognitive ability. Other comparisons of effect size indicated that instructional quality had a greater effect than disposition to learn, challenging goals and mastery learning produced greater effects than parent involvement, and teacher style and questioning effects were greater than peer effects. Hattie (2003: 15) concluded that there is a difference between expert and experienced teachers in 'the way they represent their classrooms, the degree of challenges that they present to students, and most critically, in the depth of processing that their students attain'.

Hattie (2007: 104) contends that, "when feedback is combined with effective instruction in classrooms, it can be very powerful in enhancing learning" but he points out that, "With inefficient learners, it is better for a teacher to provide elaborations through instruction than to provide feedback on poorly understood concepts." Hattie stresses the need for feedback to be directed at the right level, to be clear, purposeful, meaningful, and compatible with students' prior knowledge, to relate to specific and clear goals and provide little threat to the person at the self level. "These conditions highlight the importance of classroom climates that foster peer and self-assessment and allow for learning from mistakes." (Hattie, 2007: 104)
While Hattie (2003) puts the effect of principals and schools as only 5-10%, Dinham (2007) focuses on the role of educational leaders in the AESOP schools and the features of their leadership that contributed to successful outcomes. For principals, these features include:

- Focus on Students and their Learning, personal and social as well as academic
- External Awareness and Engagement, being open to change, opportunity and external links;
- Bias Towards Innovation and Action, using discretion, bending rules, experimenting;
- Personal Qualities and Relationships, high levels of interpersonal skills and compassion, positive attitudes which are contagious, intellectual capacity and moral leadership;
- Vision, Expectations and a Culture of Success, including recognition of students and staff;
- Teacher Learning, Responsibility and Trust, assisting and empowering staff;
- Student Support, Common Purpose and Collaboration, with focus on welfare and equity.

The features were similar for other school leaders such as Head Teachers, the only difference being that Bias Towards Innovation and Action was replaced by Professional Capacity and Strategy. Dinham (2009) noted that the exceptional school leaders were highly responsive to people and events and highly demanding of themselves and others and they had a framework for

reflection and action rather than relying on quick fixes. It is most often gradually introduced changes that lead to transformation.

By allowing bending of the rules, being open to change, having compassion and focusing on student and family needs, school leaders make it possible for teachers to be flexible and responsive to family needs as evidenced in the following response to a student teacher's question about why all students did not do the same homework:

"What do you think the purpose of homework is? ... For me, it is to encourage parents and kids to share their learning. This boy's dad has 3 kids and a demanding job and has told me upfront that this term he needs to take some of the pressure of the kids. He spends 60 minutes a day in the car taking the kids to and from school and they listen to books on tape and discuss them. They build vocab and they talk to their dad. And he doesn't end up resenting me and the school." (Rowan, 2009)

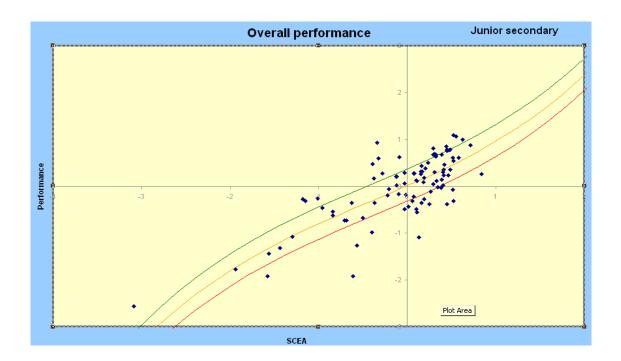
Leadership was an important factor in the R(T)EP project and it was noted that distributed leadership led to the development of an empowered and effective school community at six of the site-studies (Wallace et al., 2008: 291). What emerged from the project as special for rural education leadership are the unique concerns of students, difference, place, community, staffing and pedagogy, and "Fundamental to the successful practice of school leadership were leaders working with people and building relationships" (Novak, Green & Gottschall, 2008: 357).

Project Aims

The aim of the project was to determine successful strategies implemented in rural schools which have higher performance relative to other schools with a similar degree of isolation and socioeconomic status, and to document how those strategies have been implemented and maintained. There were three phases of the project: identification of schools, structured telephone interviews with principals to identify the school practices considered relevant to strong performance on assessments and case studies at the most promising of these schools to document the factors leading to successful school outcomes.

Project Procedures

In order to identify schools that were performing well for the degree of disadvantage in their community, their performances on 2008 NAPLAN (Years 3, 5, 7 and 9), School Certificate and Higher School Certificate were graphed against a measure of School Community Educational Advantage (SCEA). The SCEA measure was obtained by combining the Accessibility/ Remoteness Index of Australia (ARIA) and an index of socio-economic status (SES). The graph below is for junior secondary results. Each blue diamond is a school, the yellow line represents the mean trend line for performance at different SCEA values, the green line is one standard deviation above the mean trend line and the red line is one standard deviation below the mean trend line.



The SCEA measure was an earlier iteration of the Index of Community Socio-Educational Advantage (ICSEA) used on the My School website. Only schools with test cohorts of at least ten and ARIA scores greater than 2 were considered (see classifications on page 1). A regression analysis was used to identify the greatest deviations above the mean trend line in order to select thirty primary schools, thirty junior secondary schools and thirty senior secondary schools. Some central and high schools scored well in more than one grouping, resulting in identification of 72 schools altogether.

Following consultation with Regions nine schools were removed from the list and approval was given for Principals to be contacted at 63 schools (see Appendix A). Three Principal Liaison Officers supported by a high school principal conducted preliminary interviews by telephone with the 63 Principals across five DET Regions and only one Principal declined to participate. Although good practices were reported at all of these schools, the object of the research was to identify a limited number of schools for comprehensive case studies and to report on innovative practices and strategies that would be transferable to other rural schools. The 2009 NAPLAN data was also considered when deciding which schools would be visited by case study teams, and the following fourteen schools were selected.

Bonalbo Central School Bunnaloo Public School Coonamble High School Coonabarabran High School Dorrigo High School Forbes North Public School Glen Innes High School The Henry Lawson High School Kempsey South Public School Manilla Central School Mudgee High School Narrabri Public School Narrandera Public School Quaama Public School Most case study visits were over two days with the exception of the P5 schools and a couple of schools where prior commitments only permitted a one day visit. The case study teams were led by the three Principal Liaison Officers and one Principal who had conducted the initial telephone interviews with the Principals. Most teams included a regional representative and/or a representative from the Educational Measurement and School Accountability Directorate. There was an Aboriginal representative on the case study teams in the eight schools with substantial Aboriginal populations and three Principal Liaison Officers normally based in Sydney participated in six of the case study teams.

At each school the case study teams interviewed a selection of parents, students, teachers and other staff about what they thought had contributed to high student achievement relative to other schools in similar circumstances. Team members also perused relevant school documents and observed lessons. Lessons were video recorded in nine of the schools and some interviews were also recorded on video at the three North Coast Schools where a cameraman was included on the teams. The absence of video clips from some case study reports is not a judgment on the quality of the lessons at the schools visited but simply because video equipment was not available for the first few case studies or for some later case studies when dates for school visits overlapped.

The individual case study reports which accompany this document attempt to present a concise overall picture of the strategies and practices observed while attempting to explain how the school has initiated, developed or maintained those practices. The schools in this study have responded to their own unique circumstances and often there was a strong interaction between the practices observed. To set the scene each school case study commences with information about the school context and then presents overall findings before listing practices which could be transferable to schools in similar circumstances.

Context of Schools

All of the schools have an ARIA value of at least 2 but only one school, Coonamble High School, classifies as remote. In 2009 eight of the fourteen case study schools had substantial Aboriginal populations: three with around 20%, two with around 30%, two with around 50% and one with 60% Aboriginal or Torres Strait Islander students. The primary schools cover a range of size and include two P5, three P4 and one P3. The schools identified for secondary results included six high schools (one S8 and five S9) and two central schools (C2 and C3). The school communities have a range of socio-economic status from very low at Coonamble, Kempsey South and Narrandera to above average at Bunnaloo, Dorrigo and Glen Innes.

Staff turnover was highest at Coonamble High School. The average annual exits as a percentage of staff entitlement over the previous three years were 18% at Coonamble High School and between 10 and 11% at Bonalbo Central School, Dorrigo High School and Narrandera Public School. Most of the schools had stable staff, including some that are a long distance from Sydney.

Overall Findings

The practices and strategies implemented by the schools were specific responses to their individual circumstances but often they were different means to achieve similar ends. The following strategies are a summary of the findings from the fourteen case study schools. More comprehensive findings are recorded in the individual case study reports. The strategies tended to fall into two different categories, whole school strategies and classroom strategies. The whole school strategies were an important foundation that created consistency across the school and/ or good will that paved the way for favourable reception and effective implementation of strategies in the classroom.

Whole School Strategies

The whole school strategies built a positive school culture by developing positive relationships and student self-confidence, involving the community, engaging Aboriginal students, trying innovative ideas to engage disengaged students and developing collaboration and teamwork. These strategies across schools effectively supported the teaching strategies implemented within classrooms, particularly within the quality teaching dimension of Significance, for example, the element of Cultural Knowledge is strongly supported by involving the Aboriginal community in teaching an Aboriginal language and Knowledge Integration is strongly supported in secondary schools where there is collaboration and teamwork between faculties.

Build positive relationships

Positive relationships were based on treating students and others as individuals. These relationships were not only between staff and students, but between staff, between students and between the school, parents and wider community. A positive school culture seemed to develop from this focus on individual needs. The obvious effects of positive relationships were happy students, staff and parents, but an effect that is often less recognised was the desire of students not to disappoint their teachers and their willingness to put in extra effort and achieve to the high expectations of their teachers. Schools recognised the importance of inclusion and assisted with social needs, for example, teachers and canteen workers at Coonabarabran High School noticed that a student was not going to attend the school formal and they collaborated at short notice to provide her with an outfit from local stores so that she could go to the formal.

The schools had positive systems of behaviour management, mostly based of Positive Behaviour for Learning, and the absence of disruptive behaviour was seen as the absolute foundation for learning. Mudgee High School had a purely positive merit system and Narrabri Public School had an extensive awards system where parents pinned the awards on students and the Principal updated the levels on a large display with photos of all the students in the school. A good way to ensure students did not earn or feel obliged to live up to a negative reputation was evident at Manilla Central School where only positive announcements were made at morning assemblies of the secondary students. Schools found that recording incidents of misbehaviour using the RISC

system helped them to identify and target problem behaviours. At schools with more difficult behaviour problems teachers were doing training in non-violent crisis intervention.

At Narrandera Public School the high expectations of the Positive Behaviour for Success program were evident in how all students start on the *Working Well* level and students are then rewarded for good behaviour by progression to *Star Worker* level and can then move on to the *Legend* level. Teachers simply recorded the students' initials next to the appropriate level on a white board. Whole school systems of behaviour management make it easy for staff to enforce rules in and out of the classroom because the rules are known by all.



Welfare was focused on learning, for example, Kempsey South Public School, Bonalbo Central School and Coonabarabran High School had a weekly whole staff meeting to talk about students and their learning. Positive teacher-student relationships were also built through developing individualised learning plans and projects and this was particularly evident at Bunnaloo Public School.

Specific programs were adopted to foster positive relationships. Quaama Public School adopted the FISH! Philosophy (http://www.charthouse.com/content.aspx?nodeid=16741) of 'leaving your problems at the gate' and choosing the attitude that is going to make a difference to your learning. Forbes North Public School has a Virtues program where the school has identified ten key virtues and provided relevant activities in order to focus on each one for a fortnight in all classes.

Students were given a voice and staff listened to them. There were strong Student Representative Councils, for example, the Student Representative Councils were actively and confidently tackling the issue of bullying at The Henry Lawson and Coonabarabran High Schools. Student relationships were developed by prefects running lunch time bonding activities at Coonabarabran High School.

Build student self-confidence

Primary schools used many different strategies to build student self-confidence and the following are just a few. At Bunnaloo Public School a focus on strong literacy and numeracy skills increased student confidence. Forbes North Public School has the Big Hugs program to build emotional reserves by daily aiming to give each student twelve individual positive affirmations. Narrabri Public School introduced hand-held microphones in classrooms to increase students' confidence in public speaking. At Quaama Public School individual and group projects give students ownership of their learning which increases their self-confidence. At Narrandera Public School there is an emphasis on students taking responsibility for their learning so they are given choices where possible. At Kempsey South Public School there is a focus on organised sport at lunch time to build on students' natural skills so that they experience success which improves

self-concept and willingness to engage in learning. An added bonus was building teamwork and very few playground altercations.

Effective peer tutoring was important in secondary schools and this was conducted during DEAR time at the beginning of the school day at Coonamble High School to encourage students to arrive on time. Tutors completed certificate courses which ensured they had the skills needed. The Peer Reading Program at The Henry Lawson High School had Year 10 and 11 students mentoring students in Years 7 to 10 while using established reading programs and assessments. The assessments ensured progress could be tracked and provided both recognition and accountability.

Nurturing talents and interests was a means of building confidence, for example, in debating and the arts at Glen Innes High School where students ran the Youth Project (a performance project) with minimal support from staff. All of the secondary schools used Pathways to meet students' interests, for example, at Dorrigo High School a student interested in art and music and her autistic brother who was interested in automotives. Dorrigo High School and Manilla Central School had also accelerated students, some just in Maths. The Principal at Kempsey South Public School said success in one area such as sport led to an improved self-concept and more willingness to engage in other learning activities.

Year 10 Mock Interview Panels, which included community members, greatly enhanced student confidence at Glen Innes High School, Manilla Central School and Bonalbo Central School. The mock interviews had a relevance and purpose which made students rise to the occasion. This process was greatly enhanced and built upon at Bonalbo Central School where students in Years 7 to 10 participated in Portfolio Panels where they presented a portfolio of their work to a panel that included a teacher, a parent and a student from another class. Students were provided with a matrix of criteria that let them know what was required to obtain different grades and all students started with a pass just for participating. Students commented on how they gained confidence each year.

Mentoring students was an important strategy to build self-confidence at several high schools. Higher School Certificate students were often mentored by teachers but a big impact for younger students was the Plan-it Youth mentoring program which uses community mentors. At most high schools, such as Coonamble High School, Plan-it Youth focuses on struggling students but at Manilla Central school every student in Year 10 had a community mentor. The school hosted a community breakfast each year to thank all the mentors and other people who volunteered at the school.

Providing homework centres and timetabling study skills gives students support which might not be available at home. The secondary schools ensured that study skills were timetabled and had after school homework/ study centres and holiday study workshops. In fact a timetable was required to prevent overlap by teacher volunteers outside school hours at Coonabarabran High School and at Glen Innes High School the Principal said Year 12 could probably go to three lessons at night per week. Both of these schools run a homework/study centre and the homework centre at Manilla Central School supports both secondary and primary students.

Developing and structuring goal setting in secondary schools gives students a sense of purpose with support which engages them in their learning. The structured goal setting and study skills support combined with community mentoring has turned around the expectations of students at Manilla Central School from one of unemployment and welfare for many students. Now every student had a career goal which they achieved at the end of school whether it was a job, an apprenticeship or a university course.

Communicate with and involve the community

Newsletters were informative and websites were up to date. Some schools made a particular effort to include colour photographs of students and to distribute newsletters to the wider community, for example, the bus driver at Bonalbo Central School dropped off newsletters to general stores in outlying townships and The Henry Lawson High School made them available at the local newsagent. Schools also had regular columns or pages in the local weekly newspapers to inform the community about events, projects and student successes.



Regular contact with parents was a common feature of the case study schools who would phone parents immediately if situations arose. Parents praised the executive staff for the way they swiftly acted on issues and openly communicated about and dealt with problems. The Principals at Bonalbo Central School and Kempsey South Public School were praised by Aboriginal staff for the support they provided by visiting homes when necessary.

Student participation in the community also provided many benefits. School participation in charity fund-raisers such as Relay for Life (at Coonabarabran High School) brought the whole community together and was reciprocated at school events. As well as raising funds for charities, students at Manilla Central School volunteered at the local nursing home and trained in the Bush Fire Brigade. Some of the peripheral benefits included an Aboriginal student finding his vocation in aged care nursing, students winning third place in a Bush Fire Brigade competition and the volunteering assisting students in their applications for university scholarships by providing an essential element of community involvement.

Home literacy projects, like Born to Read, were supported and organised by Principals or executive staff, for example, at Narrabri Public School and Manilla Central School. The long term benefit of such actions cannot be underestimated.

Engage Aboriginal students

Aboriginal culture was a significant element within the school, for example, a local Aboriginal archaeology site was the focus for a history unit of work at Coonabarabran High School. Schools celebrated Aboriginal special days such as Sorry Day, Reconciliation week and NAIDOC and those

with substantial Aboriginal communities invited Elders to events. The schools regularly consulted with their Aboriginal communities and made Aboriginal culture a focus. Kempsey South Public School has been involved in developing the Indij Readers writing project which will soon be available www.indijreaders.com.au and the school is using a child protection resource, All Children Being Safe, with Dunghutti stories in Kindergarten (www.napcan.org.au). Aboriginal culture was visually evident in murals at Bonalbo Central School and playground markings at Kempsey South Public School where there was a conscious effort to make Aboriginal culture systemic across the schools.



and other courses.



An Aboriginal language as LOTE for all students in Year 8, taught by an Aboriginal elder, is an effective community interaction that seemed to have a strong influence on the learning and self-confidence of Aboriginal students as well as on community harmony in several schools, for example, Gamilaraay taught at Coonabarbran High School and Bundjalung at Bonalbo Central School. The same effects were evident at Forbes North Public School where Wiradjuri was taught by five tutors trained by a local elder, at Kempsey South Public School where songs were sung and classes named in Dunghutti language and at Narrabri Public School where students were sung in Gamilaraay language. This is an educational practice that privileges Aboriginal knowledge and builds deep respect for Aboriginal culture within the whole community.

Interagency meetings were an effective strategy to involve a reluctant and wary community. Parents and carers who had negative experiences of schools were more likely to attend meetings on neutral ground, as Bonalbo Central School and Coonamble High School found. Local Schools as Community Centres (SaCC) facilitators work with schools and interagency partners to plan collaborative initiatives to develop capacity in young children from birth to 8 years, families and local communities. The SaCC at Forbes North Public School and the one close to Kempsey South Public School were excellent venues for interagency meetings and also provided many community capacity building activities, such as playgroups, health projects, parenting initiatives

Adult role models are important in schools where many people in the community are unemployed. Adult education students model life-long learning at Bonalbo Central School and Coonamble High School. Interagency workers also provided excellent role models and this is one of the many reasons that the Aboriginal Medical Service was welcomed when they offered to run health programs at Bonalbo Central School.

Try innovative ideas to re-engage disengaged students

Flexibility was exhibited and encouraged by school leaders at the case study schools and the ideas trialled were as varied as the student populations. At Manilla Central School a community mentor engaged Year 8 students in constructive projects, at The Henry Lawson HS there was a focus on learning styles, at Bonalbo Central School and Coonamble High School interagency pilot projects had been planned or trialled to provide alternative learning situations for disengaged students, some of whom were returning from juvenile justice. The raising of the school leaving age will increase the importance of implementing projects such as these.

Transition programs up to a year-long were reducing the possibility of disengagement before students even enrolled at school at the Forbes North, Narrabri, Narrandera and Kempsey South Public Schools. It is difficult to close the gap for students who start behind others and these schools were as much making sure that the school was ready for the child as making the child ready for school. The schools carried out assessments which made it possible to put programs in place for students as soon as they arrived in kindergarten. For example, the Kempsey South and Narrabri Public Schools had student hearing and speech assessed.

Mini microphones are worn by teachers in all classes at Narrabri Public School and students can use hand-held microphones to ensure everyone can hear. This is an excellent strategy as it is well known that glue ear and Otitis Media can lead to gaps in learning and disengagement.

Attendance was greatly improved by the introduction of the Funny Money at Forbes North Public School where students get five dollars of 'funny money' for every day they attend school and at the end of the year they can spend the funny money on prizes donated by local businesses and parents.

Develop collaboration, teamwork and sharing

Staff collaborated on behaviour management and some schools recorded incidents using the RISC system which was helpful to identify times, classes and places of incidents. Problem behaviours could then be pinpointed and staff worked together to develop appropriate interventions. Staff within faculties or between primary classes organised support for each other in regard to behaviour management.

Collaboration at secondary schools was enhanced through a focus on transparency at Mudgee HS, through an emphasis on listening at Coonabarabran HS and through critical friends at Coonamble High School. The secondary schools in the case study encouraged teamwork and sharing of knowledge, resources and programs through the leadership of a strong, enthusiastic middle executive staff. Several schools were putting resources on MOODLE so they could be shared but, in addition to resources, Coonamble High School was planning to put across-faculty programming on MOODLE in order to provide new staff with the support they needed when they arrived mid year because of the school's high staff turnover.

Collaboration and sharing was a hallmark of the primary schools. At Narrabri Public School, stage scope and sequence is developed by committees. Stage teams have the same program and quality programs are in place so new teachers can be up and running but they still have flexibility in implementation. Casual teachers can come into the school and pick up where teachers left off because emergency booklets have been made for when the school can't get a casual or for a child who is sent out, as there is always a requirement that work will be done.

There was intense collaboration and sharing at the two P5 primary schools. This was enhanced at Bunnaloo Public School by a close staff travelling together from a town on the Victorian border and effectively having a thirty minute discussion about student learning on the way to and from school each day. The teachers at Quaama are very different individuals but they work equally well together, always putting the needs of their students first. The collaboration and dedication of teachers at Quaama Public School, which caters for a large proportion of special needs students, is well known and some students travel a long distance to attend this tiny school.





Focus funds and teacher professional learning on student needs

Funding was judiciously used. Several schools employed extra specialist staff who had reading recovery training so that they could target students in Stages 1 and 2 who were not progressing in their reading. Kempsey South Public School ensured inclusion by funding swimming for students whose families were experiencing financial hardship and they employed School Learning Support Officers who ran lunch time and after school sport programs to foster talent and build teamwork, confidence and skills leading to improved self-concept and learning.

The Reading to Learn program was a focus of teacher professional learning in several secondary schools because it trains staff across faculties in explicit teaching methods that support students at-risk to increase their literacy levels. Reading to Learn with its focus on factual texts is also used in Stage 3 at Narrabri Public School, while Accelerated Literacy which has a focus on narrative texts is used in Stage 2. Accelerated Literacy was also used at Narrandera Public School and Kempsey South Public School. Both of these programs, which are based on the theories and practices that underpinned Scaffolding Reading for Indigenous Students, focus on the explicit teaching of reading, writing and spelling while at the same time allowing teachers to increase the level of texts that students can access and thus meet high expectations. The Principals of all schools involved with these programs were keen to train more teachers and were only restricted by funding and the need to limit the number of staff out of the school at one time.

Schools planned teacher professional learning to meet needs of both students and individual staff members, for example, Coonamble High School had individual professional learning plans for all staff, which included training in Reading to Learn, Quality Teaching and Technology thus benefiting staff while improving student engagement.

Programs that enhance student engagement were the focus of teacher professional learning at several case study schools. At several of the case study schools professional learning had been focused on Quality Teaching but many schools also focused on specific programs to enhance student engagement, for example, at The Henry Lawson High School through Learning Styles Analysis www.creativelearningcentre.com, at Dorrigo High School through effective use of technology, at Quaama Public School through Brain Gym and Move to Learn and at Forbes North Public School through the Stephanie Alexander Kitchen Garden Program. For details see Stephanie Alexander Kitchen Garden Foundation.





Classroom Strategies

In all schools the observed classroom strategies included the elements within the Quality Learning Environment dimension of quality teaching whether or not the staff had training in Quality Teaching because they had a focus on commitment and excellence. All schools were developing the elements of Significance and Intellectual Quality but some were further along this path than others. The classroom strategies were about building positive relationships with students, using positive behaviour management, engaging students in learning, having high expectations and supporting student learning with explicit teaching, criteria and feedback.

Build positive relationships with students

Noticing, hearing and responding to students' individual needs was the main way that teachers and other staff in the case study schools built positive relationships with their students. For example students at Narrandera Public School said, "The teachers and the Principal really seem to care about us and it shows in the all the things that they do for the students at the school."

Support teachers talked about noticing when a student puts their head down on the desk and checking if they have had breakfast or if there is any other problem.

Treating students with respect and trust builds positive relationships. For example, at The Henry Lawson High School Year 7 students said teachers treat them like they are 16 or 17, not 13 or 14 and parents said Year 12 students are treated like adults and even though there is more freedom, they do not cross the line. A clue to the way to achieve this was a comment at Coonabarabran High School that, "Teachers teach with the kids not at the kids." Parents commented that the students were nice to each other because the teachers modelled respect.

Several teachers said they use humour to build a relationship with students, as it creates a positive atmosphere within the classroom and breaks down barriers and one teacher pointed out that humour can make a difficult subject teachable. The humour observed was gentle fun where teachers role-played, adopted accents or used surprised and comical facial expressions. Secondary students commented on how teachers made 'in jokes' to keep them interested in a subject or topic.

Use positive behaviour management

Teachers were firm, consistent, calm and positive in managing behavior in classrooms. This type of behaviour management develops student self-control which is essential before relationships can be built or teaching and learning can occur in lessons. Teachers modelled a calm demeanour by never raising their voice. Behaviour was seamlessly managed by teachers who constantly and silently rewarded positive behavior, for example, by awarding points or levels on the board for good attention instead of responding to inattention. Minor attention seeking behaviours were ignored but students were not allowed to distract others from learning. Rules were calmly, consistently and firmly enforced and any infringements were responded to quickly.

Rules were displayed and consistently adhered to in classrooms. Students knew the rules and the consequences of breaking them. Having a whole school strategy of behaviour management makes it easier for students to follow rules in classrooms because the rules do not change in different parts of a school with different teachers.

Students did not want to disappoint their teachers because they appreciated all the extra time and individual attention that their teachers gave them. Here good relationships and positive behaviour management overlapped and students and teachers benefited from the mutual trust and respect that developed within lessons.

Have high expectations

Believe in and challenge students. A belief in Aboriginal students was expressed at Coonabarabran High School through an Aboriginal awards night as part of NAIDOC celebrations. Teachers in some primary schools put a daily challenge on the board for students to think about. Students' work was returned with feedback about how to improve instead of just a mark and

many schools allowed students to resubmit work to gain higher marks or they marked assignments in stages so that students could benefit from more feedback. Schools also expressed their belief in the ability of disengaged students by spending a lot of time and effort in organising community mentors, special projects and interagency initiatives to try to engage them in learning.

Assess and "never assume anything". This advice from a teacher at Kempsey South Public School is an important corollary to high expectations because expectations should not be about making assumptions. Meeting high expectations relies on teachers knowing where students are at and supporting them to move ahead in their learning. Teachers said you cannot assume that children will remember what was done yesterday so it is important to revise and check before supporting students to move on to the next step. Teachers were also aware that the experiences of children living in poverty is very different to those of teachers and pointed out, for example, that you cannot assume a young child will know that a 'p' food for breakfast is porridge when it is more likely to be popcorn, if anything. Many teachers were aware of the need to assess student interests as well as their knowledge in order to make learning relevant and meaningful as well as challenging.

Engage students

Teachers vary activities and include practical learning where possible. Students appreciated variety in presentation and yet liked clear structure and visible planning so that they knew what to expect. Students were highly engaged by practical lessons and excursions. Staff in primary schools commented on how practical activities were effective in creating understanding, for example, building shapes in maths at Kempsey South Public School and science lessons in the Kitchen Garden Project at Forbes North Public School. Staff at Coonamble High School and Kempsey South High School stressed the importance of excursions to broaden the experiences of students from low socio-economic backgrounds.

Teachers and students use technology as an effective learning tool. Interactive White Boards (IWBs) were used effectively in all of the case study schools. The case study teams observed students interacting with IWBs in primary schools and saw teachers and students use them to access Internet sites, for example, to play relevant ABC current affairs and radio programs and discuss them in Legal Studies at Coonabarabran High School. At Dorrigo High School students said the teachers accessed videos for Dance class and used cultural and foreign language sites for Geography and Language lessons. Websites were also accessed on computers, for example, many schools used Maths Online and students were observed using them to research history at Bonalbo Central School. During the last case studies the Year 9 laptops had arrived and students and teachers were enthusiastic about using them. At Coonamble High School students had created animations for a community website and students at Manilla Central School the English and ICT teachers had collaborated to film plays for English.

Teachers build on student successes. Teachers identified students' talent and interest and focused on these, which led to success and in turn led to an improved self-concept and more willingness to engage in other learning activities. Kempsey South Public School had a focus on

sport to develop students' talent and staff would reward students with games or movement breaks between lessons. An art teacher at Manilla Central School talked about how he related progressing in his subject area to how the student becomes successful in sport or other areas of interest.

Teachers are enthusiastic and passionate. Many students commented on their teachers' enthusiasm for learning. A Year 11 student said, "Our teachers have a passion - I am sure that our poetry teacher goes home and reads poetry at night." An Aboriginal Year 7 student said, "It's about their body language, if it shows that they want to teach it, you want to learn it." These comments show how a teacher's enthusiasm makes an impression on students and influences their learning.

Focus on the relevance and purpose (significance) of learning. Teachers related learning to fields that students were familiar with and interested in, for example, writing about dirt bikes at Mudgee High School and using cattle farming as an analogy at Dorrigo High School. A really powerful way to focus on the purpose and relevance of learning was the goal setting practiced at Manilla Central School where all Year 10 students identified their career goals and knew exactly why they needed to study subjects to achieve their goals. Teachers also made learning authentic, for example, commerce students at Bonalbo Central School used their technology skills to help students with disabilities at a local training centre create advertising flyers and labels for products they make. The Stephanie Alexander Kitchen Garden Project at Forbes North Public School was an excellent example of authentic, relevant, significant learning in many key learning areas as well as achieving the original aim of increasing the healthy choices made by students.

Encourage student ownership of learning through goal setting and personal learning plans. At Narrabri Public School goals were set by teachers during interviews with the student and parents or carers and revisited at the next interview following teacher and student self-assessment. Students kept a copy of the goals in their tote trays and could state how they were progressing in relation to their goals. All schools had personal learning plans for their Aboriginal students but at Bunnaloo Public School there are individual learning plans for each student even though none are Aboriginal. The development of project work at this school enables work to be provided at the level needed for each student, whether that is below, at or beyond Stage level and also allows staff to help individual students whilst others can continue working independently. Glen Innes High School streamed classes to cater for students who were more independent workers. This also works well to cater for students who require more explicit support in other classes provided they are encouraged to work more independently as their skills and confidence increase.

Teachers provide opportunities for discussion and group work. Students were challenged to think in discussions by teachers' excellent open ended questioning techniques, for example, in an Ancient History class at Coonabarabran High School the teacher encouraged students to think about how and why characters acted as they did. At Manilla Central School senior classes are often small 'like tutorials' but there is also a lot of group work in junior secondary and students are encouraged to help each other as well as work individually. Group and class discussions develop oral language skills, an important foundation for reading comprehension in primary schools. Group work, which was observed in all schools, is very important to allow students to

talk through their understanding about concepts. The picture below shows group work during a PDHPE lesson at Glen Innes High School.



Teachers make it possible for all students to be involved in lessons. For example, a student at Coonabarabran High School commented that, "We might not be good at something but the teachers will give us opportunities to do things. They know how to set little goals and competitions to encourage all students to get involved." Year 8 students at Manilla Central School said they liked particular subjects best because the teachers explained the work well or got everyone involved by making the lesson interesting and possible for all to do the work.

Support student learning with explicit teaching, criteria and feedback

Support secondary students with explicit scaffolded literacy and numeracy across KLAs (key learning areas). For example, Year 8 Science students at Glen Innes High School had two periods a week for a term each on Literacy and Numeracy, Experiments, Library Study and Computers Study. A Numeracy and Literacy Committee at this school tracks students at risk and puts remedial strategies in place as needed. Teachers who were trained in Reading to Learn at Coonamble High School and Dorrigo High School said it is very effective with the bottom students because it allows the students to be successful in their responses. Some of the other secondary schools were about to commence training in Reading to Learn. At The Henry Lawson High School a literacy committee across KLAs collaborated to set a writing standard that used a common language in regard to literacy.

Support primary students with explicit scaffolded literacy and numeracy programs. Teachers have been trained in Reading to Learn at Forbes North Public School and Narrabri Public School (Stage 3 classes), and in Accelerated Literacy at Kempsey South Public School, Narrandera Public School and Narrabri Public School (Stage 2 classes). These programs were clearly supporting students to improve their literacy skills and teachers were using the grammatical metalanguage. Count Me in Too and Count Me in Too Indigenous were credited with improving student numeracy skills at Narrabri Public School and Kempsey South Public School.

Teachers encouraged questions and used open-ended questioning techniques to ensure that students think and offer their own opinions. Excellent questioning techniques were observed in Ancient History lessons at Manilla Central School and Coonabarabran High School. This approach was appreciated by a student at Glen Innes High School who said of the teacher, "She asks us questions and asks what we think before she says what she thinks."

Provide clear expectations, criteria and choice in assessments. Staff at The Henry Lawson High School collaborated to provide agreements on quality work and create rubric marking guides, 'How will you know you have done this well'. Science teachers gave students choices for research projects at Dorrigo High School and for how to present assignments at Coonamble High School and Bonalbo Central School. Ownership of learning was encouraged at Narrabri Public School through providing rubrics with criteria for writing assessment tasks so students know how much each part is worth and also through self-assessment of work prior to teacher assessment.

Constructive feedback is regularly provided. Teachers were observed constantly discussing progress with students during group work. At Coonabarabran High School big projects were looked at in stages to keep students on track and at Dorrigo High School students could hand in a draft of an assignment for feedback. Students commended some teachers at all of the secondary schools for the extensive written and verbal feedback they provided. Feedback was often verbal in primary schools, for example, a student at Quaama Public School said, "Our teachers are really good – they tell you what you are good at and what you need to work on. They are really considerate and are interested." At Kempsey South Public School students said, "She comes around and tells us how we are going. If we are doing it right she will tell us. We give one another feedback," and, "If we don't know an answer teachers help us figure it out by sitting down and talking." Teachers said they have concentrated on letting students know what they have to do to get extra marks.

Discussion of Results

The staff in the case study schools exhibited care, dedication and a genuine interest in the welfare and learning of their students. They were constantly trying to improve their teaching performance and their students' learning. Each of the case study schools had developed a positive school culture of success and high expectations in which the needs of every individual were important.

Like Dinham (2009), the case study team noted that exceptional school leaders were highly responsive to people and events and highly demanding of themselves and others and they had a framework for reflection and action rather than relying on quick fixes. The whole school strategies identified in this research are dependent upon exceptional school leaders who have built a collaborative team to develop positive relationships, build student self-confidence, involve the community, engage Aboriginal students and try innovative ideas to engage disengaged students. As noted in the AESOP study (Dinham, 2007), the Principals, Deputy Principals, Assistant Principals and Head Teachers in the case study schools all exhibited high levels of interpersonal skills and compassion, positive attitudes which are contagious, intellectual capacity and moral leadership. The leaders assisted teacher learning, gave teachers responsibility and trusted and empowered their staff.

The classroom strategies observed in the case study schools had resulted in positive relationships with students, student self-regulation, engagement of students in learning, high expectations and support for student learning with explicit teaching, criteria and feedback. The strategies to achieve these ends reflect the elements of quality teaching in the Quality Learning Environment

dimension: explicit quality criteria, engagement, high expectations, social support, students' self-regulation and student direction of learning.

Elements of the Intellectual Quality dimension of quality teaching were also evident at the case study schools. For example, Deep Knowledge and Deep Understanding were exhibited by Year 6 students at Narrabri Public School during a writing lesson based on an article about Space Junk; both within their writing and when the students had to state a new fact they had learned before they were dismissed from the lesson. Problematic knowledge was presented to students and discussed, for example, via ABC radio and television programs on an Interactive Whiteboard, in a Legal Studies lesson involving asylum seekers and human rights. Higher-order thinking was evident, for example, in Ancient History lessons where students discussed the motivation of characters or categorised sources of information. Metalanguage was displayed with examples on classroom walls, for example, grammar terminology at schools where the Accelerated Literacy or Reading to Learn programs were used and teachers discussed how these different parts of speech developed texts. In discussions teachers used open-ended questioning techniques to encourage substantive communication about a topic, for example, at Manilla Central School there was sustained reciprocal interaction between student and teacher in a Photography Video and Digital Images lesson focused on how to create a poster for the school play, an authentic connected task.

Ladwig (2008) reported that the SIPA research into the efficacy of Quality Teaching and Learning in 'closing the (authentic) achievement gap' found that all elements of quality teaching investigated resulted in improvements in learning but Quality Learning Environment and Intellectual Quality were the most effective in closing the gap. ATSI students overtook non-ATSI students when task Quality Learning Environment was higher and Low SES students overtook high SES students when task Intellectual Quality was higher (Amosa et al., 2007). Although Ladwig (2008) reported less effect on achievement from classroom tasks characterised by elements of the Significance dimension of Quality Teaching, whole school strategies that focused on Significance in the case study schools had an effect that is equally if not more important than significance in classroom tasks. In particular the focus on cultural knowledge, inclusivity and connectedness to community, combined with the school leaders' interpersonal skills in communication and flexible innovative approach, seemed to have strong effects on student willingness to engage in learning especially in schools with substantial Aboriginal populations. These whole school strategies also had a strong effect on community capacity building as demonstrated at Bonalbo Central School, Coonabarabran High School, Narrandera Public School, Kempsey South Public School and Forbes North Public School. The importance of the Schools as Communities Centres at Forbes North, Narrandera and nearby at Kempsey West should also be acknowledged for their strong contribution to building capacity in these communities. Students could see the value of mock interviews and portfolio panels at Bonalbo Central School which provided connectedness to situations students will confront when they apply for jobs. The panels were also taken seriously by students because the panels included community members as well as staff and students.

Some whole school strategies, such as positive behaviour for learning, were implemented across the school in all classrooms but others were implemented outside the classroom and could address issues outside the control or influence of classroom teachers and their quality teaching,

for example, community negotiations leading to the teaching of an Aboriginal language by local Elders at several schools or the Funny Money Program that increased attendance at Forbes North Public School. Another highly effective whole school strategy was the involvement of members of the local community in mentoring students. This strategy was highly successful at Manilla Central School where all students in Year 10 had community mentors and a community member worked with disengaged Year 8 students on constructive projects. Plan-it Youth and Sports Mentors at Coonamble High School and mentoring through work experience at Mudgee High School were also effective in building self-concept and re-engaging students in learning. The schools said these programs provided disengaged students with the one-to-one attention they needed in order to make a meaningful connection with learning, experience success and find a relevant purpose for their learning.

Conclusion

The Rural Outcomes of Schooling Research Project has found that whole school strategies were used to develop a school culture of success and care for individual students. The application of strategies and programs across the schools provided a foundation on which a culture of success was built and this supported teachers in the implementation of quality teaching strategies in the classroom.

The strategies that seemed to be the most important in the eyes of students, staff and parents were about building positive relationships between students and teachers, between teachers, between students and between the school and community. Developing positive behaviour for learning strategies was a necessary foundation for the implementation of quality teaching strategies in classrooms. Where there was trust, respect and effort from teachers this was reciprocated by students and high expectations were rewarded with successful outcomes.

The reader is encouraged to peruse the school case study reports (some of which include video clips) to learn more about how each school in its specific context implemented and maintained strategies to meet the individual needs of their students.

References

- Amosa, W., Ladwig, J. G., Griffiths, T., & Gore, J. M. (2007). 'Equity effects of Quality Teaching: Closing the gap'. Paper presented at the Australian Association for Research in Education Annual Conference.
- Australian Bureau of Statistics (2009). *A Picture of the Nation: the Statistician's Report on the 2006 Census*. http://www.abs.gov.au/ausstats accessed 28 April, 2010.
- Bonnor, C. (2009). 'The Changing Contexts for Public Education.' Keynote presentation at the *Victorian Association of Secondary School Principals*, August, 2009.

- Calma, T. (2005). Face the Facts. Sydney: Human Rights and Equal Opportunity Commission.
- Dinham, S. (2007). *Leadership for Exceptional Educational Outcomes (AESOP Series)*. Teneriffe, Queensland: Post Pressed.
- Dinham, S. (2009). 'How to get your school(s) moving and improving.' A PowerPoint presentation at *NSW DET Conference*, 24 April, 2009.
- Gore J., Ladwig J., Griffiths T. & Elsworth W. (2007). 'Variations in pedagogical quality and their social effects: Implications for teacher education', 2007 AERA Annual Meeting and Exhibition: The World of Educational Quality. Papers, Chicago.
- Gore J., Ladwig J. & King M. (2004). 'Professional Learning, Pedagogical Improvement, and the Circulation of Power.' Paper prepared for presentation at the *AARE Annual Conference*, Melbourne, December 2004.
- Graham, L., Paterson, D. & Stevens, R. (2007). *Exceptional Educational Equity Programs: Findings from AESOP*. Teneriffe, Queensland: Post Pressed.
- Green, Bill (2008). Spaces and Places: The NSW Rural (Teacher) Education Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- Green, B. & Novak, M. (2008). 'Staffing and the Provision of Quality Teaching in Inland Rural NSW.' Chapter 3 in Green, B. (Ed.), Spaces and Places: The NSW Rural (Teacher) Education Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- Hattie, J. (2003). 'Teachers Make a Difference: What is the Research Evidence?' Paper presented at Australian Council for Educational Research Annual Conference on Building Teacher Quality. http://www.leadspace.govt.nz/leadership/articles/teachers-make-a-difference.php
- Hattie, J. (2007). 'The Power of Feedback.' Review of Educational Research, 77 (1), pp. 81-112.
- Hattie, J. (2009). Visible Learning: A synthesis of Over 800 Meta-Analyses Relating to Achievement. London and New York: Routledge, Taylor and Francis Group.
- Ladwig, J. (2008). 'An update on research into Quality Teaching in NSW, 2008.' Presentation to *North Coast Region Quality Teaching Conference*, Coffs Harbour, February 2008.
- Letts, W. (2008). 'Aboriginal Education 'Out West': Creatively Responding to Challenges'. Chapter 10 in Green, B. (Ed.), Spaces and Places: The NSW Rural (Teacher) Education Project.

 Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- McConaghy, C. (2008a). 'Spatialised Disadvantage: A Sociological Profile for Schooling in Rural NSW.' Chapter 4 in Green, B. (Ed.), Spaces and Places: The NSW Rural (Teacher) Education

- Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- McConaghy, C. (2008b). 'Situating Pedagogies: Rural Pedagogy as Social Action'. Chapter 8 in Green, B. (Ed.), *Spaces and Places: The NSW Rural (Teacher) Education Project.* Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- McConaghy, C., Maxwell, T. & Foskey, R. (2008). 'Place, Povery and Student Outcomes:

 Identifying the New Socio-Spatial Dynamics of Schooling Disadvantage in NSW.' Chapter 5 in Green, B. (Ed.), Spaces and Places: The NSW Rural (Teacher) Education Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- Novak, M., Green, B. & Gottschall, K. (2008). 'Situated Leadership and Rural Schooling: Leading Learning Locally?' Chapter 9 in Green, B. (Ed.), Spaces and Places: The NSW Rural (Teacher) Education Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.
- NSW AECG Inc. & NSW DET, (2004). The Report of the Review of Aboriginal Education. Yanigurra Muya: Ganggurrinyma Yaarri Guurulaw Yirringin.gurray.Freeing the spirit: Dreaming an Equal Future. Darlinghurst, NSW: NSW Department of Education and Training.
- Pegg, J. & Panizzon, D. (2007). 'Inequities in student achievement for literacy: Metropolitan versus rural comparisons'. *Australian Journal of Language and Literacy*, 30(3), pp. 177-190.
- Rowan, Leonie (2009). 'Powerful Partners or Pushy Pests? Positioning Parents in Home/School Literacy Partnerships.' PowerPoint presentation at *Bridging Divides*: *National Conference for Teachers of English and Literacy*, Hobart, Tasmania, 9-12 July, 2009.

 http://www.englishliteracyconference.com.au/files/documents/hobart/conferencePapers/handoutsPowerPoints/LeonieRowanKeynoteF3.pdf
- Thomas, Ross (Series Editor) (2007). AESOP Series. Teneriffe, Queensland: Post Pressed.
- Thomson, S., Cresswell, J. & de Bortoli, L. (2004). Facing the Future: A Focus on Mathematical Literacy among Australian 15-year-old Students in PISA.

 Camberwell, Victoria: Australian Council for Educational Research.
- Thomson, S. & de Bortoli, L. (2008). *PISA in Brief from Australia's perspective*. Accessed online 3 September, 2008 from http://www.acer.edu.au/documents/PISA2006 PISAinbrief.pdf
- Vinson, T. (2004). Community Adversity and Resilience. The distribution of social disadvantage in Victoria and New South Wales and the mediating role of social cohesion. Richmond: Jesuit Social Services.
- Wallace, A., Boylan, C., Mitchell, R. & Streckfuss, A. (2008). 'Reconceptualising school-community relationships in inland NSW'. Chapter 7 in Green, B. (Ed.), *Spaces and Places: The NSW*

Rural (Teacher) Education Project. Charles Sturt University, Wagga Wagga: Centre for Information Studies.

Wallace, A., Boylan, C., Burton, C., French, B., Manton, K., & Streckfuss, A. (2005). *Brungle: A Study of a Community and their School.* Bathurst: Rural (Teacher) Education Project.

APPENDIX A – Rural Outcomes of Schooling Research Project

Selection of schools for preliminary interviews by telephone

Primary Results	Secondary Results	Region	SEG	SEG Name
Gulmarrad Public School	Maclean High School	535	636	Clarence
Lawrence Public School		535	636	Clarence
	Toormina High School	535	637	Coffs Harbour
	Woolgoolga High School	535	637	Coffs Harbour
Kempsey Sth Public School	Kempsey High School	535	639	Hastings
	Melville High School	535	639	Hastings
Barrington Public School		535	641	Lower North Coast
Old Bar Public School		535	640	Manning Camden Haven
Raleigh Public School	Dorrigo High School	535	638	Mid North Coast
Gladstone Public School	Nambucca Heads High School	535	638	Mid North Coast
Woodenbong Central School	Bonalbo Central School	535	634	Richmond Valley
Merriwa Central School		534	649	Hunter 8
	Armidale High School	536	653	New England Central
	Ashford Central School	536	652	New England North
	Tenterfield High School	536	652	New England North
	Glen Innes High School	536	652	New England North
	Inverell High School	536	652	New England North
	Macintyre High School	536	652	New England North
	Manilla Central School	536	654	New England South
	Quirindi High School	536	654	New England South
Mullaley Public School	Barraba Central School	536	654	New England South
Narrabri Public School		536	655	New England West
	Temora High School	537	660	Riverina Central
Bunnaloo Public School		537	657	Riverina South West
Mayrung Public School		537	657	Riverina South West
Moulamein Public School		537	657	Riverina South West
	Deniliquin High School	537	657	Riverina South West
	Finley High School	537	657	Riverina South West
	Barellan Central School	537	659	Riverina North West
	Narrandera High School	537	658	Riverina West
Narrandera Public School		537	658	Riverina West
	Wade High School	537	658	Riverina West
Candelo Public School	Bega High School	538	665	Sapphire Coast/Monaro
Quaama Public School	Eden Marine High School	538	665	Sapphire Coast/Monaro
Bermagui Public School	Narooma High School	538	666	Bateman's Bay
Morgan Street Public School	Broken Hill High School	539	677	Broken Hill
Lightning Ridge Central School	Lightning Ridge Central School	539	674	Bourke
	Brewarrina Central School	539	674	Bourke
		555	J/ 4	- Jane

Tullamore Central School	Peak Hill Central School	539	676	Dubbo
	Condobolin High School	539	675	Lachlan
	Forbes High School	539	675	Lachlan
	Parkes High School	539	675	Lachlan
Forbes North Public School	The Henry Lawson High School	539	675	Lachlan
Cudal Public School		539	672	Orange
Gilgandra Public School	Coolah Central School	539	673	Warrumbungle
Coolah Central School	Coonabarabran High School	539	673	Warrumbungle
	Coonamble High School	539	673	Warrumbungle
	Dunedoo Central School	539	673	Warrumbungle
	Gilgandra High School	539	673	Warrumbungle
	Mudgee High School	539	673	Warrumbungle