Submission to the Senate Education, Employment and Workplace Relations Committee

Inquiry into the administration and reporting of NAPLAN testing

INDEX

1. ACARA

1.1 ESTABLISHMENT

In October 2008, the Council of Australian Governments (COAG) agreed to establish a new national education authority that would bring together, for the first time, the functions of curriculum, assessment and reporting at the national level. The decision was the result of COAG negotiations in relation to the new National Education Agreement and National Partnerships.

The Australian Curriculum, Assessment and Reporting Authority (ACARA) was established to improve the quality and consistency of school education in Australia through a national curriculum, national assessment, data collection and performance reporting.

Section 5 of the Commonwealth *Australian Curriculum, Assessment and Reporting Authority Act 2008* (ACARA Act) established the body in December 2008. On 28 May 2009, ACARA's Board members were appointed by the Commonwealth Minister for Education, at which point ACARA effectively became operational. At that time, ACARA superseded the Interim National Curriculum Board, which was established in April 2008 and had begun work on the national curriculum in specified areas. It also took over work on the National Assessment Program (NAP), including the National Assessment Program: Literacy and Numeracy (NAPLAN), which had been managed since 2007 by a federal, state and territory steering committee.

Finally, ACARA began work to develop a national school data and reporting system which later became the *My School* website, and other work related to its functions of assessment, curriculum and reporting.

1.2 LEGISLATIVE MANDATE

The ACARA Act prescribes the following functions for the Authority:

- to develop and administer a national school curriculum, including content of the curriculum and achievement standards, for school subjects specified in the Ministerial Council on Education, Employment, Training and Youth Affairs' (MCEETYA) Charter for ACARA;
- to develop and administer national assessments;
- to collect, manage and analyse student assessment data and other data relating to schools and comparative school performance;
- to facilitate information sharing arrangements between Australian government bodies in relation to the collection, management and analysis of school data;
- to publish information relating to school education, including information relating to comparative school performance;
- to provide school curriculum resource services, educational research services and other related services; and
- to provide information, resources, support and guidance to the teaching profession.

1.3 CHARTER AND DIRECTIONS

Subsection 7 (3) of the ACARA Act states that the Authority must perform its functions and exercise its powers in accordance with the Charter set by MCEETYA and any other written instructions from the Council. MCEETYA has since become the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA).

The current charter outlines ACARA's responsibility for developing and implementing a single national school curriculum, administering national assessment, and developing and maintaining a system of reporting on school progress and benchmarking.

The other key document that guides ACARA's work is the *Melbourne Declaration on the Educational Goals for Young Australians* (Appendix 1) which was released by MCEETYA in December 2008.

1.4 GOVERNANCE

ACARA is a co-operative enterprise between state and federal jurisdictions and its activities are jointly funded by Commonwealth, state and territory governments. The ACARA Board comprises members nominated by Commonwealth, state and territory education ministers, as well as the Catholic Education Commission and Independent Schools Council of Australia.

The following diagram sets out some of the main reporting and advisory relationships.
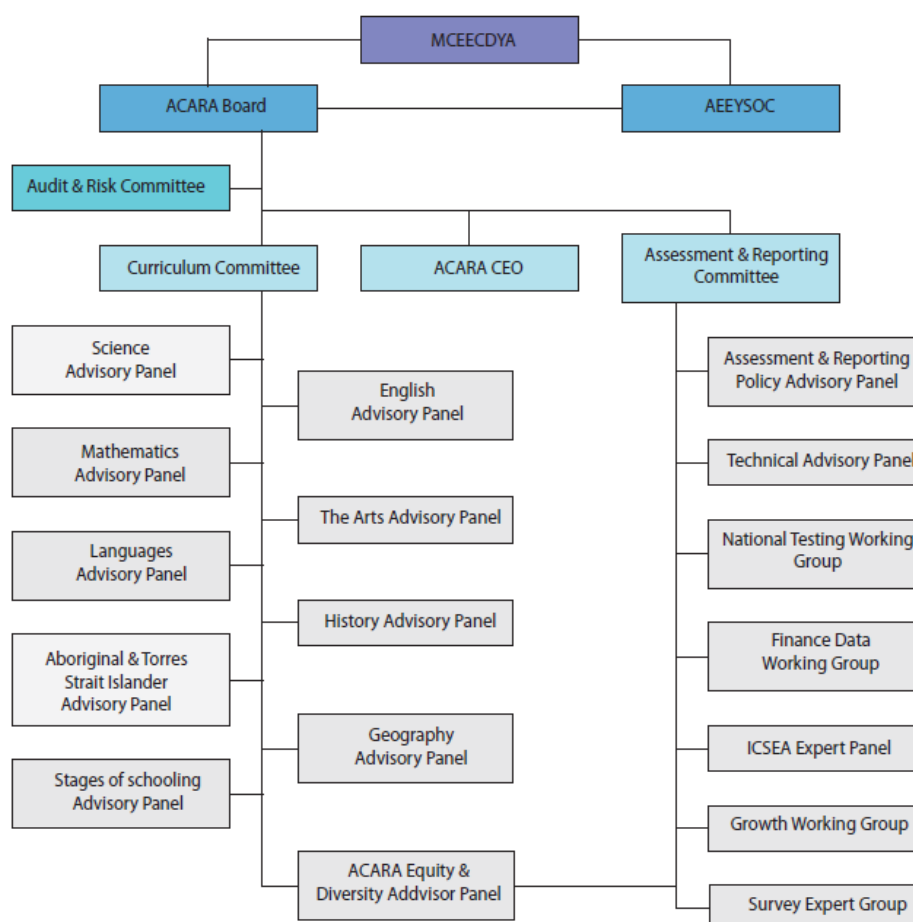
2. NAPLAN

2.1 INTRODUCTION

Literacy and numeracy are the foundations on which further learning depends. It is therefore important that literacy and numeracy capabilities are developed early. The foundations for literacy are built primarily in English and the foundation for numeracy primarily in mathematics, but both literacy and numeracy are reinforced and strengthened through teaching of other learning areas. Literacy and numeracy need to keep developing across the school years as the curriculum areas put them to work in increasingly distinct and complex ways.

One of ACARA's key responsibilities is to assess the literacy and numeracy capabilities of Australia's student population, and consequently, ACARA manages NAPLAN, which has been in place since 2008. NAPLAN is one aspect of the broader NAP which is described in Appendix 2.

Prior to the introduction of NAPLAN, each state and territory had conducted its own regime of numeracy and literacy testing for primary and secondary school students. This commenced with the Basic Skills Tests in New South Wales in 1989. In Victoria, an annual common test known as the Achievement Improvement Monitor testing was conducted by the Victorian Curriculum and Assessment Authority and undertaken by students at year levels 3, 5, 7 and 9. Similar testing was also undertaken in other states and territories. Although the state and territory-based testing regimes differed in certain respects, national comparative data was prepared annually from 1999 through a process called equating.

In July 2003, MCEETYA agreed to enhance the consistency and timeliness of reporting and agreed to pursue enhancements to the collection of literacy and numeracy outcome data.

In 2004, the *Schools Assistance (Learning Together – Achievement through Choice and Opportunity) Act* prescribed the implementation of common national tests before 1 January 2008. MCEETYA agreed in July 2006 that national literacy and numeracy testing for all students in years 3, 5, 7 and 9 would commence in 2008.

In December 2007, MCEETYA, through the Australian Education Systems Officials Committee (AESOC), directed Curriculum Corporation (a ministerial company now merged with education.au to form Education Services Australia) to project manage the NAPLAN tests in 2008 and 2009.

In May 2008, the first of the NAPLAN tests were implemented. Every year, Australian students in years 3, 5, 7 and 9 are assessed on the same days using national tests in Reading, Writing, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy. These tests replaced the previous state and territory-based assessments and have the support of all education ministers.

In the second half of 2009, responsibility for NAPLAN was moved to the newly formed ACARA. By this point in the planning and development cycle the tests for NAPLAN 2010 had been fully developed.

2.2 ANNUAL DEVELOPMENT CYCLE

The process for developing the tests is comprehensive and involves input from experts from around the country. The development model includes central management of the project by ACARA (and formerly the AESOC NAPLAN Steering Group) working with expert organisations providing services under contract and supported by expert review and recommendations from all state and territory officials.

The development cycle for the NAPLAN tests is approximately 12 months and proceeds in phases. These phases are described below, with a more detailed technical explanation of NAPLAN test development and analysis located at Appendix 3.

2.2.1 Phase One

The first phase involves the engagement of specialist writers to develop test questions (items) that meet nationally endorsed test specifications. These include specifications for the types of test items that can be used, test item content (curriculum content), length of tests and the spread of difficulty across items.

NAPLAN is developed to ensure age appropriate assessment and takes into consideration curriculum content and frameworks. Currently this is achieved by referencing the National Statements of Learning in English and Mathematics, and state and territory curriculum and learning frameworks. In future, NAPLAN will be references against an Assessment Framework based on the new national curriculum once that curriculum is implemented.

2.2.2 Phase Two

In the second phase, panels of experts review proposed items from a range of perspectives. Initially the test development contractor will undertake in-house panelling to determine the suitability and quality of items. The items are then presented to panels from all state and territory test authorities for review by experts in curriculum and measurement, practising teachers and specialist officers in areas such as indigenous education, English as a second language, and students with special needs. Only those items that meet the stringent criteria of the panels proceed to trialling.

Once the test questions are agreed, they are constructed into 'trial test forms' that are then sat by a scientifically chosen sample of students within Australia, to obtain critical item performance data. The performance of each question, including for example how well it is able to discriminate high-performing and low-performing students, or whether there is any bias, is determined by psychometric analysis of the data, conducted after the trial.

The final selection of items for inclusion in tests is then based on a set of quality assurances including: (i) the psychometric data collected through trialling (ii) professional judgments from educational measurement, test construction and curriculum experts from all jurisdictions and

(iii) the requirement to have the final test forms comply with the detailed NAPLAN test specifications.

The final review process also includes consideration of the items by experts in indigenous education, education for students from language backgrounds other than English, students who have a visual impairment and other experts in teaching and learning for students with disabilities. The purpose of this process of review is to make sure that the final set of test items that are printed and delivered to schools are appropriate to the widest possible number of students.

2.2.3 Phase Three

An Expert Advisory Group (EAG) consisting of five pre-eminent educational measurement experts provides advice and endorsement on aspects relating to technical methodology and specification, equating of tests and quality assurance. The final test specifications are reviewed by the EAG to ensure there is an acceptable level of compliance between the target NAPLAN test specifications and the achieved specifications in the tests.

2.3 EQUATING THE TESTS

In order to be able to compare the performance of students on different tests conducted across different years, an 'equating' process is completed to determine any variation in the difficulty of the tests so that the difficulty of one set of tests can be aligned to the level of difficulty of the second set of tests. This process enables tests to be located on a common scale and valid comparisons made between the performances of students on different tests.

In the case of NAPLAN, it is important to be able to equate tests in subsequent years so that comparisons can be made between student performances, comparisons that are valid because they are not affected by the variations in the relative difficulty of the tests.

In 2009, equating tests were developed so that future NAPLAN tests could be located on the same scale (the NAPLAN scale). The 2009 equating process used both 'on-shore' and 'off-shore' testing. Students in New Zealand participated in the testing and sat the 2008 NAPLAN tests and the equating tests. In Australia another sample population of students sat the 2009 NAPLAN tests and also the equating tests. Using a combination of equating methods, the 2008 and 2009 tests were able to be placed on the same scale through the process of the common equating tests.

From 2010 a sample of students from each year, drawing from all states and territories and school sectors, will sit the secure equating tests as well as the current year's NAPLAN tests. The equating tests will be administered by specially trained independent test administrators. This ensures that the security of the equating tests can be preserved.

The equating process for NAPLAN was informed by advice from the EAG. Care is taken to provide a high level of assurance as to the reliability of comparisons between years. The equating process provides confidence that any test difference has been taken into account before reporting any differences in student performance between years.

Finally, ACARA signs off the tests and endorses them as satisfying the specifications.

2.4 TEST CONTENT

The content of each test is informed by the National Statements of Learning in English and Mathematics (Appendices 4 and 5) which underpin state and territory learning frameworks and existing state and territory curriculums. The National Statements are available from the Educational Services Australia website at www.esa.edu.au.

Test questions cover aspects of literacy (Reading, Writing, Spelling, Grammar and Punctuation) and numeracy. Questions are either multiple-choice or require a short written response. The writing task requires students to write an extended piece in response to a provided prompt drawn from a specified genre (such as narrative or persuasive) which is set by MCEECDYA and communicated to schools early. NAPLAN tests are designed to test key literacy and numeracy skills. The best preparation schools can provide for students is teaching the curriculum, as the tests reflect core elements of state and territory curricula. In future, the NAPLAN tests will be aligned with the Australian Curriculum. Currently the first four learning areas of the Australian Curriculum (English, mathematics, science and history) are in draft form with consultation underway for the senior years and analysis being undertaken of feedback received on the Kindergarten to Year 10 curriculum .

Test practice should involve students completing examples of previous tests or sample tests for the purpose of familiarising them with test instructions and common forms of questions. Teachers routinely prepare students for testing including, as appropriate, practice on sample tests. Adequate preparation ensures that students feel comfortable in the testing environment and are able to confidently demonstrate what they know and can do.

2.5 TEST ADMINISTRATION

State and territory Test Administration Authorities (TAAs) are responsible for the implementation and administration of the NAPLAN tests in their jurisdictions. These authorities manage the printing and distribution of test materials, coordinate the testing program within their jurisdictions and administer special provisions to assist eligible students with particular needs to participate in testing.

The NAPLAN tests are conducted at schools and administered by classroom teachers, school deputies or the principal.

The TAAs for NAPLAN are:
- ACT - Department of Education and Training
- NSW - Department of Education and Training
- NT - Department of Education and Training
- QLD - Queensland Studies Authority
- SA - Department of Education and Children's Services
- TAS - Department of Education
- VIC - Victorian Curriculum and Assessment Authority
- WA - Department of Education

ACARA has nationally agreed protocols for the administration of NAPLAN testing that are used by all TAAs. The *National Protocols for Test Administration* (Appendix 6) form the basis for test administration manuals (see Appendices 7 and 8), and ensure the integrity and consistency of the testing process. The National Protocols also include detailed requirements for the management of test security.

The security of the NAPLAN tests is achieved through contractual obligations on commercial service providers and strict instructions for the handling of materials in schools. Contractors responsible for the printing, packing and delivery of NAPLAN test materials must comply with stringent quality assurance and security requirements. For example, there are specific requirements for the secure packaging of materials, highly restricted access for staff to areas where test materials are produced and secured and agreed protocols for the delivery of materials to schools.

Once students have sat the tests and they are collected, the test administration authority in each state and territory manages the marking of the tests and the capture of answer data through an electronic scanning process. Tests for Reading, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy are scored using optical mark recognition software for multiple-choice items. Writing tasks are professionally marked using quality assured procedures for maintaining marker accuracy and consistency.

TAAs submit de-identified student data from all tests to a contractor, appointed to undertake the analysis of the test data on behalf of ACARA and the states and territories. The national contractor performs a range of analyses on the data for purposes of individual, school, jurisdiction and national reporting.

2.6 FORMS OF REPORTING

NAPLAN results are reported nationally through the *NAPLAN National Summary* (September release) (Appendix 9) and *NAPLAN National Report (*December release) (Appendices 10 and 11) and at the student level in the form of reports to parents. Results are available for use by education systems, schools and parents.

Individual student reports, provided to parents/carers, show student results against the national average and the middle 60 per cent of students nationally. These reports contain a description of what was assessed in each of the tests and provide information about what students can typically do.

NAPLAN results are reported using five national achievement scales, one for each of the NAPLAN assessment domains of Reading, Writing, Spelling, Grammar and Punctuation, and Numeracy. Each scale consists of ten bands, which represent the increasing complexity of the skills and understandings assessed by NAPLAN from Years 3 to 9. Six of these bands are used for reporting student performance in each year level.

The NAPLAN reporting scales are constructed so that any given scale score represents the same level of achievement over time. For example, a score of 700 in Reading in one year is equivalent to the same score in other testing years.

After the first year of NAPLAN testing and reporting in 2008, MCEETYA commissioned Colmar Brunton Research to evaluate the NAPLAN reports and how they were received and understood by parents (Appendix 12). The evaluation concluded:

> *The 2008 NAPLAN student report issued is considered to have received a consistent and positive evaluation. NAPLAN student results were valued, considered important and were able to be understood by the majority of parents who received them. There were no major issues raised during the evaluation which would indicate that significant changes are required for subsequent years.*
>
> *The core messages received from the NAPLAN student reports is the comparison of their child/ren to the national average and an ability to assess their child/ren's performance. The achievement bands and the national average were the most important comparison points so that parents can assess their child/ren to be higher or lower than average. This is more important than understanding the national minimum average.* (p38)

The study also made some significant findings about parents' perceptions of the national literacy and numeracy testing more broadly.

> *Australian parents place significant importance on national literacy and numeracy testing for their child/ren. Nearly nine in ten parents (87%) consider national assessment to be either very important or important.* (p11)

States and territories also make extensive use of NAPLAN data to improve the teaching and learning programs in schools. Some states and territories provide highly sophisticated analytical packages for the use of teachers, principals, their supervisors and for use by a whole system to identify areas of strength and areas for development.

2.7 FUTURE DIRECTIONS

The most immediate issue for ACARA to address will be the redesign of NAPLAN to reflect the new Australian Curriculum. While the curricula for K-10 English and mathematics will be approved in 2010, it is not clear at this stage whether all schools will have implemented them by 2012, which is realistically the first year in which it would be theoretically possible to have newly designed tests in place. Other issues and opportunities for consideration include:
- the possibility of assessing a broader range of outcomes through the use of multiple test forms and perhaps even a component of moderated teacher assessment;
- exploring potential benefits available to large scale assessments from new and innovative technologies;
- the potential for online and computer adaptive testing in the future; and
- enhanced provisions for students with special needs to participate in testing through assistive technologies and test delivery platforms.

3. MY SCHOOL

3.1 POLICY CONTEXT

An overarching objective set by the Ministerial Council is to provide greater transparency and accountability for the performance of schools to ensure that every Australian child receives the highest-quality education and the opportunity to achieve through participation in employment and society.

On 22 August 2008 MCEETYA agreed that an Expert Working Group (EWG) would be convened by the Australian Government to provide a report to Ministers on relevant measures to guide school evaluation, accountability and resource allocation. (Note that the EWG was renamed the School Reporting Working Group (SRWG) on 13 February 2009). This was agreed by COAG in the context of the development of the new Commonwealth-State financial arrangements (National Education Agreement) and the desire for improved school accountability and transparency including the publication and provision of data to create an accountability framework to assist in building an evidence base for improving outcomes.

COAG determined that the public should be provided with information on each school in Australia. It was agreed at COAG's 24th meeting held on 29 November 2008 that:

> *...the new Australian Curriculum, Assessment and Reporting Authority will be supplied with the information necessary to enable it to publish relevant, nationally-comparable information on all schools to support accountability, school evaluation, collaborative policy development and resource allocation. The Authority will provide the public with information on each school in Australia that includes data on each school's performance, including national testing results and school attainment rates, the indicators relevant to the needs of the student population and the school's capacity including the numbers and qualifications of its teaching staff and its resources. The publication of this information will allow comparison of like schools (that is, schools with similar student populations across the nation) and comparison of a school with other schools in their local community.* (COAG Meeting Outcomes).

The key aspect of this decision was that school performance data should only be published publicly in a contextualised manner so that performance data is provided with a range of information about a school's student and teaching population and its resources.

In late 2008, the EWG commissioned the Australian Council for Educational Research (ACER) to provide advice on national schools data collection and reporting for school evaluation, accountability and resource allocation. Amongst their many recommendations, ACER recommended that:

> *For the purpose of providing public information about schools, a common national website should be used to provide parents/caregivers and the public with access to*

rich information about individual schools.(viii)

This report also recommended the use of NAPLAN as the basis for the comparative performance of schools.

> *The best available nationally comparable student outcome measures at the present time are provided by NAPLAN.* (p13)

Importantly, the study found that NAPLAN was an effective way to assess whether a school was making a difference in a student's numeracy and literacy skills by measuring improvement across the years.

> *NAPLAN provides a basis for evaluating each primary school's effectiveness in promoting literacy and numeracy gains between Year 3 and Year 5. In those states in which Year 7 is in the primary school years, NAPLAN also provides a basis for evaluating each primary school's effectiveness in promoting gains between Year 5 and Year 7. In other states, gains from Year 5 to Year 7 occur across the primary secondary transition and so are more difficult to attribute to a single school (except in K-10 or K-12 schools). In most Australian states and territories, NAPLAN provides a basis for evaluating the effectiveness of secondary schools in promoting literacy and numeracy gains between Year 7 and Year 9.* (p17)

ACER also considered the basis on which the results of schools could be compared.

> *Research consistently shows a correlation between students' socio-economic backgrounds and their levels of school attainment. For this reason, the socioeconomic backgrounds of a school's student intake also must be taken into consideration in any evaluation of the school's performance.*
>
> *The socio-economic backgrounds of students in a school can be measured either at the level of the school (eg, using data from the ABS census collection districts for the home addresses of the students attending the school) or by aggregating information about the SES backgrounds of individual students in the school.* (pp23-24)

This report was tabled before MCEETYA in April 2009 (Appendix 13). At this meeting, it was agreed that 2008 and 2009 NAPLAN data would be included on the website and a like-school model developed to enable comparisons between schools with similar student intake characteristics.

3.2 POLICY CONSIDERATIONS

It is important to focus on the performance of schools since they provide the context in which students learn. It is important too to reveal the variation in performance of schools with students of similar social backgrounds since the higher performing schools can raise the expectations of the others and become sources of information about practices that could raise the performance levels of the lower performing schools.

It is important to examine the whole distribution of student performances and not to focus only on the mean or only on the proportion of students whose performance lies below the minimum acceptable level for their year level. The *My School* site, therefore, presents the distributions of results in a school as well as the means. Furthermore, the distributions are presented using the bands on the NAPLAN scales where the lowest band represents performances below the minimum acceptable level.

In some other countries, the focus is on the proportions above and below the minimum acceptable level. That encourages schools to focus on students close to that criterion level, to ensure those just above do not slip below and to try to shift as many as possible of those just below over the line to improve the school's performance measure. That can cause schools to ignore both high performing and very low performing students.

3.3 INDEX OF COMMUNITY SOCIO-EDUCATIONAL ADVANTAGE

The best way to compare the performance of schools in the NAPLAN tests would be to find groups of schools with students of similar abilities on commencing school. Currently, no such measures of starting abilities are available nationally. Instead, attention focused on students' social backgrounds for which the typical measures are parents' education and occupation. Most states and territories do not presently collect this information for students, so an indirect estimate was needed. The approach adopted was one long used in Australia for allocating funds to non-government schools and also in some state departments of education for identifying schools enrolling students from similar social backgrounds. The approach uses Australian Bureau of Statistics (ABS) census data.

Research was undertaken by ACARA to find a set of variables that best predicted student performance on the NAPLAN tests on reading and numeracy, and to use these to create an index that could be used to group schools that are 'statistically similar' in terms of their student populations. As noted above, the ACER Report of December 2008 had stated that there are clear links between students' socio-economic backgrounds and their future educational outcomes. ACARA therefore decided to use socio-economic indices as a starting point to build a comparative tool for student populations, in line with the ACER recommendations.

The ABS produces four indices of socio-economic status, the Socio-Economic Indicators for Areas (SEIFA). These indices correlate positively with student achievement, but none of them was specifically designed to best predict the educational attainment of Australia's schools. A new index was thus developed, namely the Index of Community Socio-Educational Advantage (ICSEA).

ICSEA uses the SEIFA variables and school data to create an index that best predicts schools' average performance on NAPLAN tests. The variables that make up ICSEA include socio-economic characteristics of the small areas where students live (in this case an ABS census collection district (CCD)), as well as an index of remoteness, and the proportion of Indigenous students enrolled at the school.

After establishing a methodology, the following steps were taken to calculate an ICSEA value for each school. Firstly, residential addresses for each student in Australia were gathered (without student names or 'de-identified') as well as data about each school's:

- proportion of Indigenous students; and
- remoteness (based on an agreed Australian Bureau of Statistics (ABS) system which identifies localities on a scale from metropolitan through to provincial, remote, and very remote).

For government schools, information was gathered from state and territory education departments. For non-government schools, information was gathered from the federal Department of Education, Employment and Workplace Relations.

Next, each address was matched to its CCD. A CCD is a geographical area (much smaller than a postcode or suburb) which contains on average about 220 households. Student residential addresses were matched to their CCD by a process known as geo-coding, where the address is located to a point on the earth's surface (a specific latitude and longitude). The CCD in which the address is located was then identified and the address was linked with the CCD's unique identifying number.

Third, the relevant socio-economic status (SES) characteristics of the CCD in which each student at a school lives (known from ABS household census data) were aggregated to the school level. For example, for a school with 100 students living in five different CCDs, the relevant variables from SES data for each of those CCDs were aggregated, proportionally, up to the school level, so that the averages for each SES variable at the school level were known.
A regression model was then fitted to these data and to data on remoteness and indigeneity.

Finally, an ICSEA value was calculated using the regression weights from the regression model. ICSEA places schools on a numerical scale and with a mean of 1000 and standard deviation of 100 for all Australian schools. For example:
- a school in a regional town with a student population drawn largely from relatively disadvantaged households might have an ICSEA value of about 850;
- a school in a metropolitan area which draws its students from relatively advantaged households might have an ICSEA value of about 1150; and
- a school in a remote Indigenous community might have an ICSEA value of about 540.

ICSEA values are calculated for schools irrespective of the proximity of students' homes to the school, so schools that draw students from a wide geographic area will still have an ICSEA value. Some schools, however, will not have an ICSEA value because of the nature of their student population. An example could be a school for children with intellectual disabilities.

In a small proportion of cases, ICSEA may provide an inappropriate measure of the socio-educational level of the school. This can occur in instances where there is a mismatch between students' actual levels of socio-educational advantage and that of the CCD values associated with their addresses. An example would be remote schools where the ICSEA values are inflated where a mining community is located in an otherwise disadvantaged remote community.

The initial ICSEA values for all schools were checked with school authorities. On the basis of this checking, ICSEA values of around seven percent of schools were revised. An expert panel was convened to review the changes and ensure consistency in the criteria used to make them.

In September 2009, MCEECDYA endorsed the use of the new ICSEA index on the new website.

3.4 WEBSITE DEVELOPMENT AND LAUNCH

While ICSEA forms the basis of the comparison of schools' NAPLAN performance data, ACARA was required to publish further contextual information on schools. Education ministers agreed to a set of rules to support meaningful and comparable reporting of school data and responsible use of this information. These are contained in the *Principles and Protocols for Reporting on Schooling in Australia* at <u>Appendix 14</u>. These rules include the following principles:
- the protection of individual student privacy;
- not publishing comparative data without contextual information; and
- the publication of error margins, caveats and explanatory notes to ensure accurate interpretation.

ACARA joined the SRWG on 5 August 2009 and took over the role of Chair. From this point, ACARA led the broader development of the *My School* website, however substantial work had already been undertaken to determine what data should be reported on the site. ACARA went on to test the proposed site with focus groups to assess the site's layout and changes were made to reflect this feedback.

The final design of the website was endorsed by MCEECDYA in September 2009. The *My School* website (www.myschool.edu.au) was launched on 28 January 2010 and provides profiles of almost 10,000 Australian schools that can be searched by the school's location, sector or name. The website provides contextual information, as well as NAPLAN results that can be compared with results from statistically similar schools across Australia and the average of all Australian schools.

3.5 WEBSITE CONTENT

The information included on the *My School* website comes from a number of different sources. School information and student results should be considered within their State or Territory, sector and school context. Some schools do not, for instance, provide data on senior secondary outcomes in terms of vocational education and training or other pathways achieved following students' completion of high school.

3.5.1 Website Pages

The front page of the *My School* website allows users to search the site and find a particular school. Users can search using a school name or postcode, and can search by sector for government or non-government schools. It is also possible to can also search by school type, based on the standard categories used by the Australian Bureau of Statistics, which are:
- primary;

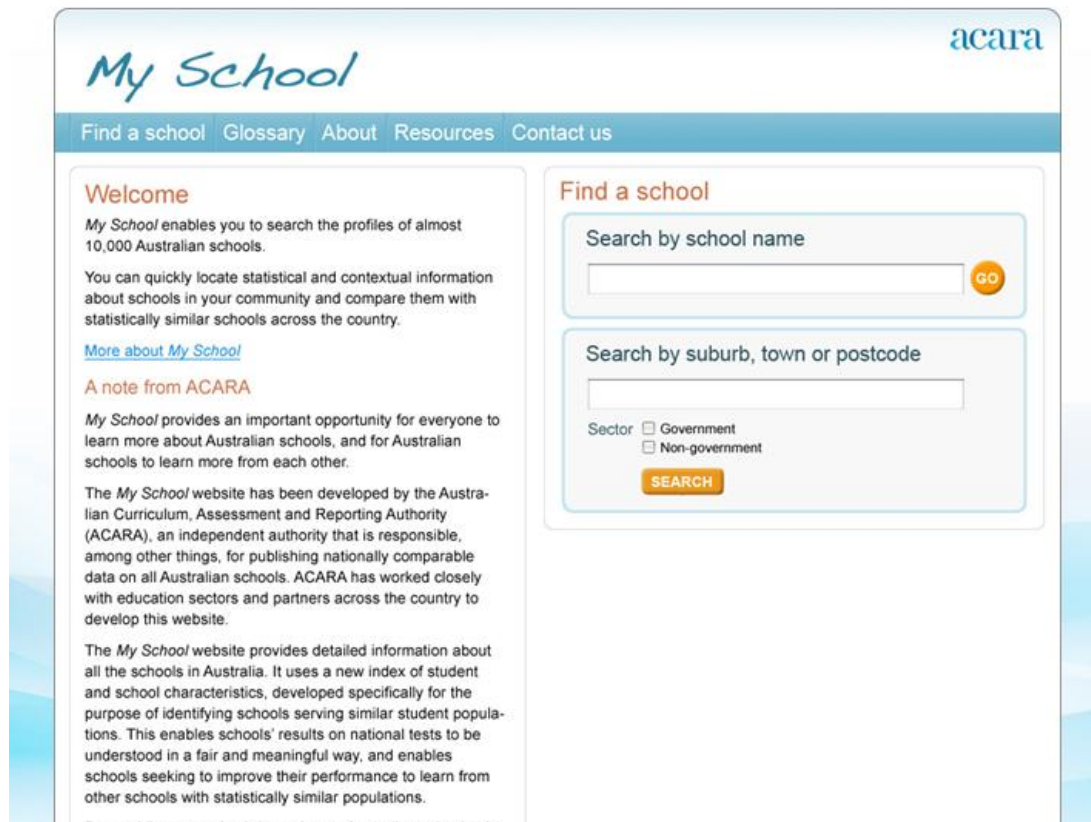- secondary; and
- combined primary and secondary.

FIGURE 1: Front page of *My School* website

Once the school in question has been located, users will come to the homepage for that school. For the purposed of this paper, the fictitious 'Elsewhere Primary School' has been used as an example.

The website has four key elements, each with a dedicated webpage. They are shown here on the sidebar menu on the *My School* homepage. As shown on the sidebar menu, the elements are:

- School profile — an overview of key information about the school as well as comparative data on average results for NAPLAN tests in 2008 and 2009.
- Results in bands — detailed analysis of the collective results of students in bands. It provides more detail on where the range of student achievement lies in a school in comparison with the information on the homepage.
- Statistically similar schools — average NAPLAN scores of the selected school compared with those of up to 60 statistically similar schools, displayed in alphabetical order.
- Local schools — a list of up to 20 schools closest geographically to the school selected.

3.5.2 School Profile
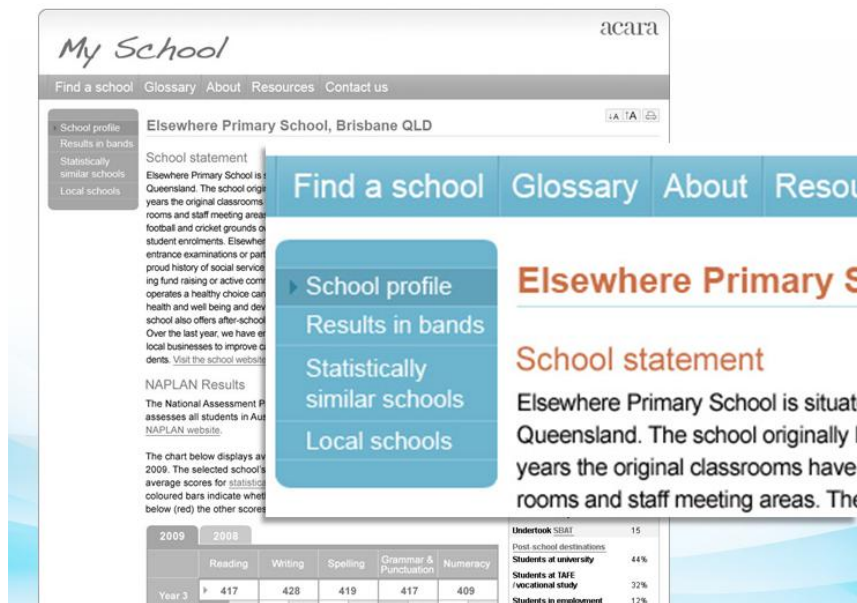
FIGURE 2: School profile on *My School* website

The first element of the profile page is the school statement text, which is an important part of the overall school profile. The statement description has been provided by schools, or by education systems on behalf of schools, and is the first thing that users see at the top of the page. The statement is an opportunity for schools to tell people about their context, including the community they are part of, and the core values they hold. Importantly, where schools have a website of their own, it includes a link to that website. By leaving the *My School* website and to the school's own website, users can find out more detailed information about that school and the types of programs they offer.
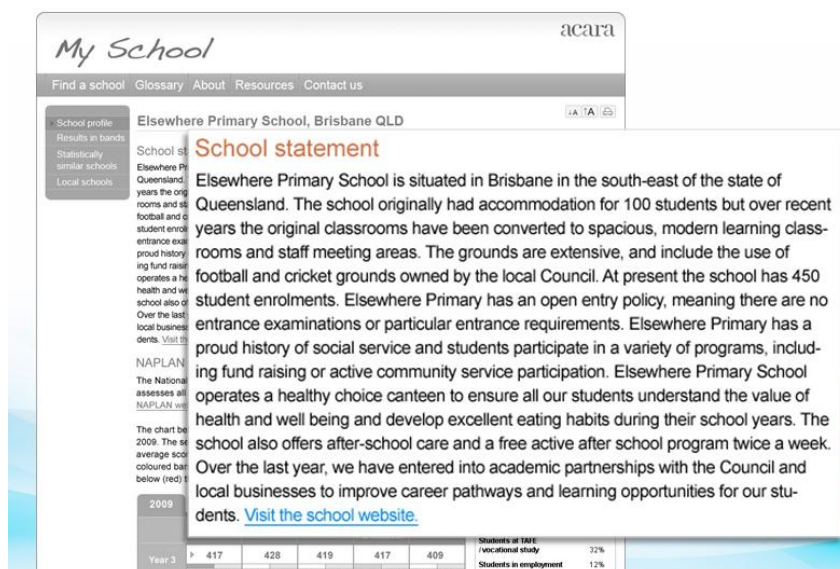
FIGURE 3: School statement on *My School* website

Next are the 'School Facts' and 'Student Background' sections of the school profile page. This contains important indicators about how many students are enrolled, how many teachers there are, and the socio-educational profile of the school.
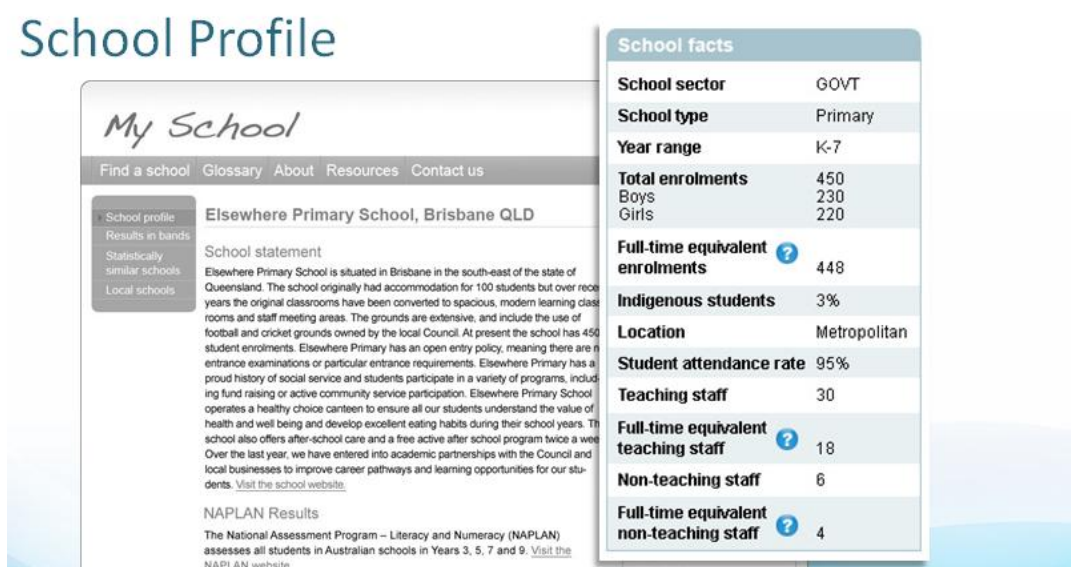
FIGURE 4: School facts on *My School* website

School sector

Australia's education system is comprised of government and non-government schools. The 'School facts' section does not provide additional information on the type of non-government school. This information is only available in the overview ('School statement') that was provided by the school.

School type

In line with ABS practices, ACARA lists secondary schools, and combined schools (combining the primary and secondary school) as the school type. There are also a range of special purpose schools. Where these schools have been identified as being for a special purpose by the States and Territories, they have been given the school type 'Special' on the *My School* website. Special purpose schools include different school types, such as juvenile justice schools. In the first release of the *My School* website, academically selective schools have not been listed as a school type.

Year range offered by the school

The schooling years on the *My School* website include Year 1 to Year 12 and the various provisions for education prior to Year 1 which are part of the schooling system in each State and Territory. The abbreviations for school years used on the *My School* website are consistent with the abbreviations used by the school education systems. For example, K is kindergarten; P is preparatory. The ages that children start school are not currently reported on the *My School* website. This varies across States and Territories.

Total enrolments

Enrolments are counted in two ways: firstly, through a head count of students and secondly, through fulltime equivalent enrolments of students. The total enrolment figure uses the head count method and includes both full-time and part-time enrolments.

Full-time equivalent enrolments

A full-time student is one who undertakes a workload equivalent to, or greater than, that prescribed for a full-time student of that year level. This may vary between States and Territories and from year to year. A full-time equivalent enrolment is registered as 1.

A smaller enrolment is represented as a proportion of the full-time enrolment. For example a half-time enrolment is 0.5.

Percentage of Indigenous Australian students

A student is considered to be an Indigenous Australian if he or she identifies as being of Aboriginal and/or Torres Strait Islander origin. The term 'origin' is considered to relate to people's Australian Aboriginal or Torres Strait Islander descent and for some, but not all, their cultural identity.

Location

There are four categories of geographic location commonly used to describe school locations: metropolitan, provincial, remote or very remote. 'Metropolitan' is an area in each state or territory within close proximity of its capital city. 'Provincial' is an administration division within a country or state. 'Remote' is an area considered spatially distant from the capital city of that state or territory. 'Very remote' is an area considered spatially very distant from the capital city. More specific definitions are provided by the Australian Bureau of Statistics.

Student attendance rate

The student attendance rate is collected by schools and supplied for an agreed comparative period during the 2009 school year. It refers to the number of actual student days attended during the period as a percentage of the number of possible student days attended during the period. It includes the total (aggregated) attendance across year levels 1 to 10 for the relevant school. It does not include pre-Year 1 attendance, except in government schools in Victoria. In Victoria, this attendance data includes Prep and covers the 2008 year, but does not include the 2009 attendance rates.

School staff

Numbers of school staff cited are provided by the school sector or system. Some school sector/systems only provide numbers of staff employed by the sector/system. In these situations, staff employed directly by the school are additional to the figure stated.

Teaching staff

The head count of full-time and part-time teaching staff employed by and assigned to schools.

Full-time equivalent teaching staff

This is the same data provided under teaching staff numbers with full-time staff counted as 1.0, and part-time staff represented as a proportion of the full-time load. For example a staff member who teaches halftime is counted as 0.5.

Non-teaching staff

The head count of full-time and part-time staff employed at the school who are not included in the teaching staff category.

Full-time equivalent non-teaching staff

This is the same data provided under non-teaching staff numbers, with full-time staff counted as 1.0, and part-time staff represented as a proportion of the fulltime load. For example a staff member who works half-time in a non-teaching capacity is counted as 0.5.

This page also shows a school's ICSEA value. ICSEA quarters for each school are displayed in percentages. This gives contextual information about the socio-educational composition of the student population. If students at a school were drawn proportionally from the broad spectrum of the community, then theoretically there would be 25% in each quarter.

FIGURE 5: Student background on *My School* website
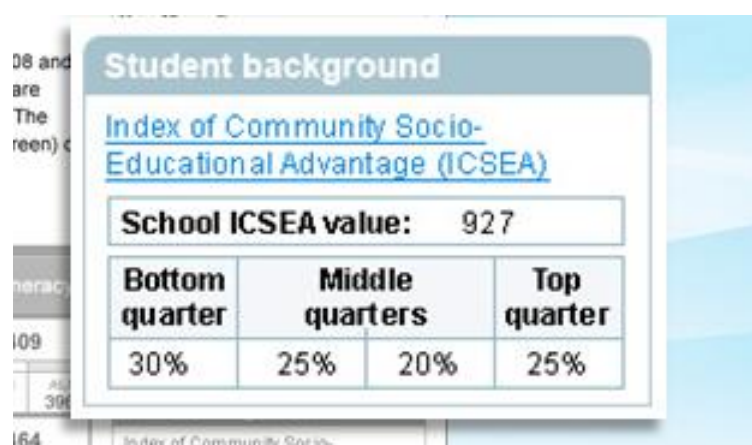
For schools with students in the senior secondary years, the website includes information about:
- Year 12 results;
- vocational education and training participation and achievement; and
- education and employment pathways of secondary students after they have left school.

Senior secondary outcomes

On the bottom right hand corner of the page are details about the school's senior secondary outcomes. This data has been provided by the Australasian Curriculum, Assessment and Certification Authorities. As different jurisdictions use different definitions for these data, data is not currently comparable between jurisdictions. Definitions for some of the terminology used are provided below.
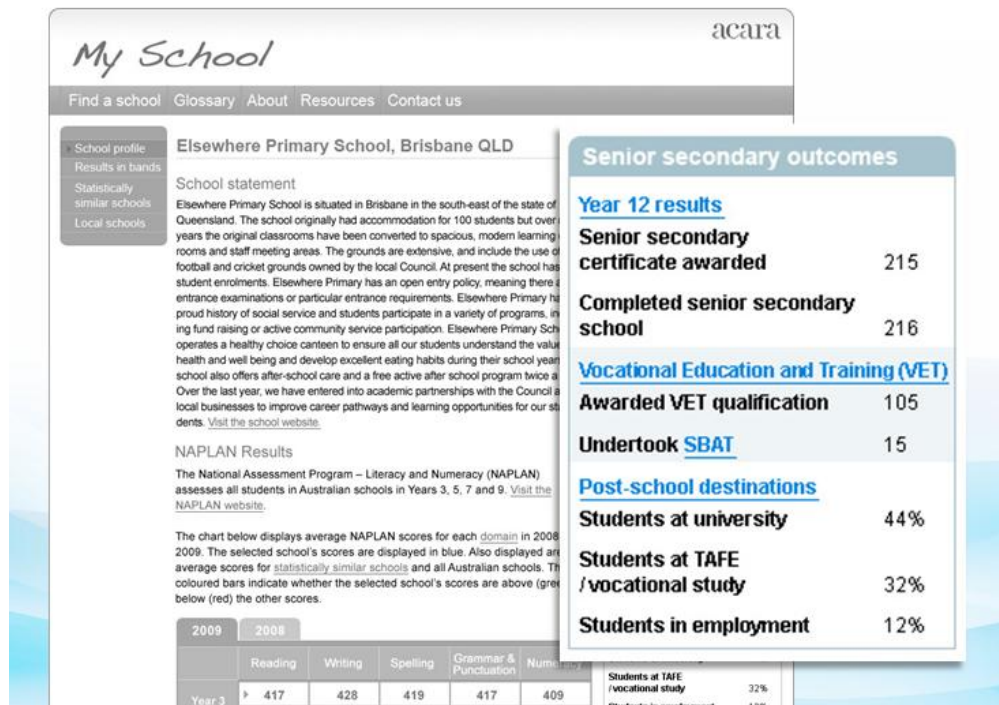
FIGURE 6: Senior secondary outcomes on *My School* website

SBAT is the name that is given to two programs: School-based Apprenticeships and School-based Traineeships. These programs provide the opportunity for students to combine paid part-time employment, and study towards a nationally credentialed program, while continuing at school and completing their high school certification. Depending on the pattern of study, an Australian Tertiary Admission Rank can be achieved.

Vocational Education and Training (VET) is education and training that focuses on providing skills for work. VET provides many skills for people in a vocational environment. VET courses are offered in schools and colleges, community centres, TAFE institutes and other registered training organisations. In these organisations VET may be provided off-the- job and/or in a workplace environment. For example, workplace training is a significant part of all apprenticeships and traineeships.

The last set of information on this school profile page is summary information about NAPLAN outcomes for the students in a school. NAPLAN results from 2009 and 2008 can be viewed. This section will appear only if the school has year 3, 5, 7 or 9 students. The fictitious Elsewhere Primary School is a K–7 school in Queensland, so it has year 3, 5 and 7 NAPLAN results shown.

This section provides the mean scores of the school's students on the achievement scale. Each scale has an average score of 500, with around 68 percent of schools with average scores within the range 400 to 600 in each of the NAPLAN domains of reading, writing, language conventions (spelling, grammar and punctuation) and numeracy.
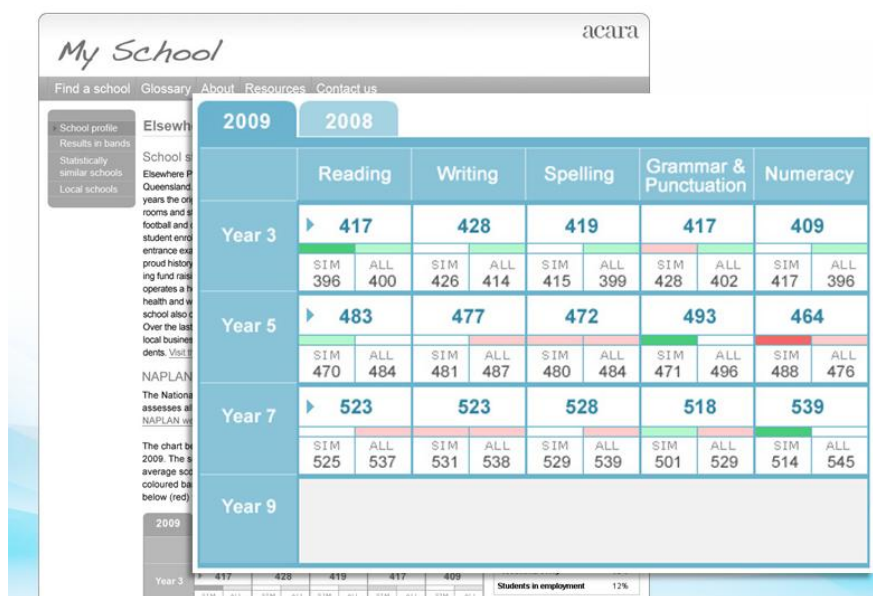
<u>FIGURE 7</u>: Summary NAPLAN outcomes on *My School* website

The example above of Year 5 Reading in 2009 shows Elsewhere Primary School's students had a mean score of 483. Underneath that score there are two other mean scores.

- The mean Year 5 Reading score for students of all schools in the statistically similar group (that is, those schools that have a similar ICSEA index — in this case the mean score for students from statistically similar schools is 470).
- The mean score for students from all schools in Australia — in this case it's 484.

This allows the performance of students of a particular school to be located relative to students in the rest of Australia, as well as relative to students of schools of a similar type that serve similar cohorts of students.

The other feature that helps with this comparison is colour coding. Colour coding gives a quick reference guide to locate the performance of students from a school against students from the rest of Australia and students from statistically similar schools.

Green indicates that the performance of students in a school is above the average, and red indicates that it is below average. Brighter shades of each colour indicate that the students in a school are substantially above or below the average. No shading — white — indicates that the mean performance of students in a school is close to the average of students from statistically similar schools or to students from all schools.

In the example above of Year 5 Reading, where there is a score of 483, the students of Elsewhere School are above the average of those from statistically similar schools, as shown by light green shading, but close to the average of those from all Australian schools, as shown by no shading.

Across the data for Year 5 Numeracy, it can be seen that Elsewhere School's students have a mean score of 464, which is significantly below the average for the students of its statistically similar school group, as shown by the bright red shading, and below the average for students in all schools, as shown by the lighter red shading.

3.5.3 Results in bands

The next page for each school's is the 'Results in bands' page. This page goes deeper into the NAPLAN results for a school's students and illustrates the spread of achievement by showing the proportion of students in each of the NAPLAN bands.

Results from NAPLAN tests are shown in bands of achievement, from a bottom band, which indicates performance which is below the national minimum standard, to a top band, indicating achievement at that level or higher. For any given year level, for example Year 7 Reading, there are six achievement bands. These bands fit into a single scale of 10 achievement bands that span all the NAPLAN tests a student will undertake in their schooling years (over Years 3, 5, 7 and 9). This single scale allows students, teachers and parents to monitor progress across the years and compare results to those in previous years as students advance through school.
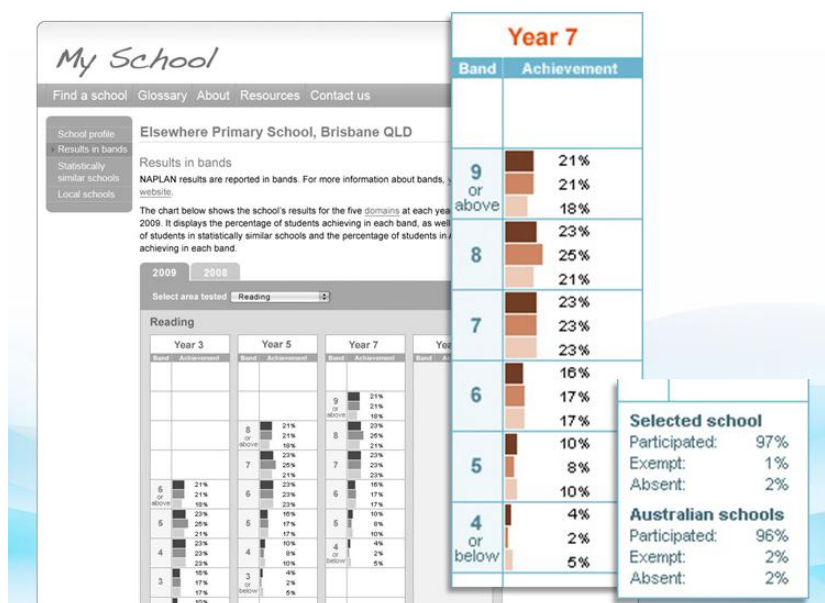
FIGURE 8: NAPLAN Results in bands on *My School* website

This page shows information about the distribution of students' scores at each year level by NAPLAN domain, compared with students in the statistically similar schools, and also those in all schools across Australia.

This page also gives details about the school's student participation rate in NAPLAN, as well as the percentage of students who were exempt and absent from the test.

Participation, absentee and exemption rates for NAPLAN tests

The proportion of students who participated in the NAPLAN tests is displayed at the bottom of the chart which shows NAPLAN results in bands. Also displayed are absentee rates and exemption rates (where students have received an exemption from the test because they have a language background other than English and have arrived from overseas less than a year before the tests, or because they have significant intellectual disabilities). These rates are compared for the selected school and nationally. Participation rates do not include exempt students.

Schools and classes with small populations

In the case of individual schools, the larger the number of students taking the tests, the greater the confidence one can have in the accuracy of the school mean scores as true measures of student performance. For this reason, indicative confidence intervals are reported for schools with varying numbers of students, and no mean scores are reported where there were fewer than five students participating in a test for a particular NAPLAN year.

3.5.4 Statistically similar schools

The third key feature on the website is the webpage link to 'Statistically similar schools'. Here you can see a list of up to 60 schools that have a similar student population to Elsewhere Primary School. These 60 schools have ICSEA values that are closest to the value of Elsewhere Primary School, making them a group of statistically similar schools.

FIGURE 9: Statistically similar schools on *My School* website

This list of statistically similar schools allows you to compare average student results on NAPLAN tests with those of students attending other schools in a similar group. The schools in the group could be from all over Australia.

This is the only comparison of individual schools that is shown on the website. In the example of Elsewhere School, it is shown on the first line of the list. All the other schools will be listed alphabetically, not in order of students' results on NAPLAN tests.
Colour coding is again used to indicate where student results are substantially above or below those of students in the selected school. This colour coding is different to the red and green colour coding used on the profile page.

Schools with students achieving higher average results are shown in purple, and those with student results below those of the selected school are in orange. The brighter shades represent schools where average student results were significantly above or below those of the selected school.

Looking at Year 3 reading for example, it can be seen that the second, unnamed school is showing bright purple, which means its students' average score is substantially above that achieved by students at Elsewhere School. Schools shaded purple are those where students are doing better on average than those at the selected school. It is then possible to find out more about those schools by clicking on the name of the school, and this will take you to that school's profile homepage.

3.5.5 Local Schools

The final page provides a list of all schools — government and non-government — that are the closest geographically to the selected school. It shows a list of up to 20 schools closest to the selected school. In a city, these schools could be quite close together. In remote and rural areas, the 20 closest schools may be separated by great distances. If the distance is deemed excessive, the list may be shorter than 20 schools. From this list, clicking on the school name will take the user to the profile school page for that school. This page does not allow any online comparison of schools.

FIGURE 10: Local schools on *My School* website

By 25 June 2010, the *My School* website had received 2,445,308 visitors and 3,368,847 visits.

3.6 NEXT STEPS

The original plans for the *My School* website envisaged staged development, with some elements that could not be completed for the first version added in the second in 2010 and third in 2011. In meetings over the past 13 months, ministers of education have asked the ACARA to investigate additional proposals for enhancing the *My School* website. The following is a brief summary of the proposals now under consideration.

3.6.1 School financial data

Ministers have agreed that financial data for each school will be published in the second 2010 iteration of the website. This is intended to include 2009 recurrent income, disaggregated by source of funding (federal government; state and territory governments; school-initiated fees, charges and voluntary contributions, and; other sources). It is also likely to include capital expenditure in 2009, also broken down by source of funding. Deloitte is assisting with the collection and validation of the data to ensure that they are accurate and comparable across states and territories and across government and non-government schools.

3.6.2 Nationally comparable senior secondary information

Currently limited data are displayed on the *My School* website and these are comparable only within individual states or territories. Work is underway to obtain more nationally consistent data, especially indicators of senior secondary outcomes and including information relating to Year 12 attainment and tertiary entrance scores.

3.6.3 Satisfaction with schooling

ACARA has been requested to investigate the feasibility of a national satisfaction survey of parents, teachers and students to enable nationally comparable satisfaction information to be published on the website in future. It is hoped that this will be available for inclusion in the 2011 version of the *My School* website.

3.6.4 Student population indicators

ACARA will expand the reporting of contextual information about schools by publishing the percentages of students with disabilities (as indicated by those in receipt of special provisions) and of students with a language background other than English.

3.6.5 Growth data on literacy and numeracy achievement

Ministers have asked ACARA to provide advice on ways of reporting the growth in learning of students who took NAPLAN in 2008 and 2010. In the absence of unique student identifiers, the analysis will be restricted in the 2010 *My School* release to students who were in the same school in both years. For primary schools, an indication of growth between

Years 3 and 5 should be available later this year and, for Queensland, Western Australia and South Australia, also between Years 5 and 7. For secondary schools in NSW, Victoria, Tasmania, ACT and the Northern Territory, a measure of growth between Years 7 and 9 will be available in most cases.

3.6.6 Teaching staff levels of expertise

New national certification/registration standards for teachers are being developed. It is intended that once they have been implemented, information on proportion of teachers at each level of expertise will be published. These data will not be available for the 2010 version of the *My School* website.

3.6.7 Using student-level data to compute ICSEA

For the first release of the *My School* website, ICSEA was developed from the characteristics of the ABS CCDs in which students' home addresses were located. Ministers have asked ACARA to investigate the feasibility and appropriateness of making use of student-level SES) such as information on their parents' or carers' education and occupation. Some states and territories have this information but it was not used for the initial *My School* website because others did not. Two approaches are being considered. One is to obtain the family information in all jurisdictions. The other is to use it for those jurisdictions that have it and to continue to use home addresses and CCD data for the others.

3.6.8 Other enhancements to ICSEA

Ministers have endorsed ACARA's proposals to investigate:
- obtaining updated and comprehensive home address data for all students to improve the accuracy of ICSEA in cases where Census Collection District Data are used;
- including within the ICSEA formula a variable to take account of the effect of language background other than English;
- improving the process for quality assuring ICSEA values for individual schools and, for those for which Census Collection District data are used, identifying instances where the initial estimate is inappropriate.

3.6.9 Reporting of results

Ministers have endorsed ACARA's proposals to investigate:
- allowing users to refine their search for like and statistically similar schools;
- providing a facility for users to view NAPLAN results for all students in the school, or for all students excluding students attracting special provisions;
- providing a facility for schools to provide a commentary on their NAPLAN results;
- and displaying more prominently information about student absences, withdrawals and exclusions from NAPLAN testing.

3.6.10 Action to minimise misuse of My School data

Ministers have endorsed ACARA's proposals to investigate:
- a 'click-wrap' requiring users to indicate their agreement up-front to terms and conditions of use of *My School* data;
- ways of deterring or preventing automatic scraping of data from the website.

ACARA will report on the progress of each of these measures to meetings of the Ministerial Council in August and October 2010.

In addition, Professor Barry McGaw is the chair of an important group of stakeholders who will provide advice to the ACARA Board's Assessment and Reporting Committee on these matters. The Working Party is made up of educational experts including literacy and numeracy specialists, principal organisations and representatives of the Australian Education Union and the Independent Education Union of Australia, and will provide further professional advice on the use of student performance data and other indicators of school effectiveness as ACARA develops additional improvements to the *My School* website. The My School Working Party held their first meeting on 17 June 2010 and under its terms of reference (Appendix 15) is due to provide final advice to ACARA by Friday 27 August 2010.

APPENDICES