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Curriculum coordinators e-news

March, 2017 Volume 13, Issue 1

In This Issue

Spin offs!

Too bright to teach?

"Nerds don't necessarily make good teachers."

[Stephen Elder, Executive Director of Catholic Education in Melbourne, criticising the Victorian Government's decision to raise the entry standard for undergraduate teaching degrees to an ATAR of 70. He didn't say whether he was happy about his doctor having an ATAR below 70. The Age 25/11/16]

Grizzlies determine school gun laws

"I would imagine there is probably a gun in a school to protect from potential grizzlies."

[Betsy deVos, Trump's new billionaire US Education Secretary, replying to the question: "Do guns have any place in and around schools?" She told her confirmation hearing that she supported Trump's election pledge to get rid of gun-free schools.

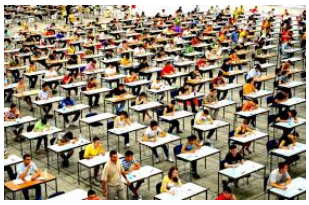
Dear Colleague,

Welcome to the first edition of the 2017 Curriculum Coordinators e-news. We welcome any suggestions about the content or format of the e-news.

If there is someone else at your school who should receive this e-news (and is an AEU member) please forward it on to them. They will be put on our Coordinators email network once we receive their email address.

News: Victorian

Special Report



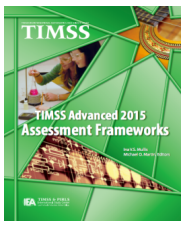
Testing, testing, testing: Victorian students 2015-16

Three lots of national and international testing results were published in the last two months of 2016 - Trends in International Mathematics and Science Study (TIMSS) 2015, the Program for International Student Assessment (PISA) 2015 and NAPLAN 2016. In March 2017 the National Assessment Program's 2015 Year 6 science literacy results were released.

The four testing programs separately measured student performance in Years 3, 4, 5, 6, 7, 8, 9 and 10.

The performance of Victorian students in all of these tests (with the exception of Year 6 science) was consistently high compared to that of students in other Australian states/territories, however Australian results in the international tests were generally lower in mean averages and country rank order compared to previous tests.

TIMSS



The results from TIMSS 2015, which measures Years 4 and 8 students' achievement in the mathematics and science curriculum every four years, were released in November 2016. Victorian students were comfortably above the Australian average in each curriculum area and outperformed only by students in the ACT.

There was a smaller proportion of Victorian students in the low performance category compared to the rest of Australia (except for ACT) and compared to the performance of Victorian students in 1995 (the first test) and 2011 (the previous one).

TIMMS 2015 Mean Average Scores

Since 2013 there have been 210 US school shootings and 0 grizzly bear attacks.]

Iodine to stop decline

"The reason the kids from Kazakhstan are performing better than ours may well be due to the fact that they have had universal iodisation of all edible salt in Kazakhstan for more than a decade and have supported this with a public health education campaign to optimise iodine intake."

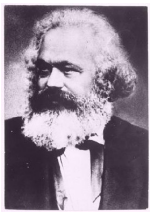
[Cres Eastman, Clinical Professor of Medicine, Sydney University on how to improve Australian student results in international testing. Sydney Morning Herald 6/12/16]

Book Review by Tony

"A wonderful evocation of the glories of our culture."

[Ex-PM Tony Abbott after reading private school point man (and anti-AEU obsessive) Kevin Donnelly's *The Culture of Freedom*, a monograph published by the right wing Institute of Public Affairs. The Age 12/12/16]

Frothing at the keyboard



"Instead of educating students in a balanced and impartial way the AEU is committed to indoctrinating children with neo-Marxist politically correct groupthink."

[Kevin Donnelly (Tony Abbott's favourite author) in his article "AEU's priority is Marx not marks". The Australian, 19/12/16]

Malcolm on Teachers

"I have to say, of course I am biased, I suppose, with a school teacher daughter. But

	Victoria	Australia
Year 4 Maths	525	517
Year 4 Science	527	524
Year 8 Maths	516	505
Year 8 Science	518	512

Victorian 2015 Year 4 students did significantly better in maths than their equivalents in 1995 and 2003 but worse than those in 2007 and 2011. In science, Year 4 students did slightly worse (1 or 2 points) than those in three of the four previous tests, and significantly worse than students in 2007.

Victorian Year 8 students in 2015 did significantly better in both maths and science than Year 8 students in each of the previous four tests.

At Year 4, Victorian male students outpointed female students by 17 points in maths (the biggest difference in Australia) and by 8 points in science. At Year 8 female students on average were 5 points above their male counterparts in maths and both sexes had similar scores in science.

PISA

Since 2000, PISA has been conducted every three years. In each cycle, the three assessment domains - reading literacy, maths literacy (from 2003) and scientific literacy (from 2006) - are rotated so that one domain is the major focus. PISA 2015 was the sixth cycle of PISA and scientific literacy was the major domain.

Science

The average score of Victorian students in science in PISA 2015 was 513 compared to the Australian average of 510. Only ACT and Western Australia had a higher average score and Victoria was well above the OECD average of 493.

Student performance in Victoria and Northern Territory showed no significant difference in 2015 compared to 2006. All of the other states/territories experienced a significant decline in scientific literacy scores over this period of time.

16 per cent of Victorian students were in the low performance category in science in 2015, the same as in 2006. The proportion of low performers increased in all other jurisdictions except Northern Territory over this period. The proportion of high performers in Victoria - 10 per cent - was 1 per cent lower than 2006. The decline in other states/territories (apart from NT) was greater than that in Victoria.

PISA 2015 Mean Average Scores

	Victoria	Australia	OECD
Science	513	510	493
Reading	507	503	493
Maths	499	494	490

Reading

The average score for Victorian students in reading was 507 compared to the Australian average of 503 and the OECD average of 493. The Victorian score was below that of the ACT and equal second with Western Australia.

teachers work very hard; they are absolutely at the front line of our future because it is teachers - charismatic, hard-working teachers - that change lives."

[PM Malcolm Turnbull talking about his daughter Daisy, who is a teacher in NSW, after Queensland MP Andrew Laming questioned the work ethic of teachers. Unfortunately Malcolm did not announce support for the Gonski package to show he meant what he said. The Age, 18/1/17]

Publications

Professional Voice

Hard copies of the latest edition of *Professional Voice* - titled: "What Works (and what doesn't)" - will be mailed soon to everyone on the coordinator e-news list. Articles in it can be cited as professional reading as part of the VIT PD requirements.

Contents:

Editorial: What works (and what doesn't) - John Graham;

What makes great teaching? - Steve Higgins, Lee Elliot Major and Rob Coe;

The lack of an evidence base for teaching and learning: fads, myths, legends, ideology and - wishful thinking - Stephen Dinham;

Brain Training: a panacea for working memory difficulties? - Gehan Roberts;

Preschool: Two years are better than one - Stacey Fox;

The relationship between homework practices and educational outcomes - Justin Bowd;

School funding policies and their impact on student achievement - Trevor Cobbold;

Barbara Arrowsmith-Young on neuroplasticity in the classroom - Interview by Rachel Power.

Back Copies

A limited number of hard copies of previous editions of *Professional Voice* are available. They contain articles by leading writers on education from Victoria, interstate and

The average reading literacy scores between PISA 2000 and 2015 were not significantly different in Victoria, Queensland and the Northern Territory, while there was a significant decline in all other jurisdictions.

Between 2000 and 2015 the proportion of low performers in Victoria rose from 14 per cent to 16 per cent. This was the smallest increase in the country. Over the same period the proportion of high performers fell from 14 per cent to 10 per cent. This was the second lowest decline behind NT (2 per cent) and contrasted with ACT and WA which each declined by 11 per cent.

Maths

The average score for Victorian students in maths was 499 compared to the Australian average of 494 and the OECD average of 490. The Victorian score was 3rd highest below that of the ACT and Western Australia.

Over the period 2003 to 2015 the average maths score in Victoria declined by 12 points; the fall was the smallest in Australia and was not statistically significant.

Over the same period the proportion of Victorian students in the low performance category increased by 2 per cent to 19 per cent (smallest increase) while students in the high performance category fell by 4 per cent to 11 per cent (smallest decrease apart from NT).

When Victoria as a state is placed in the country league tables for PISA 2015 it performed:

- In science significantly lower than 9 countries and not significantly different to 8 countries (out of 56 countries);
- In reading significantly lower than 7 countries and not significantly different to 15 countries (out of 53 countries);
- In maths significantly lower than 15 countries and not significantly different to 13 countries (out of 54 countries).

NAPLAN

Victorian students continued to do well in NAPLAN reading and numeracy in 2016 relative to the rest of Australia. Its mean average performance was above the Australian average at all Year levels in both curriculum areas.

Over the period 2008 to 2016 Victorian students made significant improvement in Year 3 and Year 5 reading. In Year 3 the mean average rose from 419.9 in 2008 to 437.7 in 2016. In Year 5 the average rose from 496.7 in 2008 to 511.1 in 2016.

In the other Year levels in reading and in all Year levels in numeracy there were no significant differences between 2008 and 2016.

2016 NAPLAN mean average scores: reading and numeracy

	Victoria	Australia	Vic rank order
Reading			
Year 3	437.7	425.6	2
Year 5	511.1	501.5	2
Year 7	545.6	540.8	2
Year 9	583.9	580.8	3
Numeracy			

overseas. They also contain interviews with many of the most highly regarded educationists such as Linda Darling-Hammond, Andy Hargreaves, Richard Elmore, Pasi Sahlberg, Diane Ravitch, Alan Reid, Kenneth Leithwood, Bill Hannan, Raewyn Connell and Jill Blackmore.

To view the contents of past copies go to here.

To request a copy of a specific edition send an email to Marlene McLean at marlene.mclean@aeuvic.asn.au indicating the volume, number, and title of the edition and your postal address.

Year 3	413.6	402.0	1
Year 5	502.5	493.1	1
Year 7	555.9	549.7	1
Year 9	592.9	588.9	3

Year 6 Science

The 2015 national three yearly assessment of Year 6 students' science achievement has shown no statistical difference between 2006 and 2015. In 2006 54.3 per cent of Australian Year 6 students were found to be performing at the "proficient standard" in science; this rose to 55.1 per cent in 2015.

The mean score of Victorian students in 2015 was 399 compared to the Australian average of 403. 53.6 per cent of Victorian students were performing at the proficient level in science.

Year 6 Science Mean Scores (and Victorian rank order)

	2006	2009	2012	2015
Victoria	408 (3rd)	398 (2nd)	393 (5th)	399 (5th)
Australia	400	392	394	403

In 2015 female students performed better than male students. Nationally the mean score for female students was 408 compared to 398 for male students. Female students trailed male students from 2003 - 2009 and were one point ahead in 2012. In Victoria female students had a mean score of 403 compared to 395 for male students.

The results of an accompanying student survey showed that the great majority of students (over 80 per cent) appear to be interested in learning new things in science, learning about science and doing science-based activities.

ACARA NAPLAN Sample Assessment Science Literacy 2015

Languages Assessment Resources

The VCAA will release a range of assessments, beginning in mid-March 2017, to support teachers of Languages to implement the new Victorian Curriculum F-10.

Working with the Australian Council for Educational Research (ACER), the VCAA will provide teachers with a suite of languages assessments. Teachers will be able to access online assessments, known as Languages Proficiency Assessments (LPA), which test students' additional language reading and listening skills, providing teachers with diagnostic information that they can use to target individual students' areas of need.

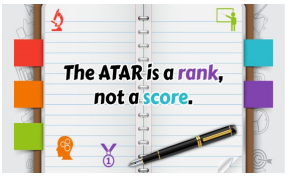
The LPA will offer tests for the beginner, intermediate and advanced learners in eight languages. These levels correspond to nominal hours of learning at 100 hours, 200 hours and 300 hours, and will be aligned to the Victorian Curriculum F-10.

The LPA will be released in three stages across 2017, and will be offered in Chinese (Second Language and Background Language), French, German, Indonesian, Italian, Japanese, Modern Greek and Spanish.

To support the LPA release, the VCAA, in conjunction with ACER, will be running a number of online professional development sessions. These sessions will step teachers through how to use the LPA, as well as address the broader contextual question of effective assessment practices in the Victorian Curriculum F-10 Languages.

Victorian ITE Selection

A new framework for selection into Victorian initial teacher education courses is presently being finalised. It will contain the new ATAR undergraduate entry requirements - minimum 65 in 2018 rising to a minimum 70 in 2019 - and information about new personal attributes/capabilities selection criteria.



Increase in ATAR entry for 2017

The average ATAR of students applying for teacher education courses in Victoria increased from 57.35 to 62.74 this year. First-round offers for graduate entry teaching courses fell 47 per cent, while undergraduate offers increased by 5 per cent.

Academy for the Gifted

The consulting firm Ernst and Young has been appointed by the Department of Education and Training to investigate the funding, construction and governance of an academy for gifted children.

The institution would provide services for gifted students from regional Victoria and could include a state-funded residential college for students in the four select-entry high schools. The site being considered is next to Melbourne High School.

[The Age 18/1/17, p.7]

News: National

Phonics Test Proposal

The Federal Education Minister, Simon Birmingham, has proposed introducing a version of the UK's Year 1 phonics screening test into Australian schools.

The phonics screening check was introduced into English schools in June 2012. It aims to assess whether 6-year-old children are meeting an appropriate standard in phonic decoding and to identify children struggling with phonic skills.

It usually takes 5-10 minutes and checks that a student can: sound out and blend graphemes in order to read simple words; read phonically decodable one-syllable and two-syllable words, e.g. cat, sand and windmill; read a selection of nonsense words which are referred to as pseudo words.

Pseudo words are included in the check specifically to assess whether a student can decode a word using phonics skills and not their memory.

The UK Department of Education's evaluation of the program found that student performance in phonics and the teaching of phonics had improved. However, there has been no improvement in literacy outcomes.

An independent research study found that while the check was strongly correlated with other literacy skills and was sensitive in identifying at-risk readers, so too were teacher judgements of phonics. It concluded that although the check fulfilled its aims, resources might be better focused on training and supporting teachers in their ongoing monitoring of phonics.

Official independent (NFER) evaluation for DOE
Independent research report

World (testing) Cup: Australia v Kazakhstan

When the results from the Trends in International Maths and Science Study (TIMSS) were published at the end of 2016 the headline grabber in much of the Australian media was the fact that "even" Kazakhstan had outperformed Australia.

The meteoric rise of Kazakhstan, leaving Australia in its wake, was justification enough for the federal Minister for Education, Simon Birmingham, to feel "embarrassed" by the results and to describe Australia's performance as "appalling".

The story of Kazakhstan's rise is an intriguing one. In the previous TIMSS test in 2011 its Year 4 students had a mean score of 501 in maths (Australia: 516) and 495 in science (Australia: 516). Its Year 8 students had a mean score in maths of 487 (Australia: 505) and 490 in science (Australia: 519).

In 2015 Kazakhstan's Year 4 maths results rose 43 points to 544 while Australia's score rose one point to 517. In Year 4 science Kazakhstan's score rose an extraordinary 55 points to 550 while Australia's score rose 8 points to 524.

In Year 8 maths Kazakhstan's score rose 41 points to 528 while Australia's score fell 7 points to 505. In Year 8 science Kazakhstan's score rose 43 points to 533 while Australia's fell 7 points to 512.

The only country to come close to Kazakhstan's improvement in scores and rank order over the four areas of results was Norway. In 2011 Kazakhstan was below Australia in rank order in the TIMSS league tables in all four tested areas; four years later it was above Australia in the same areas.

The 2015 PISA results for 15-year-olds in maths and science came out a week after the TIMSS results, in December 2016. While Australia's results were above the OECD average, they fell 10 points in maths and 11 points in science. Australia's rank order fell from 19th in 2012 to 23rd in 2015 in maths. In science it rose from 16th in 2012 to 14th in 2015. Some of the countries above Australia had not participated in 2012 PISA.

As for Kazakhstan, while it participated in PISA 2015, its results did not appear in the official tables.

In 2012 PISA Kazakhstan's results were way below those of Australia and the OECD averages. In maths Kazakhstan's students had a mean score of 432 (Australia: 504; OECD average: 494). In rank order it came 49th out of the 53 participating countries (Australia: 19th).

In science the mean average for Kazakhstan was 425 almost 100 points below Australia with 521, and was below the OECD average of 501. Kazakhstan came 52nd out of 55 countries while Australia was 16th.

The results of four countries participating in 2015 PISA were deemed by the OECD to be not comparable to those of other countries - Albania, Argentina, Malaysia and Kazakhstan. Albania, Argentina and Malaysia were described as meeting "the operational standards and guidelines" of the OECD but making technical errors such as sampling, weighting and data capture.

Kazakhstan was the one country which did not meet the OECD standards:

> *In Kazakhstan, the national coders were found to be lenient in marking. Consequently the human-coded items did not meet PISA standards and were excluded from international data.*[OECD (2016), PISA 2015 Results (Volume 1): Excellence and Equity in Education, p.304]

The exclusion of human-coded items because of marking "leniency" meant that Kazakhstan's results were not comparable to those of any other country - including those of Australian students.

It is difficult to reconcile the performance of Kazakhstan's 9 and 13-year-old students in TIMSS 2015 with the PISA results of their 15-year-olds three years earlier, particularly as they were the one country in the world which failed to meet OECD quality assurance standards in PISA 2015.

PISA is administered by the OECD while TIMSS is run by a different organization - the International Association for the Evaluation of Educational Achievement (IEA).

Addressing Australia's PISA decline

Since the PISA tests began in 2000, the major federal education policy levers have included:

- significantly increased federal funding to private schools under John Howard, followed by a commitment by Julia Gillard that no school would lose a dollar.
- failure to implement Gonski's needs-based funding of all schools
- the introduction of NAPLAN, My School, the Australian Curriculum and the AITSL national teaching standards.
- increased emphasis on market measures for school provision, such as Independent Public Schools and school autonomy.

Over this same period there has been a steady decline in PISA and TIMSS results, while educational inequality is on the rise.

Australia has one of the widest ranges of student achievement and one of the most segregated schooling systems in the world, and the OECD data provide a strong correlation between high-performing systems such as Singapore and factors of social cohesion and equity.

Analysis of OECD PISA data over time shows a correlation between equitable funding of schools and systemic performance on PISA.

"If we want to address these sliding results then we must address the issue of educational inequality in Australia".

[from Bob Lingard and Stewart Riddle, "PISA results don't look good, but before we panic let's look at what we can learn from the latest test", *The Conversation*,7/12/16]

Closing the Indigenous gap

The ninth annual Closing the Gap report found that there were only limited improvements in educational outcomes recorded for Aboriginal and Torres Strait Islander (ATSI) students over the past year.

Closing the Gap is a government strategy to reduce disadvantage among ATSI Australians and covers the areas of life expectancy, child mortality, access to early childhood education, educational achievement, and employment outcomes.

The strategy was set up by the Council of Australian Governments (COAG) in 2008 and has a set of measurable targets to monitor improvement. A report on progress towards the targets is presented each year to the federal parliament by the Prime Minister.

The 2017 report found that while the strategy was on track to meet the target for Year 12 attainment, it was failing to make sufficient progress in school attendance, literacy and numeracy and early childhood education.

The proportion of ATSI 20-24 year-olds who had achieved Year 12 or its equivalent increased from 45.4 per cent in 2008 to 61.5 per cent in 2014-15. Over the same period the rates for non-Indigenous attainment did not change significantly (85 per cent to 86.4 per cent).

Another positive education outcome was the 93 per cent increase between 2005 and 2015 of ATSI students in higher education award courses (8,303 to 16,062 students). Over the same period there was an increase of 47 per cent for all domestic students.

There was no real progress towards meeting the target to close the gap between ATSI and non-ATSI students for school attendance by 2018. The national attendance rate in 2014 for ATSI students was 83.5 per cent. In 2016 it had fallen to 83.4 per cent. In 2016 the non-Indigenous rate was 93.1 per cent. The difference between the two groups was particularly large in remote areas (75.9: 91.9) and very remote areas (66.4: 91.1).

Another measure estimated the proportion of students who attended school 90 per cent or more of the time. In 2016, 49 per cent of ATSI students attended school 90 per cent or more of the time compared to 79.3 per cent of non-ATSI students.

The target to halve the gap by 2018 for Indigenous students in reading and numeracy for Years 3, 5, 7 and 9, used national minimum standards in NAPLAN as the measure. In 2016, Year 9 numeracy was the only area on track to meet the target, although significant progress was being made in Year 3 reading and numeracy.

The original early childhood target was to have all Indigenous four-year-olds in remote communities having access to early childhood education. It expired unmet in 2013. The present target is to have 95 per cent of all four-year-olds enrolled in early childhood education by 2025. In 2015, 87 per cent of ATSI students were enrolled.

More Money for TFA

The Turnbull Government has allocated an additional $20.5 million to fund another two cohorts of Teach for Australia. The new funding runs until 2020-21 and will allow up to 300 new places in the program.

News: International

The 8 take-away messages from PISA

After examining the results from all countries that participated in PISA 2015 the OECD Report identified the following outcomes :

Public Schools do better

"Students in private schools score higher in science than students in public schools; but after accounting for the socio-economic profile of students and schools, students in public schools score higher than students in private schools on average across OECD countries and in 22 education systems." (p.10)

Parental Choice

"When choosing a school for their child, parents are more likely to consider important or very important that there is a safe school environment, that the school has a good reputation and that the school has an active and pleasant climate - even more so than the academic achievement of the students in the school." (P.10)

Advantages of Smaller Classes

"On average across OECD countries, students in smaller classes reported more frequently than students in larger classes that their teachers adapt their instruction to students' needs, knowledge and level of understanding." (p.11)

More Science Time

"Students score five points higher in science for every additional hour spent per week in regular science lessons, after accounting for socio-economic status." (p.11)

Extra-school work ineffective

"School systems where students spend more time learning after school, by doing homework, receiving additional instruction or in private study, tend to perform less well in science." (p.11)

Science pedagogy makes the difference

"In almost all education systems, students score higher in science when they reported that their science teachers "explain scientific ideas", "discuss their questions" or "demonstrate an idea" more frequently. They also score higher in science, in almost all school systems, when they reported that their science teachers "adapt the lesson to their needs and knowledge" or "provide individual help when a student has difficulties understanding a topic or task"." (p.12)

More resources to disadvantaged schools

"In countries and economies where more resources are allocated to disadvantaged schools, overall student performance in science is somewhat higher, particularly among OECD countries. " (p.13)

Free-of-charge tutoring

"Governments may need to provide additional resources for free-of-charge tutoring in disadvantaged schools so as to prevent the development of a shadow education system* - and to ensure equity in education opportunities." (p.14)
["Shadow education system" is private supplementary tutoring often used to maintain the competitive advantages of the already successful and privileged.]*

[PISA 2015: Results in Focus, OECD, December 2016]

What top PISA countries have in common

Summary from Andreas Schleicher Director for Education and Skills in the OECD and in charge of PISA.

Conditions which are common to the top PISA countries:

- Action taken to make teaching more prestigious and selective;
- Direct more resources to the neediest children;
- Enrol most children in high quality pre-schools;
- Help schools establish cultures of constant improvement;

[Amanda Ripley, What America can learn about smart schools in other countries, New York Times 6/12/16]

New US Secretary of Education

Donald Trump's choice of billionaire Betsy DeVos as US Education Secretary has been confirmed by the US Senate only after Vice-President Mike Pence cast the deciding vote.

This was the first time ever that a vice-president has had to intercede in such a way for a cabinet secretary.

DeVos has had no prior experience working in education but has spent decades advocating for school voucher programs, charter schools and the privatization of public schools.

Trump has proposed that $20 billion of federal education funds should be used to support vouchers to increase access to private schools. Research on existing voucher programs has found that there is no evidence to show achievement gains for students who used vouchers to attend private schools.

De Vos and her family funneled $1.45 million into a campaign to weaken oversight of charter schools in their home state of Michigan, making it easier for shady operators to open schools.

[Ferguson Maria (2017), Choice for Secretary of Education, Phi Delta Kappan, V98:N.5]

Singapore's Special Education Provision

Singapore, which sits at the top of most international test league tables, has announced that from 2019 all children with special needs who are above six

years old and below 15 will have to attend school as part of the Government's commitment to build a more inclusive society.

Currently, children with moderate to severe special needs are exempt from compulsory education. However the majority of them already attend Government-funded special education (SPED) schools run by voluntary welfare organisations.

The 20 SPED schools support 5,500 children with moderate and severe needs such as visual impairment or multiple disabilities. About 40 per cent of students in SPED schools have autism, up from some 32 per cent in 2011 and this has placed enrolment pressure on these schools.

10 per cent of children with moderate to severe special education needs do not go to SPED schools for various reasons and may be home-schooled, enrolled in private education institutions or are unable to attend due to physical or intellectual disabilities.

With the change, all children will be required to attend the primary-level sections of specified SPED schools. Exemptions will still be considered, but on a case-by-case basis.

Trainee teachers at the National Institute of Education (NIE) undergo training to gain a basic understanding of helping students with special needs. In 2014, NIE started an advanced diploma in special education to equip allied educators and teachers with skills in classroom and school practices.

There are now 1,000 SPED teachers across the 20 SPED schools, up by about 6 per cent since 2012. The physical capacity of SPED schools is being expanded to cater for the increase in demand.

There are an additional18,000 students with mild special educational needs being educated in mainstream schools. All mainstream primary schools have at least one allied educator trained to support students with mild special needs such as dyslexia and Attention Deficit Hyperactivity Disorder (ADHD).

Channel NewsAsia (4/11/16)
The Straits Times (7/11/16)

Grammar School expansion under attack

The UK Conservative Government has run into opposition from all quarters since Prime Minister Theresa May said they would introduce a new wave of selective grammar schools for families that are 'struggling' or 'just managing'.

Opponents of grammar school expansion who have spoken out include:

- The Royal Society (top scientists) doubt it will help disadvantaged students to achieve high results in maths or science.
- The Sutton Trust has research which shows it is not only Free School Meal students (low SES) who fail to get into grammar schools, but all families on below average earnings. Also that "bright pupils do just as well in the best comprehensives".
- The Institute of Fiscal Studies has pointed out that 13% of children who get a grammar school place come from private fee-paying primary schools (20% in some areas).
- Alan Milburn, the Government's "social mobility tsar", has warned that it will only create more divisions in society. The poorest children will be left further behind.
- 33 Kent headteachers wrote an open letter to Theresa May pointing out how destructive selection already is in Kent. All 66 secondary heads in Surrey wrote to the prime minister attacking the proposal to expand selective education as "nostalgic and unrealistic".
- The House of Commons education select committee chairman Neil Carmichael, a Conservative MP, said: "The focus on opening new grammar schools is, in my view, an unnecessary distraction from the need to ensure all our young people are equipped with the skills to compete in the modern workplace".

Reclaiming Schools, 27/2/17

Reports and Resources

Encouraging higher order thinking

The most important question you can ask when planning a lesson:

"How will I infuse higher-order thinking into the lesson, making sure students are required not only to know something, but also to apply what they know?"

Strategies to ensure that every lesson encourages students to think deeply:

- Plan two or three open questions for each lesson

- Include strategies to get students to respond to one another not just the teacher
- Students should be asked to consider comparisons requiring analysis and reasoning about concepts and situations
- Use a fictional student's arguments to encourage criticism and analysis
- Provide different sides of an argument so students have to determine which they support
- Ask 'why' as often as you can
- Need to include 'wait time"; silence to allow everyone to think about the question (particularly for young students)
- Use think-pair-share approach
- Encourage thinking not 'retelling' (ie finding information and putting in project, report, brochure, poster)
- Putting into own words is a reading comprehension task rather than using higher-order thinking
- Pose a purposeful problem as the basis of any retelling task
- Ask "what if" and "what else" to compel students to expand or elaborate on what they're studying, analysing or describing
- Teach students to self-assess with rubrics/checklists to assess quality of own work
- Use confidence ratings so students can indicate if they understand, or if they are uncertain if they understand, or if they do not understand something
- Students can co-create success criteria eg through looking at work samples and dividing them into low, medium and high.

[Susan M Brookhart, "Start with higher-order thinking", *Educational Leadership,* V74: No 2, Oct. 2016 pp 10-15]

Engaging Students

The Grattan Institute report *Engaging students: Creating classrooms that improve learning* (2017) claims that around 40 per cent of students are consistently disengaged. Around 25 per cent are compliant but quietly disengaged.

To address this situation, the report recommends that teachers must know their students and the specifics of any behaviour issues, including passive disengagement. They need to identify the conditions that prompt and reinforce behaviours, including whether their own behaviour is contributing to the problem.

Teachers should also collaborate with colleagues to discuss issues and potential solutions. This should include taking opportunities to observe colleagues' classrooms to identify how and why something is working.

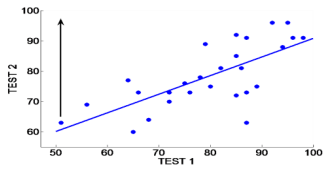
The report synthesises the research about how to create an effective learning environment and how to implement this in the classroom. The research highlights the following common approaches:

- High expectations: recognise that student motivation, engagement and self-belief can drive student achievement - and vice versa. Instil in every student an expectation of success.
- Strong teacher-student relationships: students who have a good relationship with their teacher tend to succeed at school. Positive student-to-student relationships also help.
- Clarity and structure in instruction: there is a need to be clear and consistent about what students are expected to do, as well as teaching them how to do it.
- Active learning: the more opportunities students have to respond in class, the more likely they are to learn well. Without opportunities to speak, problem-solve and work with others, students may disengage.
- Encouragement and praise: positive reinforcements include praise (specific and genuine), encouragement and rewards. Praise the process or action not the person or trait.
- Consistent corrections and consequences: use corrections first, to avoid punishments. Warnings should be brief, calm and clear about what is required and any punishments should be explained in terms of how their behaviour affects the student's own learning and/or the learning of others.

[Peter Goss and Julie Sonnemann (2017), Engaging students: Creating classrooms that improve learning, Grattan Institute]

Research Digest

Data-informed teaching



The use of learning achievement data (big and small) has increasingly become central to most schooling systems. It has been used (and misused) at both system and classroom levels to inform policy and practice.

It has the potential to personalise learning when data analysis is used to identify the next steps needed by each student to make progress in an area of study. It also has a down side where data takes over and drives teaching and learning and can distort the way students are taught.

A research study of 4th and 7th grade literacy teachers in New York found that the theory of data-driven instruction made sense as a theory but its implementation in the classroom created a pedagogical

environment which limited student opportunities to learn.

On one hand the theory*: Data collection can lead to more deliberate and systematic analysis of student work, which in turn can lead to more differentiated approaches to instruction that highlight individual students' strengths while working on their weaknesses, which can lead to greater student learning. This process is intended to create a carefully calibrated road map for instructional moves that will promote higher achievement.*

On the other hand the researchers found classroom practices based on the public display of individual progress data, the constant use of data-related worksheets, more tests and more data analysis. This type of pedagogy had a particularly negative effect on struggling students who were "measured, examined, assessed, rubricked, and labelled ...consigned to an instructional regime that's bereft of content and meaningful instruction".

The researchers provided five recommendations about the use of data in the classroom.

- Test score data can provide a basic road map for determining areas that are relatively strong and others that need strengthening. These data, however, are not particularly helpful to the students - nor are they effective motivators.
- Standardized assessment creators develop item pools to represent skills to be tested. They are selected to differentiate student responses on the assessment to establish norms on a distributional curve. There is no point in conducting exhaustive item analyses of standardized tests or examining students' responses to individual test items for the purposes of teaching this information.
- Test item analyses will not develop deep comprehension skills. Students learn these skills through carefully crafted, systematic instruction.
- Schools should use student work to inform instruction, monitoring progress while maintaining a focus on teaching. This is data-informed rather than data-driven teaching, recognizing that the purpose of monitoring student progress is to fine-tune instructional moves to enable all students to be successful.
- The definition of *data* as "recorded information on student learning" excludes the softer side of data - the looks on students' faces, the tenor of a rich discussion, or the smiles and signs of joy when students are learning something new. For the highly capable teacher, these observations are also data.

[Neuman, Susan B. (2016), Code Red: The danger of data-driven instruction, *Educational Leadership*, v74:N:3, pp24-29]

Misdiagnosis of students with ADHD

Four international studies have found that the youngest children in a school class are more likely than their classmates to receive pharmacological treatment for attention deficit hyperactivity disorder (ADHD).

A recent study in Western Australia compared the proportions of WA children born in the early and late months of a recommended school-year intake who received at least one Pharmaceutical Benefits Scheme prescription for an ADHD medication in 2013.

An estimated population of 311,384 children was included in the study. They were analysed in two 5-year bands: children aged 6-10 years and children aged 11-15 years. A total of 5937 children (1.9%) received medication for ADHD; the proportion of boys receiving medication (2.9%) was higher than that of girls (0.8%).

Among children aged 6-10 years, those born in June (the last month of the recommended school-year intake) were about twice as likely to have received ADHD medication than those born in the first intake month (the previous July). For children aged 11-15 years, the effect was less marked, but still significant.

Similar differences were found when comparing children born in the first 3 (or 6) months and the last 3 (or 6) months of the school-year intake. These results are consistent with those of previous international studies.

Frances, who led the DSM-IV development taskforce of the American Psychiatric Association, argued that similar findings in North America indicated that developmental immaturity is mislabelled as a mental disorder and unnecessarily treated with stimulant medication.

"The most plausible explanation is that teachers provide the evidence for the diagnosis of ADHD, they assess the behaviour of these kids against their peers and they are mistaking age-related immaturity for a psychiatric disorder," researcher Martin Whitely said.

[Whitely Martin, Lester Leanne, Phillimore John and Robinson Suzanne (2017), Influence of birth month on the probability of WA children being treated for ADHD, *Medical Journal of Australia*, 206 (2): 85.]

Outcomes for disadvantaged students

A new report from the Australian Council for Educational Research (ACER) based on data from PISA and TIMSS indicates some of the reasons why socioeconomic background has more of an effect on Australian

students than it does on students in comparable countries.

The data shows that by the time they are 15, the difference between advantaged and disadvantaged students in Australia is equivalent to around three years of schooling and that the concentration of disadvantage in a school affects student outcomes.

Disadvantaged students in average socioeconomic level schools are almost a year of schooling higher than those in disadvantaged schools. Similarly, disadvantaged students in advantaged schools are more than one year of schooling higher than those in average socioeconomic level schools.

This indicates that the social composition of schools has just as strong an impact on the likelihood of being a low achiever as a student's own family background.

Disadvantaged schools were more likely to have a number of factors linked to lower student performance:

- poor quality physical infrastructure (34 per cent compared to 12 per cent of advantaged schools);
- a shortage of educational materials;
- a lack of, or inadequate or poorly qualified teaching staff (The index score for disadvantaged Australian schools was significantly higher than the OECD average, whereas for all other socio economic quartiles the index was significantly lower.);
- student behaviour hindering learning (About one-third of the students in advantaged schools, and about half of those in disadvantaged schools, reported that in most or every class there was noise and disorder, students didn't listen to what the teacher said, and that students found it difficult to learn).

Government schools have 34 per cent of their student population in the lowest SES (disadvantaged) quartile compared to 16 per cent in Catholic schools and 10 per cent in independent schools. Between 2009 and 2014 total recurrent govenment funding per student to public schools in Australia rose by 14.6 per cent, while funding to private schools rose by 30 per cent.

Statistics

VCE/ATARs 2016

- **97.9% VCE completion rate**
- **9% VCE study scores 40 and above**
- **65.2 average ATAR for all students**
- **66.45 average ATAR for girls**
- **63.76 average ATAR for boys**

ITE Courses and Graduates

Entry Scores for ITE

In 2014, 1967 ITE students entered courses on a secondary education basis (ATAR)

- 41% of students had an ATAR under 70
- 24% of students had an ATAR under 60
- 9% of students had an ATAR under 50

Practicum placements per sector 2015

- Government schools provided 77% of practicum places (with 63% of total student enrolments).
- Catholic schools provided 13% of practicum places (with 23% of total student enrolments).
- Independent schools provided 10% of practicum places (with 14% of total student enrolments).

Graduates in Fixed Term Employment

There were 2236 graduates employed in government schools in 2015.

- Of the 1382 employed in primary schools 96% (1325) were on fixed term contracts;
- Of the 752 employed in secondary schools 88% (662) were on fixed term contracts;
- Of the 253 employed in P-12 schools 85% (214) were on fixed term contracts;
- Of the 154 employed in special and language schools 94% (145) were on fixed term contracts.

[Source: Victorian Teacher Supply and Demand Report 2014-15, DET, 2016]

Professional development at the AEU

AEU training, conferences and events

The AEU runs a large number of conferences, industrial and professional training sessions and member forums. A full list of these activities, dates/times and venues can be found on our website. You are able to book your activity online.

The AEU also runs online webinars and member forums throughout the year.

These events are free to AEU members but you must register to attend. All events can be found in the AEU Events Calendar.

If there are topics you would like us to cover that would also be relevant to other members, please let us know.

AEU Professional Learning Centre

Time to book your school's Professional Learning for 2017

The Professional Learning Centre can assist your school or cluster of schools to plan their professional learning around leadership, wellbeing and teaching and learning.

In 2016 we helped many school leaders and their leadership teams to access quality activities on site. One example of this was at Melba College where the PLC sourced presenters on team building to work with the school's leadership team.

Furthermore, the PLC worked with a group of small country primary schools to organise a day on how to design engaging curriculum.

In 2016 the PLC assisted more than 3,600 people (primary, secondary and special setting) to deliver engaging and meaningful activities.

Are you worried about the cost of Professional Learning for your school?

The Professional Learning Centre has sourced a range of high quality presenters who can provide micro-sessions for one hour or up to three hours for staff meetings, Professional Learning days or Curriculum Days. We have over 20 presenters so there is rich smorgasbord of offerings that a school can access starting from around $300 (plus GST).

Some of the things the PLC can assist you with:

Full day workshops

1. Implementing peer coaching with rigour and fidelity
2. Leading Professional Learning Teams that Impact Student Achievement
3. Unpacking the capabilities curriculum
4. Leading maths in primary schools
5. What do the proficiency strands mean for maths instruction?
6. Planning for effective STEM instruction

1 or 2 hour workshops

1. Teaching reasoning in maths
2. Teaching and assessing conceptual understanding in maths
3. Teaching fluency through number talk and number strings
4. Literacy strategies

Please look at our website for ideas and then contact David Tyson, Manager, Professional Learning Centre david.tyson@aeuvic.asn.au or call 94184939

Professional development with TLN

Teacher Learning Network

Welcome to TLN in 2017

The Teacher Learning Network is your professional development provider, supported by your union - AEU Victoria.

TLN operates on school based memberships - your school pays a one-off membership fee and then all staff in your school can access the following benefits FREE of any further cost.

1. Over 100 professional development courses each year delivered by 'teachers for teachers'. See the full list at www.tln.org.au
2. Courses that meet the needs of ES staff working with students or having to manage challenging conversations with other adults.
3. Most courses are delivered online and are accessible anywhere in Victoria.
4. Multiple copies of professional journals three times per year. In 2017 the journal themes are Feedback (in schools in the first week of March): Digital Literacy - implementing the new curriculum; and New Pedagogies (assessing the new teaching models from Hattie, Marzano, McRel etc.)
5. Over 70 recorded courses - available to all staff on-demand. Topics include literacy, numeracy, behaviour management, working with students with a learning disability, differentiation.

New in 2017 (accessible to TLN members only)

Autisim in the Classroom - On-demand Package. An innovative 8-hour package of video recordings, podcasts, professional reading, forums and practical activities on teaching students with Autism. This is the best introduction to this teaching skill.

Professional Certificate in Education Leadership

In 2017, the Teacher Learning Network has introduced a Professional Certificate in Education Leadership. This is leadership development, that is practical and school focused. The Certificate is designed for new, aspiring and emerging leaders.

The Certificate comprises 16 hours of TLN leadership development. There is over 24 hours of course time available in the Certificate, so participants can tailor the program to meet their development needs and the school improvement plan.

Many courses are being run in partnership with the Professional Learning Centre. See below for a sample of the courses available to participants. More information is available from Michael Victory mvictory@tln.org.au, (03) 9418 4992 or for more information go to www.tln.org.au

Course	Presenter	Date	Venue
Leading Instructional Practice	Amanda Ellaby (Berwick Fields Primary School)	4 May	Online
Leading a curriculum/KLA team	Lori Pereira (North Geelong Secondary College)	5 September	Online

Join TLN

If your school is not a member (you can check at www.tln.org.au) then you and the staff at your school are missing out. School membership is much cheaper than you imagine.

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