



Dear Colleague,

Welcome to the fourth 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.

We have a film giveaway for Coordinator Network members (see Victorian News).

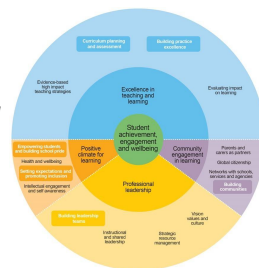
[Past copies of the Coordinator e-news are available here.](#)

News: Victorian

DET teaching practice principles

DET has published a new guide (November 2017) for teaching and learning in Victorian government schools - [Practice Principles for Excellence in Teaching and Learning](#).

The document contains: a Vision for Learning, nine Practice Principles for Teaching and Learning and a set of diagnostic tools.



Vision for Learning

The Vision for Learning is designed to create a unified set of values and beliefs and provides a frame of reference for teachers to evaluate their current practice. The Vision for Learning:

All students are empowered to learn and achieve, to experience high quality teacher practice and the best conditions for learning which equip them with the knowledge, skills and dispositions for lifelong learning and to shape the world around them.

Practice Principles

The nine Practice Principles reflect the research about effective instructional practices and what works to improve student learning outcomes. The Practice Principles articulate how teachers can deliver the curriculum and engage students.

Each of the principles is unpacked into three or four key *actions* which provide more detail about the specific teacher practices which contribute to effective teaching and learning. Each of the actions has a series of *indicators* which describe what the action looks like in practice.

There are also two *engagement activities* for each of the nine principles to "prompt discussion and debate". Each principle has one engagement activity for individuals and one for team-based work.

The nine principles are:

1. High expectations for every student promotes intellectual engagement and self-awareness
2. A supportive and productive learning environment promotes inclusion and collaboration
3. Student voice, agency and leadership empower students and build school pride
4. Curriculum planning and implementation engages and challenges all students
5. Deep learning challenges students to construct and apply new knowledge
6. Rigorous assessment practices and feedback inform teaching and learning
7. Evidence-based strategies drive professional practice improvement
8. Global citizenship is fostered through real world contexts for learning
9. Partnerships with parents and carers enhance student learning

Diagnostic Tools

The diagnostic tools include: a sample whole school reflection tool, a sample guided teacher self-reflection tool, a sample teacher survey and two sample student surveys (Years 4-6 and Years 7-12).

The document also aligns the nine principles with FISO, Education State Targets, the Victorian Early Years Learning and Development Framework and Australian Professional Standards.

High impact teaching strategies

The [High impact teaching strategies](#) (HITS) are 10 instructional practices that research has shown increase student learning wherever they are applied. They are largely based on the work of John Hattie who synthesised a large number of studies and ranked teaching strategies by the contribution they make to student learning



The 10 HITS sit at the top of these rankings. They are:

- Setting goals - Lessons have clear learning intentions with goals that clarify what success looks like.
- Structuring lessons - A lesson structure maps teaching and learning that occurs in class.
- Explicit teaching - When teachers adopt explicit teaching practices they clearly show students what to do and how to do it.
- Worked examples – A worked example demonstrates the steps required to complete a task or solve a problem.
- Collaborative learning - Collaborative learning occurs when students work in small groups and everyone participates in a learning task.
- Multiple exposures - Multiple exposures provide students with multiple opportunities to encounter, engage with, and elaborate on new knowledge and skills.
- Questioning - Effective questioning yields immediate feedback on student understanding, supports informal and formative assessment, and captures feedback on effectiveness of teaching strategies.
- Feedback - Feedback informs a student and/or teacher about the student's performance relative to learning goals.
- Metacognitive strategies - When students become aware of the learning process, they gain control over their learning.
- Differentiated teaching - To ensure all students master objectives, effective teachers plan lessons that incorporate adjustments for content, process, and product.



Literacy and numeracy strategy for government schools

The DET document *Literacy and Numeracy Strategy* sets out the Department's policies, activities and resources to improve literacy and numeracy performance in the government school system.

"The Strategy aims to empower and support schools to identify and implement strategies to improve literacy and numeracy teaching and learning, based on their own particular circumstances and needs, as part of their Annual Implementation Plans (AIP). It is not a one-size-fits-all approach. A suite of programs, resources and additional support will be provided to assist schools to set their own literacy and numeracy goals, and to achieve them."

The Strategy has a large number of components which will be made available to schools in 2017 and 2018.

Pedagogy and Professional Practice

Available 2017

- High Impact Teaching Strategies (see above)
- A pedagogical model for schools – *"The pedagogical model for schools will provide school leaders and teachers with a common language to describe and discuss quality teaching and learning."* (see above)
- Professional Learning Communities Initiative (selected schools)

Available 2018

- Leading Effective Professional Learning Communities: Guidance
- Specialist Teaching Teams (selected schools) – *"Specialist Teaching Teams will work side by side with classroom teachers in schools which are experiencing complex challenges to improve instructional practice."*

Literacy

Available 2017

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- Victorian Literacy Portal
<http://www.education.vic.gov.au/school/teachers/support/literacy/Pages/default.aspx>
 - VCAA Curriculum Specialists (early literacy) - guidance for teachers
 - VCAA Curriculum Specialists (early literacy) – targeted advice for a cohort of teachers
 - Literacy Teaching Resource – F-6 Core Reading Strategies and expert videos
 - English Developmental Continuum F-10
 - Reading and Vocabulary Assessment for English as Additional Language Learners 3-10
 - Teacher demonstration videos (rolling release) The Building Practice Excellence: Literacy Teaching Resource will provide detailed guidance to teachers
 - Literacy and Numeracy Assessment and Data Guide

Available 2018

- Enhanced English Online Interview process and supporting resources for teachers
- Literacy Teaching Resource Birth to Year 6 – full online integrated version
- Academic vocabulary resource for secondary school teachers – *“a specific resource for teachers to help build the academic literacy skills of secondary school students.”*
- Koorie English resources (selected schools)

Numeracy

Available 2017

- Victorian Numeracy Portal
<http://www.education.vic.gov.au/about/programs/learningdev/vicstem/Pages/numeracyportal.aspx>
- Science and Mathematics Specialist Centres
- Wolfram Software Suite
- VCAA Curriculum Specialists (STEM) - guidance for teachers including videos
- VCAA Mathematics curriculum – sample program – F-10
- Mathematics Developmental Continuum F-10
- Literacy and Numeracy Assessment and Data Guide
- Primary Mathematics and Science Specialists (selected schools)

Leadership

(“School leaders are defined as anyone in the school with leadership responsibilities. This might be the Principal, the Assistant Principal, a curriculum, English, literacy or mathematics coordinator or leader”.)

Available 2017

- Excellence in Teaching and Learning: A School Leaders’ Guide to Improving Literacy and Numeracy Outcomes
<http://www.education.vic.gov.au/Documents/school/teachers/support/schleadguide.pdf>

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- Workshops for primary school literacy leaders
 - Bastow Literacy and Numeracy Assessment and Data Program and Guide
 - Early Years Koorie Literacy and Numeracy Program (selected schools)
 - Extended Koorie Literacy and Numeracy Program (selected schools)
 - Secondary STEM Catalysts (selected schools)
 - Bastow Leading Literacy Program (selected schools)
 - Bastow Leading Mathematics Program (selected schools)
 - Bastow Strategic Management for School Leaders: Data Literacy Module (selected schools)

Available 2018

- Detailed Panorama Dashboard for each school – *“interactive dashboards that will provide more precise and detailed performance data to support school improvement planning.”*
- Preferred professional development provider list – *“The Department will make available a preferred provider list of external literacy and numeracy trainers and coaches”.*
- Executive Contract Principals (selected schools) – *“Executive Contract Principals will be deployed in schools that face significant challenges as vacancies arise.”*
- Turnaround Teams (selected schools) – *“The leadership teams of schools with complex challenges will be matched with one of eight Turnaround Teams, consisting of one principal class member and two leading teachers, with expertise in both leadership and instructional practice.”*
- School Improvement Partnerships (selected schools) – *“leadership teams from high-performing schools [will be matched] with those from schools that face significant challenges”.*

Student Agency and Leadership

Available 2018

- A student agency and leadership framework – *“The framework will establish a clear vision for students as key partners in decision-making about their own learning, and provide tools and resources that support the development of student agency in the classroom, at the whole of school level, and at a system level.”*

A curriculum blast from the Opposition

It looks like the culture wars are going to be re-opened in Victoria as the state prepares for next year's election. The shadow minister for education, Tim Smith (pictured), launched a media attack on the teaching of humanities in Victorian schools and on the English subject association – VATE.

Mr Smith wrote:



“It's obvious to any reasonable observer, and indeed critical thinker, that there is a cultural, ideological and

philosophical emphasis on one perspective over another in our humanities subjects.

Dominating themes of class tensions paint a bleak, negative and depressing view of our humanity. Rather than encouraging students to think clearly about moral dilemmas, which may be encountered in their lives, students are force-fed a diet of cultural and moral relativism.

I am not suggesting that politicians should be able to dictate the contents of the curriculum; rather that the curriculum should reflect the ideas and the traditions that have stood the test of time.

Identity politics is still seeping into the classroom. The decision of the Victorian Association for the Teaching of English to invite former AHRC President Gillian Triggs, GetUp! Campaigner Shen Narayanasamy and left-wing activist Van Badham to deliver speeches at their conference is evidence that one perspective, the cultural left, takes precedence over all others.

The conference agenda confirms the left-leaning allegiance of the organisation, with an over emphasis of identity politics. Also highlighted in the agenda is a discussion on post-modernist novel *The Passion*, by Jeanette Winterson.”

[Tim Smith, Victorian Liberal shadow minister for education, *Left views dominate in the classroom*, The Age, 20/11/2017]



Inquiry into Career Advice in Victorian Schools

The Victorian Parliament is carrying out an inquiry into career advice in Victorian schools. The Terms of Reference include: how well career advice is meeting the needs of school leavers, challenges faced by careers advisors, the relationship between career advice and workforce participation, how to make career advice more effective and how to meet the career advice needs of young people in regional Victoria.

The AEU submission to the inquiry will address issues raised by teachers and principals in government schools. If you, or the careers teacher/ counsellor at your school, would like to comment on any or all of the above issues or any other matters which you believe would improve the provision of career advice in schools please send the comments to John Graham: john.graham@aeuvic.asn.au

The closing date for submissions is December 15.

Film Giveaway

We have 10 advance screening double passes for members of the AEU's Coordinator networks for December 8-10 & 15-17 to see the French comedy – *Just to be Sure*.

A winning tale of parenthood, love and family, both lost and found, JUST TO BE SURE was an audience favourite of this year's French Film Festival, and went on to screen as an Official Selection of the Cannes Film Festival Director's Fortnight competition. www.justtobesure.com.au

Contact Marlene McLean: marlene.mclean@aeuvic.asn.au Subject : Film Passes (First in first served)



News: National

Federal Government School Education Review

Submissions to the David Gonski (pictured)-led *Review to Achieve Educational Excellence in Australian Schools* (the Federal Government's review into how school funding should be used to improve educational outcomes) closed on November 2. The final report and recommendations are to be provided to the Government by March 2018.



The AEU submission to the Review was based on an extensive survey of more than 4,000 public school principals and teachers around Australia.

The national survey had many of the same findings as the Victorian ACER-AEU workload survey. It found that principals are working crushing hours and are currently able to invest just 14 per cent of their time leading teaching and learning due to competing demands not focused on the classroom.

Other findings were that 79 per cent of principals said they do not have enough resources to meet the needs of students with a disability at their school and 91 per cent believe they are using funds from other areas to help students with a disability who are ineligible for funding.

The AEU submission called for greater investment in leadership and teaching in schools so that principals have more time to lead, and teachers have more time to teach. To achieve this there needs to be an end to unnecessary bureaucratic compliance, improved professional development, and more time for quality teaching and learning.

Another important finding was the need for better initial teacher education. Of surveyed public school teachers with less than four years' experience, just 13 per cent rated their initial teacher education as 'very good'.

Around 79 per cent said training to teach students with a disability was only 'of some help' or was 'not

helpful'. Similar strong concern was raised around training for involving parents and guardians, managing students with behavioural needs, and ensuring consistent and comparable assessments.

The AEU recommends teacher training should be transitioned to a two-year post-graduate qualification, such as an undergraduate degree combined with a two-year teaching masters.

The Federal Government Education Review is fatally flawed because it has been prevented from considering whether total funding is adequate to meet student needs. The Turnbull Government is cutting \$17 billion from what schools were going to receive by 2027 under the original Gonski Agreement.

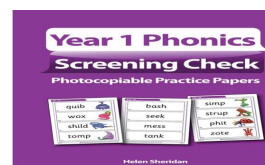
The current funding reality contradicts any claimed commitment to a high-performing school system – especially when the impact falls mainly on public schools that educate most students, and an even greater majority of students with a background of disadvantage.

The Issues paper for the *Review to Achieve Educational Excellence in Australian Schools* is available [here](#).

The AEU submission is available to read [here](#).

National phonics test proposal ignores research

Federal Minister for Education Simon Birmingham's proposal for Australia to adopt a modified version of the Year 1 Phonics Screening Check which has been used in England since 2012 has ignored research concerns about its effectiveness and impact on students and pedagogy.



Emeritus Professor Margaret M. Clark from the University of Birmingham in the UK highlights some of the concerns that have been raised about England's Phonics Screening Check.

- the pass/fail decision resulting in many children between 5 and 6 years of age and their parents being told they have failed;
- the lack of any diagnostic aspects;
- the decision to make 20 of the 40 words pseudo words creating confusion for some children, including some who were already reading;
- the large unacknowledged difference in pass rate between the oldest and youngest children (a year different in age);

The United Kingdom Literacy Association and several teachers' unions (ATL, NAHT, NUT) investigated teachers' views and found that:

- nine in ten Year 1 teachers said the Phonics Screening Check did not tell them anything new about the reading ability of their pupils;
- 86 per cent said they should not continue, including many who had been open-minded before administering the Phonics Screening Check;

- nine in ten teachers had their students practise reading made-up (pseudo) words;

The Department for Education commissioned the National Foundation for Educational Research to undertake research over the period 2012–2015 to consider the impact of the check on the teaching of phonics in primary schools, on the wider literacy curriculum and on the standard of reading. Most teachers interviewed as part of the case study visits to schools reported that the check would have minimal, if any, impact on the standard of reading and writing in their school in the future, while many interviewees reported no substantial changes to teaching.

In its final report, the National Foundation for Educational Research stated that: “There were no improvements in attainment that could be clearly attributed to the introduction of the check, nor any identifiable impact on pupil progress in literacy for learners with different levels of prior attainment.” (Walker et al., 2015, p. 67)

The Australian Literacy Educators’ Association has posed a series of questions for the Minister:

- Why would Australia want to introduce a screening check that has not worked well in England?
- If Australian teachers are already teaching and assessing phonics, then why would we want to change that?
- Aren’t teachers the best people to be making decisions about the learning that their students need?
- Isn’t phonics best taught as part of meaningful literacy activities?
- Why would teachers waste precious time teaching students how to pronounce pseudo words?

[from Robyn Henderson and Margaret Clark, *Should Australia be following England’s Phonics Screening Check?*, ALEA Hot Topic:, Nov.2017] <https://www.alea.edu.au/documents/item/1681>

Business calls for overhaul of education

The NSW Business Chamber has published a report, [*Old School/ New School: Transforming school education for the 21st century*](#), calling for the education system to be “modernised” and students better prepared for work.



The report wants authorities to create the right organisational arrangements to improve the standing of vocational education and training and encourage more students to take part. The last two years of school are too orientated towards higher education.

It calls for groups of schools in selected education regions to introduce a “vocationally intensive approach” where schools “will have collaborative learning spaces introduced and project learning methodology used by teachers.”

Communication, collaboration and problem-solving skills should be Integrated into the curriculum and education authorities must ensure every child in every school can access the support services they need, including comprehensive careers advice and targeted mentoring for high-risk students.

The report wants teachers to be freed from administration tasks to focus on their skills in the classroom.

Like their peers in Finland and Singapore, teachers should also be given more respect and opportunities to develop their careers. To this end, the report recommended the development of learning hubs to allow teachers to share best practice and take part in peer-to-peer mentoring.

Sun-safe hats not being worn

A new report commissioned by the NSW Cancer Institution and Cancer Council found that only 60 per cent of primary school students wore sun-safe hats.



Observers watched 8,000 Sydney students in government schools in western Sydney over three months and found that girls were 1.6 times more likely than boys to wear no hat at all.

In a fifth of the observed schools, less than 7 per cent of students were wearing sun-safe hats. Many of these schools had students from disadvantaged backgrounds.

Some schools have introduced sunglasses as an optional part of the school uniform because of a concern that young children had damage to their eyes caused by the sun.

[Jayce Carrano, *Sun-safe hats not worn by nearly half of Sydney primary school students*: report, SMH, 25/11/17]

News: International



Tutoring increasing inequality

A new report published in the UK about out-of-school study has labelled private tuition as the “hidden secret” in the “arms race” of education.

Experts have warned the rise in private tuition is fuelling social inequality and creates a “glass floor” which stops richer students from failing while putting poorer children at a disadvantage. Young people from more advantaged households (35%) are twice as likely as less well-off households (18%) to have ever received private tuition.

The study (*Extra Time*) by the Sutton Trust has revealed that 30 per cent of children aged 11-16 in state schools in England and Wales in 2017 have had private tuition at some point in their life. This is up from 25 per cent in 2016 and 18 per cent in 2005. In London 48 per cent had private tuition, up from 42 per

cent in 2016 and 34 per cent in 2005.

There are big gaps between socio-economic and achievement groups in England in time spent on “additional instruction” i.e. extra tuition outside the normal school timetable which may either be provided by the school, the family or by private tutors. For pupils of the same levels of achievement, well-off pupils receive 2.5 hours more additional instruction than less well-off pupils.

Bright but poor students receive much less support than their better-off peers. Whereas around a third (32%) of low-achieving pupils from advantaged backgrounds receive one-to-one tuition in science or mathematics, this falls to around one-in-twelve (7%) of high-achieving young people from disadvantaged backgrounds.

High achievers in science who are from better off backgrounds are twice as likely to receive extra instruction as high achievers from disadvantaged homes, even though Sutton Trust research shows many of the latter fall behind in secondary school.

Poorer pupils get less help at home with their homework. Only half of 15-year-olds from disadvantaged social backgrounds in England regularly receive help with their homework from their parents, compared to more than two-thirds of those from the most advantaged backgrounds.

The report recommends a range of measures to improve equity: a means-tested voucher scheme for tuition, expand non-profit and state tuition programs for disadvantaged students, schools should establish “homework clubs”, and schools should actively involve and support parental engagement in their child’s education.

[John Jerrim, *Extra Time*, Sutton Trust, September 2017]

.AI influences tutoring

University College London’s Institute of Education has partnered with online tutoring site My Tutor to develop an AI “tutor of the future”.

Parents are asked a series of questions about their child’s personality and the information is fed into an algorithm that matches them up with a series of tutors who have similar personality characteristics.

James Grant, the founder of My Tutor, said AI would be the future of tutoring. Building a “strong rapport” between a tutor and a student was crucial for academic success.

The robots are taking over

Robots will begin replacing teachers in the classroom within the next 10 years according to Sir Anthony Seldon, the vice-chancellor of the University of Buckingham.



Intelligent machines being developed in Silicon Valley would learn to read the brains and facial expressions of students and adapt the method of communication that works best for them. This would enable children to learn new material at their own pace rather than as part of a class.

“The machines will know what it is that intellectually excites you and gives you a natural level of challenge that is not too hard or too easy, but is just right for you,” he said.

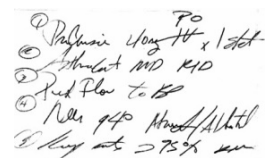
He sees the role of teachers changing so that they become “overseers” monitoring the progress of individual students, leading non-academic activities and providing pastoral support.

Experts predict that automated teaching of maths and science will form the vanguard of machine-led learning.

[Henry Bodkin, *Teachers have 10 years before robots take over*, The Daily Telegraph (UK), 11/9/17]

Laptops in exams

Cambridge University is reviewing the use of laptops in exams. It has already piloted typing rather than handwriting in the History and Classics faculties earlier this year.



The review has been told that students’ handwriting is becoming illegible as they generally write nothing by hand except in exams. Students with illegible writing are forced to come back to their college during the summer holidays to read out their answers aloud in the presence of two university administrators.

[Luke Mintz and Camilla Turner, *Writing is on the wall for exams as Cambridge considers allowing laptops*, The Daily Telegraph (UK), 9/9/17]

Reports and Resources

Developing a student growth mindset

Carol Dweck (pictured), a Psychology Professor at Stanford University, developed the idea of two core mindsets, or beliefs, about our abilities:

1. The *fixed mindset* is the belief that our abilities are fixed and limited.
2. The *growth mindset* is the belief that abilities are malleable and our current performance is what someone can do at that particular time.

Students with a fixed mindset attribute errors and problems in their performance to a lack of ability which they feel powerless to change. Students with a growth mindset believe their performance can be improved through learning from mistakes, hard work and perseverance.



Dweck's concept has become an important influence on teaching and learning in many schools in Australia.

She has recently expressed concern about the trend in some classrooms of teachers misunderstanding the mindsets concept and promoting a “false growth mindset” approach.

The danger is that some teachers think they have a growth mindset and believe it will transfer to their students, even though they themselves don’t really understand it. Others do understand the idea that abilities can be developed, but don’t understand how to pass it on to students.

A lot of parents or teachers say praise the effort, not the outcome. I say [that’s] wrong: Praise the effort that led to the outcome or learning progress; tie the praise to it. It’s not just effort, but strategy ... so support the student in finding another strategy. Effective teachers who actually have classrooms full of children with a growth mindset are always supporting children’s learning strategies and showing how strategies created that success.

Students need to know that if they’re stuck, they don’t need just effort. You don’t want them redoubling their efforts with the same ineffective strategies. You want them to know when to ask for help and when to use resources that are available.

Some teachers who themselves have a growth mindset aren’t passing it on because they are trying to protect the student’s confidence to prevent them from seeing their failures as something negative. By doing this they’re conveying anxiety about ability.

Reassuring a student that not everyone is good at maths conveys the message that ability in maths is important and it is fixed. Using a student’s problems and failures as an opportunity to enhance learning helps them to understand that abilities can be developed.

Praise needs to be “process praise” focusing on the learning process and showing how hard work, good strategies, and good use of resources lead to better learning. Dweck has seen differences in mindsets between children as young as 3 or 4 years old and with teenagers. Process praise can be used to develop a growth mindset with both of these groups.

[Carol S Dweck, [The secret to raising smart kids](#), *Scientific American*, Jan. 1 2015]

[Christine Gros-Loh, [How praise became a consolation prize](#), *The Atlantic*, Dec.16 2016]



How the brain learns to read

“As a child becomes literate, there is no “reading centre” that magically materialises in the brain. Instead, a network of connections develops to link existing areas that weren’t previously linked.

Reading becomes a way of accessing language by sight, which means it [builds on architecture](#) that is already used for recognising visual patterns and understanding spoken language.

When a skilled reader encounters a printed word, that information travels from their eyes to their occipital lobe (at the back of the brain), where it is processed like any other visual stimulus.

From there, it travels to the left fusiform gyrus, otherwise known as the brain’s “letterbox”. This is where the black squiggles are recognised as letters in a word. The letterbox is a special stopover on the word’s journey because it only develops as the result of learning to read.

It doesn’t exist in [very young children](#) or [illiterate adults](#), and it’s activated less in [people with dyslexia](#), who have a biological difference in the way their brains process written text.

Words and letters are stored in the letterbox – not as individually memorised shapes or patterns, but as symbols. This is why a skilled reader can recognise a word quickly, regardless of *font*, cAsE, or [typeface](#).

Information then travels from the letterbox to the [frontal and temporal lobes](#) of the brain, to work out word meaning and pronunciation. These same areas are activated [when we hear a word](#), so they are specialised for language, rather than just reading and writing.

Because information can travel so quickly across the skilled reader’s synaptic highways, the entire journey takes [less than half a second](#).

Literacy instruction

For young children, the process of getting from print to meaning is slow and effortful. This is partly because beginning readers have not yet built up a store of familiar words that they can recognise by sight, so they must instead “sound out” each letter or letter sequence.

Every time children practise decoding words, they forge new connections between the visual and spoken language areas of the brain, gradually adding new letters and words to the brain's all-important letterbox.

Remember, when a practised reader recognises a word by sight, [they process the letters](#) in that word, rather than its shape.

Literacy instruction can therefore support children's learning by highlighting the symbolic nature of letters - in other words, by drawing attention to the relationships between letters and speech sounds.

Here, evidence from [brain imaging research](#) and educational research converge to show that early [phonics](#) instruction can help construct an efficient reading network in the brain."

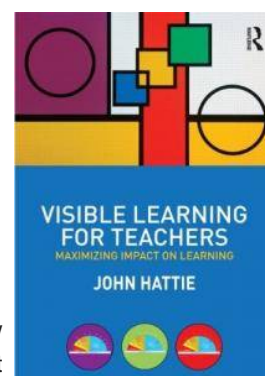
[from Nicola Bell (2017), Uni of Queensland (PhD student), *Explainer: [How the brain changes when we learn to read](#)*. The Conversation]

Three interventions with the greatest effect size

In 2015, researcher John Hattie updated his *Visible Learning* research. He included some new and expanded intervention strategies that have effect size impacts above 1.15 (the average effect size impact is 0.4).

1. **Conceptual Change Programs (1.16 effect)**

The idea is that a learner's prior beliefs can be resistant to change, even when presented with new information. Sometimes students don't assimilate all the new data in a lesson into their mental model. Often this is solved with re-teaching, but it is more effective to change the focus by directly confronting common misconceptions.



2. **Self-Reported Grades (1.3 effect)**

When a teacher knows what a student's expectations are, they're able to push the student to achieve more. Different to goal-setting, this practice of stretching student expectations grounds future goals and behaviour changes in what a student believes about his or her ability to perform today. (Hattie noted that if he were to write *Visible Learning* again, he'd call this concept "student expectations.")

3. **Collective Teacher Efficacy (1.6 effect)**

Research shows that perceived efficacy directly changes "the diligence and resolve with which groups choose to pursue their goals". According to Hattie, there's nothing better that can be done to influence student achievement than teachers believing their teaching directly benefits their students. There are many factors that contribute to teacher efficacy including the degree to which teachers participate in decisions, how much they know about what peers are doing and how responsive school leadership is.

[from Hilary Scharton, *4 ways teachers can supersize Hattie effects*, eSchool News July 24th, 2017]

Research Digest



Twin studies: Impact of genes on student performance

Studies by researchers at the University of New England of the literacy performance of twins have found that genetic inheritance accounts for between 60 per cent and 80 per cent of variation in student performance.

They found that some shared factors such as family SES and school attended are relatively minor influences on student differences once genetic endowment has been taken into consideration.

A study of 700 pairs of twins in NSW and Colorado schools in Kindergarten (Prep Victoria), Year 1 and Year 2 found that about 8 per cent of the variability among children was due to the class room they are in. Because classroom factors other than the teacher (e.g. 'classroom climate') can affect the average class score, "the actual contribution of teacher quality is probably less than 8 per cent".

This contrasts with some teacher quality commentators who put its impact at up to 40 per cent.

The substantial effect of genetics on early literacy was shown by the higher correlation in performance among monozygotic (identical) twins, compared to dizygotic (non-identical twins). Identical twins share all their genes, 'fraternal' twins share half of their genes, but both types share homes and schools.

Studies around the world of twin children in the core areas of literacy and numeracy have found genetic influence ranging from 50 per cent to 80 per cent. Less is known about creative and technical subjects where particular talents exist.

"Teachers do matter in that they are the reasons why children know more at the end of the year or even the day. But our teachers are more uniformly effective than many give them credit for."

"What works are well-designed, well-delivered and timely interventions that can help struggling children to reach or more closely approach normal-range levels. If some children struggling with literacy or numeracy are doing so because of constraints on learning with biological origins, then extra funding delivered to these children is exactly what is needed."

"We need to take comfort from the existence of scientifically-grounded interventions, which in the hands of teachers with sufficient resources, can make a difference to the prospects of students who

initially find the going in particular subjects tough.”

<https://theconversation.com/genes-can-have-up-to-80-influence-on-students-academic-performance-58052>

<https://theconversation.com/genes-arent-destiny-but-teaching-isnt-everything-either-10561>

<https://theconversation.com/for-australian-students-academic-potential-still-outweighs-social-circumstances-82441>

Reading extends teenagers' vocabulary, whatever their background

UCL Institute of Education researchers at the Centre for Longitudinal Studies found that teenagers who read often, and those who had access to plenty of books, were more likely to develop a better vocabulary than their peers.

Analysing the scores of nearly 11,000 14-year-olds in a word exercise, the researchers found that teenagers who read for pleasure every day understood 26 per cent more words than those who never read at all in their spare time. And teenagers from book-loving homes knew 42 per cent more words than their peers who had grown up with few books.



Even taking into account other factors, like parents' qualifications and profession, and cognitive tests taken by the teenagers when they were aged 5, teenagers who read for pleasure still got 12 per cent more words right, while those from book-rich homes scored 9 per cent more.

While there were large differences in parents' vocabulary scores, according to ethnic group and education, there was much less variation in their children's scores.

Mothers with a postgraduate degree on average got more than double the number of words right compared to mothers who had no qualifications (15 out of 20 compared to 7 out of 20). Among the teenagers, the differences, by parental education, were smaller; those whose mothers had a postgraduate degree scored an average of 9 out of 20, while those whose mothers had no qualifications still scored 6 out of 20.

Lead author, Dr Alice Sullivan said: “Although these results show stark socio-economic differences in parents' vocabulary, the fact that they are much smaller for teenagers than for parents gives grounds for optimism that family background is not destiny.

The link between reading for pleasure and better vocabularies suggests that if young people are encouraged to discover a love for books, it could alter the course of their lives, regardless of their background.”

[University College London Institute of Education, Centre for Longitudinal Studies, 22 November 2017]

<http://www.ucl.ac.uk/ioe/news-events/news-pub/nov-2017/reading-teenage-vocabulary>

Statistics

International fee-paying students in Victorian Government Schools

	No of students	2 year increase	% increase 2013-17
2013	2905		
2015	3575	23.1%	
2017	5202	45.5%	79.1%

A very large increase (almost 80%) in the number of international fee-paying students in Victorian government schools during the period 2013-17. The greatest proportion coming from China.

Vic. retention rates 7-12 govt. v non-govt.

	% govt. school students	% non-govt. school students
2013	85.9	89.9
2015	91.0	90.1
2017	93.3	91.4

The Victorian government school retention rate (7-12) is now significantly higher than the non-government rate.

% increase in government school students

	Vic	NSW	Aust
2012	545,006	746,874	2,321,217
2014	563,549 (+3.4%)	762,244 (+2.1%)	2,387,529 (+2.9%)
2016	588,729 (+4.7%)	779,257 (+2.2%)	2,465,628 (+3.3%)

The percentage increase in the number of students in Victorian government schools is more than double that in NSW and significantly higher than the Australian average.

% increase in number (FTE) teachers in government schools

	Vic	NSW	Aust
2012-2014 % increase/decrease	-0.3% (-141.8 teachers)	1.4%	1.2%
2014-2016 % increase	6.0% (+2,399.1 teachers)	1.5%	4.5%

There has been a 6% increase in the number of teachers in Victorian government schools over the period 2014-16 which is 4 times higher than the increase in NSW schools and significantly above the Australian average.

[Source for all tables: *Summary Statistics for Victorian Schools July 2017*]

Publications

AEU

Professional Voice

The latest edition of the AEU's professional journal – *Professional Voice* – was mailed out to all members of the union's Curriculum Coordinator and PD Coordinator networks in November. If you did not receive a copy contact Marlene McLean:

marlene.mclean@aeuvic.asn.au



This edition of the journal is titled *Professional Learning* and is also available online at <https://www.aeuvic.asn.au/news-media/professional-voice>

The next edition of *Professional Voice* will be published in the first half of next year. If you have any suggestions about the topics or issues you would like to see it cover contact John Graham:

john.graham@aeuvic.asn.au

Spin offs!

Management consultant slams VCE

"Instead of discussing the brilliance of Shakespeare we are reduced to looking at plastic bags and a Green-left world view."



[Tim Smith, the Liberal shadow minister for education, attacking part "C" of the VCE English exam which asked students to analyse the persuasive writing techniques in a mock newsletter from a school principal about the amount of rubbish in students' lunchboxes. Mr Smith lists his former occupation as "management consultant".]

Business wants teachers respected for their expertise

"We want teachers to have the time and the capacity to be teachers. Their time needs to be freed up from administrative tasks and refocused on their core skills as education experts. Like their peers in Finland and Singapore, teachers should be highly respected for their important role as educators."



[NSW Business Chamber report, Old School New School: Transforming school education for the 21st century, Nov. 2017]

Beyond toeing the line



"School leaders have to stop thinking that their role includes compliance - no need to be rebellious but toeing the line is not a good job description. At the same time they need to increase their 'participation as a learner' activity with teachers. If they do both of these things they will become more empowered and appreciated by teachers and many system leaders alike."

[Michael Fullan, leadership guru, in Professional Voice, November 2017]

Professional development at the AEU

AEU

Professional Learning Centre

PLC record of success

The PLC fills a special niche as they can get quality presenters quickly, it just happens and they make my life as a Principal easier. - Network Chair and secondary college principal



The Professional Learning Centre (PLC) has offered a wide range of leadership programs to teachers and principal class members across Victoria. Participation rates in PLC programs have significantly increased each year from 2014.

From the beginning of 2015 to 31 October 2017 the PLC delivered professional development activities to over 10,000 government school teachers, principal class and Education Support staff (business managers).

The increasing participation numbers, as well as the activity evaluation reviews indicate the high levels of participant satisfaction with the programs we provide.

The programs offered by the PLC are distinctive because of a combination of their content, their approach, their presenters, their reach, their range of audiences, their locations (metropolitan, regional, rural and on-line) and their reasonable cost.

A characteristic of the approach we use with school-based programs is co-design so that the professional learning is not an off-the-shelf program but is tailored to the context and needs of the specific school. Recent research on effective professional learning has emphasised the importance of this approach

Another element of the PLC approach valued by schools is the wide range of expert presenters in our programs. We have built up the list of people we use over the past few years and use the program

evaluation process to identify presenters who are best able to meet the needs of participants.

All of our presenters are expected to have a sound and up-to-date knowledge of Departmental policies and have a well-documented record of working with teachers and principals in Victoria's public school system.

Contact David Tyson, Manager, Professional Learning Centre: david.tyson@aeuvic.asn.au or call 9418 4939.

Professional development with TLN



A new model of Professional Development for 2018

The Teacher Development Centre is developing an exciting approach to professional development for all teachers in DET schools in 2018. The new three-day programs are based on a model of input, action plan and review and refocus goals.

The three-day model will involve teachers and leaders identifying an area of their own practice that they want to improve; an area that is aligned to the school strategic plan and annual improvement plan. Day one of the program will be input from an experienced educator. Day two will involve the development of an action plan, designed by the individual in partnership with the presenter. Day three will see everyone gather together to review the action plan and re-focus the goals of that plan.

Three examples are set out below

1. **Differentiation and explicit teaching for early career teachers (the first five years)**

Day One will explore the differentiation of quality curriculum, including outcomes and assessment tasks. It will explore the classroom work of John Hattie, Jay McTighe and Carol Ann Tomlinson.

Day Two will build on this beginning with more on explicit teaching and formative assessment based on Dylan Williams. The action plan will be developed on this day.

Day Three will involve a report back, a review of teaching goals and a focus on becoming a leader of learning.

To be delivered by Lori Pereira across terms 2, 3 & 4 on May 9, August 2 and October 19.

More details at www.teacherdevelopmentcentre.org.au from late November or from Michael.Victory@teacherdevelopmentcentre.org.au

2. The power and the purpose: refocusing your teaching career

This program is designed for experienced teachers who are ready to launch into a new phase in their teaching career. Having mastered day to day classroom practice, this course is not about teaching strategies, it is about your purpose as a teacher and renewing your understanding of the power you have to influence lives. It will provide an opportunity to spend three days 'beyond the white noise' of the classroom.

Day One will explore the purpose of teaching and schools through the lens of Gert Biesta, Padraig Hogan and Nel Noddings. These educators go beyond data and accountability to the core purpose of teaching.

Day Two will involve you in renewing your statement of purpose as a teacher and developing an action plan for the next phase of your career, with new research and new insights into what is possible.

Day Three will provide an opportunity to review your plan, refocus your goals and to build a network of supportive colleagues.

To be delivered by Michael Victory across terms 2, 3 & 4 on June 14, August 15 and November 13.

More details at www.teacherdevelopmentcentre.org.au from late November or from Michael.Victory@teacherdevelopmentcentre.org.au

3. Strategic planning for emerging leaders

One of the significant challenges within schools is developing and growing leadership amongst staff so that schools can not only be effective but agile in addressing the ever changing landscape of education. Emerging leaders communicate the values and the strategic vision of the school to colleagues and support them to enact curriculum and pedagogical change.

Across the 3 days participants will create and deliver an action plan based on the school's annual implementation plan (or strategic plan) for their area of responsibility whilst exploring and discussing the latest research in education, leadership and human behaviour.

To be delivered by Dr. Adrian Bertolini across terms 2, 3 & 4 on dates in May, August and October. More details at www.teacherdevelopmentcentre.org.au from late November or from Michael.Victory@teacherdevelopmentcentre.org.au

More programs are in development, including a comprehensive program for senior leaders with Andrew Horsfield and an online program of induction for new graduates. Courses delivered by the Teacher Development Centre are open to all, but significant discounts are offered to AEU members.

TLN Professional Certificate in Education Leadership

In 2017 the Teacher Learning Network introduced the Professional Certificate in Education Leadership. The first graduates of that program are now completing the final requirements and being awarded their Certificate. The program will run again in 2018.

The Certificate in Education leadership was introduced to provide practical, school focused leadership development opportunities for new, emerging and experienced school leaders. Participants can choose from 20 different modules of professional learning, all of which are focused on supporting leaders with the skills and knowledge to be successful in the role. Most modules have practical usable templates to save leaders time.

Regional and remote schools

Participants can complete the Certificate requirements without travelling to Melbourne. Modules are offered live online through the TLN online learning platform and as 'on-demand' online modules that you complete in your own time. Two of the first graduates included a subject coordinator from Horsham who completed the entire Certificate online and an experienced leader from Bairnsdale.

And the best things in life are free

The Professional Certificate in Education Leadership is free for all staff in TLN member schools. As many staff in your school as you want, can complete this Certificate, at no individual cost. The school just needs to be a member of TLN (about 40% of DET schools in Victoria are already members). To join go to www.tln.org.au

The 2018 Program will be released in early December – but you can see details of the 2017 program at <https://www.tln.org.au/leadership>

Or email Michael Victory for more information mvictory@tln.org.au

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