AHISA LTD
ASSOCIATION OF HEADS OF INDEPENDENT SCHOOLS OF AUSTRALIA

25 May 2016

National Education Evidence Base
Productivity Commission
Locked Bag 2, Collins Street East PO
MELBOURNE VIC 8003

Emailed to: education.evidence@pc.gov.au

Inquiry into the further development of the national evidence base for school and early childhood education

The Association of Heads of Independent Schools of Australia (AHISA) welcomes the opportunity to contribute to Productivity Commission's inquiry into Australia's education evidence base.

AHISA endorses the submission of the Independent Schools Council of Australia (ISCA) to the inquiry. ISCA's submission sets out the data collection regimes in which independent schools are required to participate and issues arising for schools as a result. ISCA also describes the sector's concern over the potential use of data for purposes for which they are not intended, such as if ICSEA scores were to be used for the calculation of governments' recurrent funding for non-government schools.

To supplement ISCA's submission, AHISA outlines developments in school-level data collection on student achievement that may help to inform the Commission's deliberations. We also provide comment on the issue of creating a Unique Student Identifier for all school students. We further suggest some principles that might be applied to the development of a 'long term vision for educational data holdings' or any proposed framework to guide data collection, access and use.

AHISA's submission includes four recommendations:

> **Recommendation 1:** To support student learning and teacher feedback, national and state student testing regimes such as NAPLAN should incorporate development of and allow access to an associated software application to assist schools analyse their students' data.
>
> **Recommendation 2:** Schools must be able to access their students' data from external tests in a form that allows them to incorporate the data in existing LMSs or to apply commercially available or custom-developed analytic tools.

AHISA National Office | Unit 17 National Associations Centre | 71 Constitution Avenue | Campbell ACT 2612
Phone 61 2 6247 7300 | Fax 61 2 6247 3677 | Email enquiries@ahisa.edu.au | www.ahisa.edu.au | ABN 99 006 107 124

About AHISA

The primary object of AHISA is to optimise the opportunity for the education and welfare of Australia's young people through the maintenance of collegiality and high standards of professional practice and conduct amongst its members.

The membership of AHISA Ltd comprises Principals of 410 independent schools with a collective enrolment of some 418,000 students, representing 11.2 per cent of total Australian school enrolments and 20 per cent of Australia's total Year 12 enrolment. AHISA's members lead a collective workforce of some 40,000 teachers and 25,000 support staff.

Some 80 per cent of AHISA's members' schools provide for early childhood education and care through early learning centres.

Recommendation 3: Any proposal to introduce a school USI should be case tested against a review of the VET USI scheme.

Recommendation 4: Sample testing and surveying provide rich information for policy development and minimise administrative burdens for schools and intrusion on the privacy of families and students. Sample testing and surveying should be the preferred data collection methods in the school education sector for policy development purposes.

There are also key points highlighted in the submission:

KEY POINT 1
Governments could more readily and effectively improve student achievement by assisting teachers and schools embrace the benefits of student data analytics rather than by making test data available for school comparisons.

KEY POINT 2
It is of concern that the Australian Government regulates the curricula schools must provide but measures school performance and develops policies that dramatically affect the work of schools based on international standardised tests not linked to those curricula.

1. Student achievement data

There is a growing trend in schools to collect and analyse student achievement data to inform differentiated (personalised) learning plans for students with a view to improving student outcomes. (By way of example, an article from the current issue of AHISA's journal, *Independence*, is attached to this submission. The article describes how one AHISA member's school is using literacy achievement data for targeted teaching.)

This trend is supported by schools' access to digital technologies, which allow for compilation and cross-analysis of student data in a range of fields, including class attendance and co-curricular

engagement, and the now commonplace expectation that schools will make available to teachers either their own laptop or other individual access point to the school online learning management system (LMS).

In the independent sector, it is becoming increasingly common for schools to create a role such as Director of Learning Analytics at senior management level, or incorporate a data analytics role within a position such as Director of Teacher and Learning.

The creation of a specific position or role is one way independent schools help keep to a minimum the time burden on teachers of data analysis. For example, working with information technology staff or contractors, the Director of Learning Analytics might develop a tool that allows teachers to easily interpret their students' data by creating a 'dashboard' of indicators; similarly, schools might invest in commercially available analysis tools. Such approaches also mean teachers do not need high level IT expertise to manipulate the data or extract the information they need, and therefore minimises professional learning costs.

Analysis of student achievement data is also an important feedback tool for teachers on their classroom practice and can inform targeted teacher professional development.

a. Schools and NAPLAN

NAPLAN results represent a significant data set for school-based data analysis in that they can illustrate student understanding against a specific set of questions. However, the usefulness of NAPLAN data has been limited by the time lag between testing and availability of student results and by what is termed its 'contextless' nature. That is, NAPLAN tests have not been linked to the curriculum delivered by schools. It is expected that the eventual move to online testing and linking of tests to the Australian Curriculum standards will increase the usefulness of the data to schools to improve student learning. However, there are concerns within the independent sector relating to online NAPLAN testing, and these are set out in ISCA's submission to the Inquiry.

Of note is that schools must access software tools if they are to interrogate the NAPLAN data in a form useful for school-wide and classroom application. This may be by accessing their centrally held school data (via password) and applying an associated online tool, as with NSW's SMART system[1], or by downloading a diagnostic tool, as with Queensland's SunLANDA software application[2]. (Other jurisdictions have also developed diagnostic tools: Victoria offers the NAPLAN Data Service[3] and Western Australia the Student Achievement Information System[4]. The independent schools sector has also invested in software applications to help schools add value to their participation in NAPLAN testing.[5]

The multiple applications available for analysis of NAPLAN data suggest that national student testing regimes such as NAPLAN could be augmented by a ready-made software application to assist school systems and individual schools interrogate their students' data to enrich student learning and teacher feedback.

> **Recommendation 1:** To support student learning and teacher feedback, national and state student testing regimes such as NAPLAN should incorporate development of and allow access to an associated software application to assist schools analyse their students' data.

The recent announcement by the Turnbull government that should it retain government in the 2016 federal election it would mandate 'assessing children in reading, phonics and numeracy during Year 1', as well as 'reporting annually to parents against agreed national literacy and numeracy standards for every year of schooling'[6], suggests the possibility of the introduction of at least one new national standardised test. This, plus the necessity of tracking student progress against national standards for literacy and numeracy for reporting annually to parents, reinforces the recommendation above. Provision of a simple, downloadable software tool, or even an Excel template with embedded formulae and chart generators, if appropriate, would help schools make the most of mandated data collection to personalise learning programs for students.

It is important to note that school systems and individual independent schools have already made significant investments in LMSs, and that the most useful data sets will be those that are available to schools to use within their LMS. The rapidly developing sophistication of student data analytics makes it increasingly important for schools to be able to download their students' data and be free to apply commercially available or custom-developed tools to the data.

> **Recommendation 2:** Schools must be able to access their students' data from external tests in a form that allows them to incorporate the data in existing LMSs or apply commercially available or custom-developed analytic tools.

In its submission, ISCA also notes that that a minimum 12 months' lead time before data collection or reporting changes are introduced is necessary if commercial software providers and schools are to be able to adapt existing tools and systems to new arrangements.

In its Issues Paper related to this Inquiry, the Commission notes that the primary focus of the Inquiry is about 'how education data can be used as an evidence base to improve outcomes' (page 8). A key consideration for the Commission will therefore be how to make national testing data and appropriate diagnostic tools readily available to schools, and what the role of governments might be in providing for teacher professional development in the application of those tools.

With the move to link NAPLAN more closely with the Australian Curriculum standards, consideration could be given to the development of online metrics and diagnostic tools for voluntary use by schools and/or teachers for students in Years 2, 4, 6, 8 and 10 (ie non-NAPLAN years) to help track student development and make appropriate interventions. That is, governments could more readily and effectively improve student outcomes – and therefore reach national education goals – by assisting teachers and schools embrace the benefits of student data analytics rather than through the use of test data for school comparisons.

> **KEY POINT 1**
> Governments could more readily and effectively improve student achievement by assisting teachers and schools embrace the benefits of student data analytics rather than by making test data available for school comparisons.

b. Schools and PISA

Australia's ranking in the OECD's Programme for International Assessment (PISA) tests has been shown to significantly influence national education policy making in Australia. Key performance measures in the Measurement Framework for Schooling in Australia 2015[7] include the proportion of

students achieving at or above the proficient standard (Level 3) on the PISA combined reading scale, combined mathematics scale and combined scientific literacy scale. Both the Coalition and ALP[8] policy documents issued this year use Australia's slide in PISA rankings and the slide in Australian students' performance against the PISA proficiency standards since 2001 as either cause for increased investment in school education or for specific policy interventions.

The ALP's policy retains the former Gillard Labor government's national targets, that Australia will be placed in the top five countries internationally in reading, mathematics and science by 2025 and designated as a high quality and high equity schooling system by OECD standards by 2025.

Academic articles and books on 'PISA shock' or the 'PISA effect' on nations' education policies and the relative merits of that influence now abound.[9] Whether or not it is agreed that PISA is a reliable instrument for benchmarking student performance internationally, it is of some concern that the Australian Government regulates the curricula schools must provide but measures school performance and develops policies that dramatically affect the work of schools based on international standardised tests not linked to those curricula.

> **KEY POINT 2**
> It is of concern that the Australian Government regulates the curricula schools must provide but measures school performance and develops policies that dramatically affect the work of schools based on international standardised tests not linked to those curricula.

c. Data linkage

If one of the most important roles of schools is to help students master the state-mandated curriculum, then senior secondary assessment, conferral of state-based certificates of education (such as WACE, SACE, VCE, HSC) and achievement of a tertiary entrance score or ATAR must rate as significant measures of school performance and therefore of policy development.

It is of interest that the Victorian Government recently commissioned full cohort analysis of Victorian students' NAPLAN data with their tertiary entrance performance.[10] This form of data linkage allows a more nuanced view of how schools are performing in their primary task of curriculum delivery.

Nationally, since 2003, the Longitudinal Survey of Australian Youth (LSAY) has added value to Australian students' PISA results by drawing on these students to create the initial wave of LSAY participants. As argued by the National Centre for Vocational Education Research, harmonisation with participants' NAPLAN results will deliver even richer information.[11] As each LSAY waves begins with 10,000 students, it is AHISA's view that the information obtained through this sampling is sufficiently rich for policy development purposes.

Linkage of Australian Early Development Census (AEDC), Longitudinal Survey of Australian Children (LSAC) and NAPLAN data has provided insights that could help inform policies about investment in early years learning. There is evidence that governments are more willing to invest in pre-school education and early intervention schemes for children at risk, based on AEDC findings.

As noted above, the Coalition's recent school education policy document lists an intention that Year 1 students are to be assessed in reading, phonics and numeracy. No detail is yet available on the form of that assessment and whether a national data collection program in the style of NAPLAN is

envisaged. If testing and analysis is to be entirely school-based, AHISA sees a place for the development of a common metric that could be applied by schools or incorporated in existing assessment/diagnostic tools. This would have the advantage of families involved in longitudinal sample studies such as LSAC and the Australian Temperament Study agreeing to make their child's results available to augment these studies.

As per our Recommendation 1, an analytical tool could be developed in association with the metric and posted online, either for downloading by schools or to which schools could upload a CSV file of student results for analysis.

d. Sector comparisons

Ostensibly, the reporting of NAPLAN data on the federal government's My School website creates transparency in Australian school performance and informs parents about the relative performance of their child's current or future school. The Australian Curriculum Assessment and Reporting Authority (ACARA), which conducts NAPLAN and publishes My School, itself uses NAPLAN student gain data to identify high performance schools as a means to share successful practice. The media and some researchers typically use NAPLAN data to create league tables of schools or for sector comparisons.

While PISA data do not allow for the ranking of schools within a nation or economy, in Australia the data are used for sector comparisons.

It should be noted that classification of non-government schools in Australia as 'Catholic' or 'independent' is not consistent. While the federal and state and territory governments define Catholic systemic schools as a distinct sector for funding purposes, for historical reasons Australian Bureau of Statistics (ABS) Schools Australia data define Catholic schools by religious affiliation. In some data sets, the designation 'Catholic' therefore encompasses both Catholic systemic and independent Catholic schools.

When used for analysis of NAPLAN data, the ABS classification appears to weaken some sector comparisons, such as the analyses of NAPLAN and Year 12 data undertaken recently for the Victorian Government. It certainly weakens any attempt to analyse the effects of school autonomy on student achievement in Australia and would be a potential flaw in the proposed Australian Longitudinal Learning Database. While school autonomy has been a focus for recent federal government and some state-based policy initiatives, given the value of ABS time series data on schools, and its linkages with other data sets, it would be difficult to overcome this sector classification anomaly.

2. Unique Student Identifier

The introduction of a Unique Student Identifier (USI) for school students was last proposed by the Rudd government in 2010, for the purposes of measuring student gain in NAPLAN. The proposal was widely criticised, not least because of privacy fears. In spite of in-principle agreement by state and territory governments to the proposal, it did not eventuate. However, even without a USI, ACARA now maps student gain across NAPLAN tests and reports gain at school level on My School. The rationale for introducing a national USI scheme on the basis of measuring student gain is therefore weaker.

Depending on their state or territory location, schools may have to obtain a state-based identity number (ID) for students. Every school certified to offer the senior secondary curriculum will need to obtain an ID for students sitting Year 12 examinations. If the school is a registered training organisation, it will need to deal with the national USI scheme for VET students. In other words, most schools will already be familiar with applying for and using some form of external student ID.

The practice of issuing IDs varies from state to state. For example, in Victoria all students are assigned a Victorian Student Number at the time they first enrol in a school, irrespective of school sector. In Queensland, students in state schools are issued with a departmental ID, Catholic systemic schools use a different ID system and independent schools choose whether or not to issue their own student number.

The existing widespread use of IDs in school systems and overlap of the VET USI with schools supports the case for introduction of a USI for all school students.

AHISA recognises that a USI issued on students' first enrolment in a school could have value over the students' school career in order to track their progress irrespective of the state or territory in which they reside and – if the USI had blanket application (that is, for external testing or VET enrolment) – for potentially easing the administrative burden on schools. However, concerns over data privacy and fear that introduction of a school USI would be the first step to tracking and surveillance of all Australian citizens become increasingly potent as digital technologies evolve.

AHISA believes the introduction of the VET USI offers a viable case for testing the expectations and concerns at play around the introduction of a school USI.

> **Recommendation 3:** Any proposal to introduce a school USI should be case tested against a review of the VET USI scheme.

3. The future of data collection and reporting

AHISA is concerned by the apparent tendency to increase the reporting burden on schools and add to the data fields published on My School in the name of 'transparency'. For example, under direction of the Education Council, ACARA is currently assessing the feasibility of publishing data on the enrolment of students with disability on My School. The Coalition notes in its *Quality Schools, Quality Outcomes* policy document the intent if it wins government for schools to report on My School employment data such as the number of teachers at each level (Graduate, Proficient, Highly Accomplished and Lead) of the Australian Professional Standards for Teachers.

Schools are already collating and supplying data to the federal government on students with disability for the purposes of determining federal funding loadings. No doubt ACARA could link to this data to avoid imposing an additional collection burden on schools. However, when the federal and state and territory governments have access to data for the purposes of policy development, AHISA questions the degree to which reporting these data on My School will add to the public's understanding of the teaching and learning context of a school.

Similarly, as teachers must meet registration requirements linked to the Australian Professional Standards for Teachers, and as certification at the Highly Accomplished and Lead levels of the Standards is undertaken by assessors external to schools and under the auspices of the Australian

Institute for Teaching and School Leadership (AITSL), it is not clear whether collecting and publishing data from schools on certification levels of their teachers against the Standards can add further to the information required by governments for the purposes of policy development. Further, it is doubtful if such information would add to public understanding of the 'quality' of schools. Schools are already obliged to list the qualifications (as opposed to certification levels) of teachers in the annual reports that are a requirement of federal funding and which are published on their own websites.

At the same time as schools face the likelihood of ever more reporting obligations, and the possibility of an increasing data collection burden, there are calls for 'new metrics' of students' skills and attributes for life and work in the 21st century, including 'students' abilities to work in teams, use technology, communicate, solve problems and learn on the job'.[12] Defining and assessing creativity and collaboration was also a focus of the Assessment and Teaching of 21st Century Skills (ATC21S) project led by the University of Melbourne.[13]

Sample testing of Australian students' creative problem solving skills is already undertaken through Australia's participation in PISA. The OECD tested problem solving as an adjunct to PISA 2003 and 2012, separate to testing in mathematical, scientific and reading literacy. Australian students ranked high in the 2012 tests, with students in only three countries and four economic regions (all from the Asian continent) performing significantly higher than Australia.[14]

In spite of these results, governments, policy think tanks and research institutions with a commercial interest in school assessment continue to promote the notion of a 'crisis' in Australian schooling as a platform for a range of interventions in schools, which invariably include recommendations for further compulsory student measurement and reporting.

AHISA acknowledges the need for national data collection on schools and student achievement to satisfy accountability requirements of governments, to inform government policy making and to report adequately to the public on a matter of national importance. We are also aware that the inappropriate and cynical use of selective schools data for political or commercial purposes, including school 'improvement' programs, has made schools wary of proposals to broaden the capture of student achievement data in NAPLAN. Schools are, however, very interested in the collection and analysis of data that can have an immediate impact on teacher practice and student learning and in tools that can expedite this process.

As mentioned above, AHISA believes governments have a role to play in developing analytic tools for schools to apply to the student data they are required to collect for governments. We also believe schools would welcome and readily adopt and adapt non-compulsory assessments and diagnostic tools developed by the federal government and linked to the Australian Curriculum. We also believe governments can help restore confidence in the purposes of government data collection programs if proposals for data collection and reporting were comprehensively justified against the *Principles and Protocols for Reporting on Schooling in Australia* (2009)[15], and the cost implications for schools and school systems acknowledged.

4. Principles of data collection and use

AHISA supports the principles set out in ISCA's submission for consideration in the development of the national education evidence base. General principles that should guide the collection and use by governments of student data include:

- ***The privacy of individuals and families must be protected***
  Names of individual students should not be used in the analysis or linking of data.
- ***Families or carers must be consulted and properly informed about collection and use of personal data***
  If schools are to be expected to collect personal information from parents, they must be able to give families accurate information about how that information will be used and any caveats on the use of the data, including length of time it will be held. That is, governments themselves must be accountable for and transparent about the ways they intend to use the data.
- ***Data collected should be meaningful***
  Data should only be collected if it can be demonstrated that the data are necessary to meet government requirements for school accountability and transparency or to inform government policy making.
- ***The reporting burden on schools should be minimised***
  To this end, only meaningful data should be collected. Wherever possible, collection should be simplified and data sets harmonised unless this breaches the privacy of individuals.
- ***Data collected should be of high quality***
  Where questions arise as to the reliability and uniform quality of information collected, confidence in the value of the data is undermined.
- ***When applied, data should be 'fit for purpose'***
  If data applications lack validity, confidence in the outcomes of those applications will be undermined.

In its submission, ISCA points out that data on parental income and level of education collected by schools will inevitably suffer from lack of quality and should therefore be treated with caution for use in funding models. The data are also questionable when used to make correlations between family characteristics and student achievement or as the basis for school comparisons (as in NAPLAN).

Linking individual students to family Census data is not a ready-made solution to the issue of obtaining family background characteristics. Given that the Australian Census is taken only every five years, currency of information would remain an issue. Linking with Census data could also be deemed as unnecessarily intrusive of families' privacy.

As noted by ISCA, the unreliability of information on family background characteristics able to be collected by schools makes the use of ICSEA scores inappropriate for calculating the relative advantage or disadvantage of schools for government funding purposes or assessing a school community's 'capacity to pay' under such funding models. The practice of geocoding of student addresses to Census data to the level of Census Collection District has been tested and affirmed as a valid measure for the purpose of ranking schools by the socioeconomic status of their student

communities. This suggests that similar 'proxy' measures based on trusted data sources could be considered where appropriate.

To inform policy development, correlations between data sets relating to children's progress, including their school achievement, and to data on their individual family background factors are better assessed through more accurate longitudinal studies such as LSAC, LSAY, the Household, Income and Labour Dynamics in Australia (HILDA) Survey and the Australian Temperament Project. These sampling surveys, which usually allow for the collection of qualitative as well as quantitative data, are also the most appropriate for any non-academic measures of student progress. When linked with data collected for the AEDC, these data sets – some of which already link to NAPLAN and PISA data – are able to provide a comprehensive and holistic picture of education and development issues affecting young Australians from early childhood through to age 25 years.

> **Recommendation 4:** Sample testing and surveying provide rich information for policy development and minimise administrative burdens for schools and intrusion on the privacy of families and students. Sample testing and surveying should be the preferred data collection methods in the school education sector for policy development purposes.

AHISA would welcome questions from the Commission on its submission.

Yours sincerely,

(Mrs) Karen Spiller

AHISA National Chair 2015-17
Principal of St Aidan's Anglican Girls' School, Qld

Further inquiries may be addressed to AHISA's Chief Executive Officer, Ms Beth Blackwood; telephone (02) 6247 7300; email ceo@ahisa.edu.au.

NOTES

[1] See http://www.schools.nsw.edu.au/learning/7-12assessments/smart/

[2] See https://www.qcaa.qld.edu.au/p-10/naplan/test-reporting-analysis/sunlanda

[3] See http://www.vcaa.vic.edu.au/Documents/naplan/teachersguide-usingnaplandata.pdf

[4] See http://www.det.wa.edu.au/accountability/detcms/navigation/school-performance/school-and-student-performance-data/

[5] An article describing the tool developed by Independent Schools Queensland can be found at http://independence.realviewdigital.com/?iid=62617#folio=42

[6] As set out in *Quality Schools, Quality Outcomes*, issued 1 May 2016, available at https://www.education.gov.au/quality-schools-quality-outcomes

[7] Found at http://www.acara.edu.au/verve/_resources/Measurement_Framework_for_Schooling_in_Australia_2015.pdf

[8] The ALP's policy, *Your Child. Our Future*, is available at http://www.laborsplanforeducation.com.au/

[9] A recent Australian critique is Simon Breakspear's paper, 'How does PISA shape policy making? Why how we measure learning determines what counts in education', available at http://simonbreakspear.com/wp-content/uploads/2015/09/Breakspear-PISA-Paper.pdf

[10] See for example: Marks GN (2015) Do Catholic and independent schools 'add-value' to students' tertiary entrance performance? Evidence from longitudinal population data, *Australian Journal of Education*, 59(2):133-157; and Houng B & Justman M (2014) NAPLAN scores as predictors of access to higher education in Victoria, *Melbourne Institute Working Paper Series* No 22/14.

[11] See 'Linking NAPLAN scores to LSAY', *Insight,* Issue #57, 16 March 2016.

[12] Masters G (2016) Five challenges in Australian school education. *Policy Insights* #5. Melbourne: ACER.

[13] See http://www.atc21s.org/

[14] De Bortoli L & Macaskill G (2014) *Thinking it through: Australian students' skills in creative problem solving*. Melbourne: ACER.

[15] Available at http://scseec.edu.au/site/DefaultSite/filesystem/documents/Reports%20and%20publications/Publications/Measuring%20and%20reporting%20student%20performance/Principles%20and%20protocols%20for%20reporting%20on%20schooling%20in%20Australia.pdf

FOCUS ON LITERACY

Our occasional survey section, 'Leading Edge Learning', presents new practice and development in AHISA members' schools. In this issue, the focus of the section is how schools are helping to improve students' literacy skills through the shared understanding and practice of teachers.

PRIMARY LEVEL LITERACY

LOUISE BRAUER
DIRECTOR OF TEACHING & LEARNING, JUNIOR SCHOOL
EMMANUEL COLLEGE, CARRARA, QLD

AT EMMANUEL College we have worked to reform our assessment and teaching practices in literacy over the last five years. This process began with the appointment of a Director of Teaching & Learning for the Junior School in 2008 and then a Literacy Curriculum Leader for the Junior School, who had experience in literacy reform, in 2010.

A vision for literacy teaching in the Junior School was developed with the help of Rhonda Hoare from Charles Sturt University in Term 4 of 2010 and presented to staff to begin in 2011.

READING to learn. Emmanuel College's literacy program encourages student self and peer assessment.

Supporting the vision is our belief that all students can learn at high levels given enough time and support and a commitment that staff will work together to ensure all students reach mastery of skills and can learn at the pace that they require.

The Emmanuel model

Literacy teaching in the Emmanuel College Junior School is now a streamlined process where students are enabled to continue to move forward regardless of their year level.

The process begins with an Emmanuel College Student Teaching And Review Time (ECStart) at the beginning of each year in the three domains of reading, writing and spelling, augmented by formal assessment at the end of each semester. This gives us three measurement points throughout the year where we can assess each student's literacy progress and then plan for the semester ahead to meet student needs.

Following ECStart, teachers group students to create focused learning centres according to each child's zone of proximal development (Vygotsky 1986), irrespective of the student's academic year level. Individual differentiated learning within the small groups then becomes evident, and is addressed by explicit teaching that builds on needed reading strategies, writing skills and spelling strategies. This teaching and learning cycle is completed formally at least twice over the year, at the end of each semester, although teachers make informal adjustments to student groupings and needs throughout each term.

The literacy teaching encourages a 'growth mindset': students of the same age are not expected to be at the same point in their learning but, instead, their immediate learning needs at the time of assessment are addressed. Our aim is for every student to make learning progress, and teachers are guided by a continuum of skill development for reading, writing and spelling from Prep to Year 6.

Our model has shown over a number of years that, while some children progress more slowly than grade levels might predict that they should, assessment by grade levels can mean many students will not be challenged enough. Under the Emmanuel model, we now find many students are excelling beyond anything we could have imagined.

Within the model, assessment data – while primarily used for teaching – serves a range of purposes. First, the data help to determine each child's zone of proximal development and to ascertain what next to teach each student (assessment *for* learning). Using the same criteria, students are explicitly taught to self and peer assess their work and know exactly what they are required to learn next, setting their own learning goals (assessment *as* learning). By law, we are required to report against year level expectations and the Director of Teaching and Learning interprets the data to provide report information (assessment *of* learning). We use every individual piece of assessment for all three purposes, never assessing for a single purpose.

Charting student learning

Our teachers work to teach students the next point in their progression, Because assessments are consistent over all year levels, we are able to accurately track the progress of students' learning regardless of the academic year that they are in. Chart 1 is an example of how student progress in reading is visualised from the beginning of Prep until the end of Year 2.

While the data give us information about where the students are along the learning continuum to guide our teaching, it has also been very powerful for teachers to see a graphic representation of the range of student prior knowledge as well as the different rates that students are able to learn and the automaticity of skills retained from the previous year's teaching. (The latter is particularly evident in Chart 2.)

CHART 1 RUNNING RECORD ANALYSIS – READING, PREP-YEAR 2

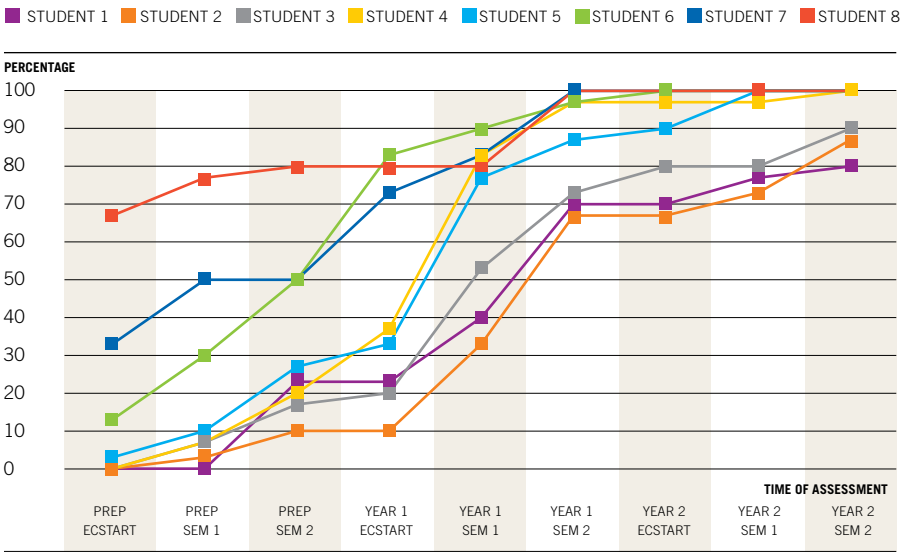
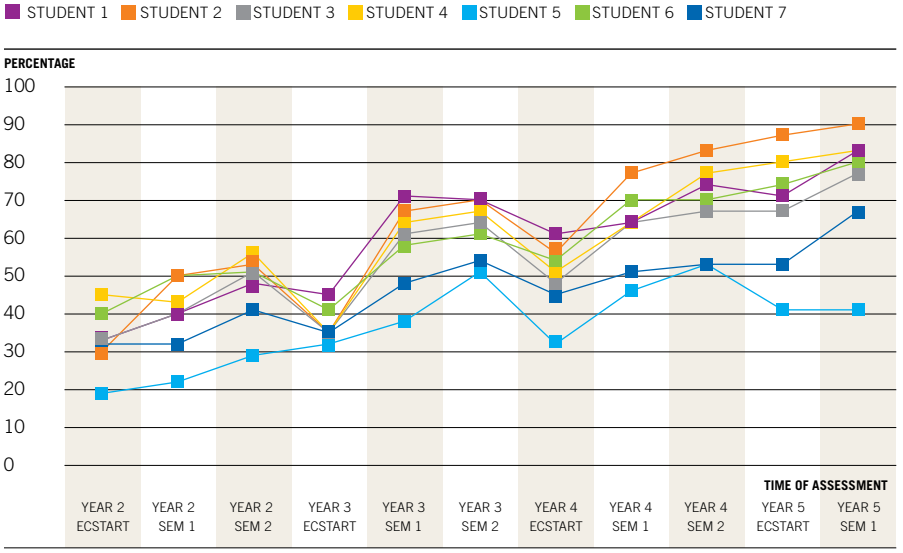


CHART 2 WRITING COMPOSITION TRACKING, YEARS 2-5



Cultural change

Prior to the introduction of the continuum model, each teacher worked only with their year level team to develop their year level assessments, rarely conferring with the year level above or below to meet student needs. While our teachers were achieving consistently high results, the learning journey for students was a rocky one: each year they were required to learn the new teacher's assessment style. At the same time, teachers were left wondering what had been taught in previous years if students were 'not up to their expectations', and learning support teachers were busy catching students who were not up to individual teachers' standards. We recognised that for the benefit of the students we needed a more consistent alignment of teaching.

We began with the domain of writing. The new assessment criteria meant that the Year 2 teacher and the Year 6 teacher were going to be using the same writing rubric and needed to be able to assess consistently across all skills. It also meant that teachers from Years 2 to 6 could be teaching the same skills and in a way that meets the needs of all of the

students. This entailed a major cultural shift in teaching practice and many hours of professional development. It was personally challenging for many teachers. Although highly skilled, professional and competent, the change to a consistent teaching mindset meant that some teachers felt that 'they were doing it wrong'.

Professional development supported all teachers from Prep to Year 6 in learning how to take running records consistently, how to teach spelling strategies consistently and how to mark writing consistently. This process was about gaining consistency across the School but an unpleasant side-effect was that some teachers – probably all teachers at one time or another over the five years – felt that their professional skills had been deemed poor.

Working through profound change at this level required a leadership team who were not afraid of tough discussions and tough times; it required a Principal and leadership team who were able to deeply understand the process and wanted the final outcome for the benefit of the children at the College, and who supported teachers while not giving up on the change. Simultaneously supporting teachers and the leaders who are implementing the change is a fine balancing act.

Positive outcomes

We now have evidence, from the data that we have collected over the last five years, that the literacy teaching at Emmanuel is positively impacting students' learning, confirming the research finding that 'when everyone in a school believes that together they can make a difference, the impact on student attainment can be almost quadrupled' (Eells 2011).

Teachers now understand that they were not 'doing it wrong', and that by working together we can really give every child an amazing education. Teachers are able to visibly see their hard work through student growth graphs, and all of their decisions about their class and their students are empowered by evidence.

Student and teacher anxiety in the shift from one year level to the next has markedly reduced. Teachers are now able to exercise their professional judgment regularly and have the information to support their decisions, sustaining accountability for the College and their own classroom and as teaching professionals. All teachers are able to explain why they are teaching certain skills, how learning support teachers can support their class teaching, why certain children are not doing the assigned homework, or why they need to teach certain small group lessons or whole class lessons.

Teachers are becoming more proficient at analysing their class data and we are now able to reflect on class averages from assessments and class growth and to look for trends in year levels in a supportive environment. In many cases, teachers who had achieved excellent results and excellent growth in their class were able to share teaching strategies and this has provided a data driven basis for professional discussion and teachers wanting to watch others teach.

This has been a long and at times difficult journey, but the consistency for the students and the results that we now enjoy have made it very worthwhile. □

Emmanuel College is a co-educational day school with 1545 students from Kindergarten to Year 12. Principal: Mr Patrick Innes-Hill.

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> Building a school's literacy culture takes time, persistence, trust, leadership endorsement and careful 'framing'.

THE Rockhampton Grammar School students prepare to peer assess work according to Education Northwest's *6 + 1 Writing Traits*.