

The science of reading in policy and practice: How far have we come and where to next?

Speech Pathology for Schools

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Centre for Education Statistics and Evaluation (CESE)

7 April 2025



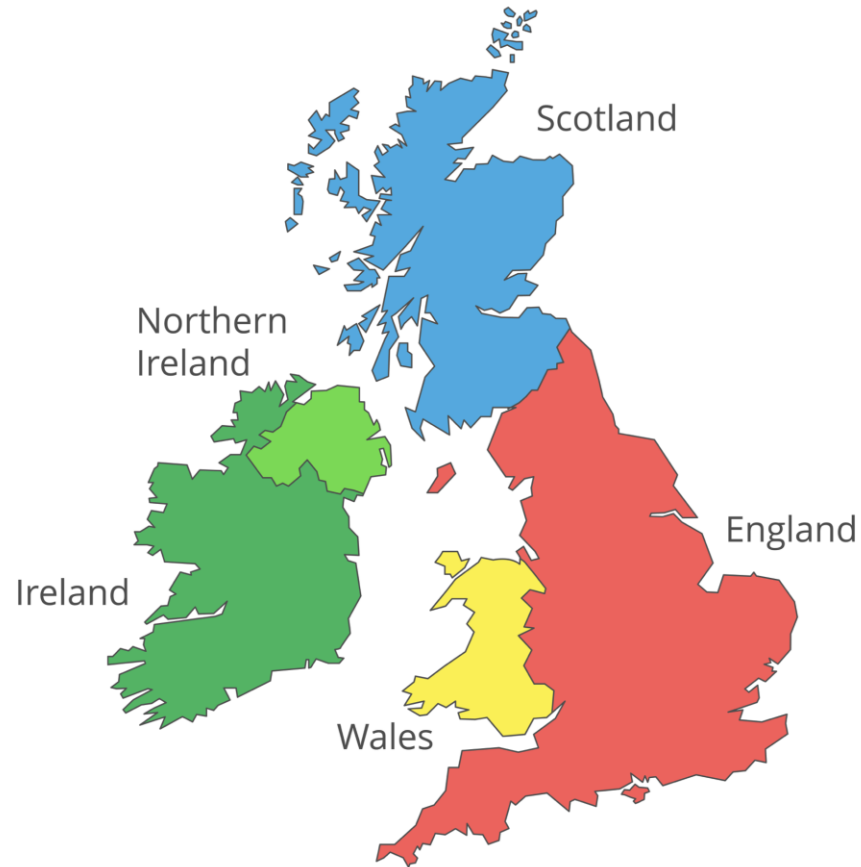
Acknowledgement of Country



We recognise the Ongoing Custodians of the lands and waterways where we work and live. We pay respect to Elders past and present as ongoing teachers of knowledge, songlines and stories. We strive to ensure every Aboriginal and Torres Strait Islander learner in NSW achieves their potential through education.

'Gaawaa' created by Finley Andrews from John Palmer Public School on Dharug Country as part of the 2022 Schools Reconciliation Challenge.

UK and Ireland



To investigate literacy instruction and policy in the UK and Ireland

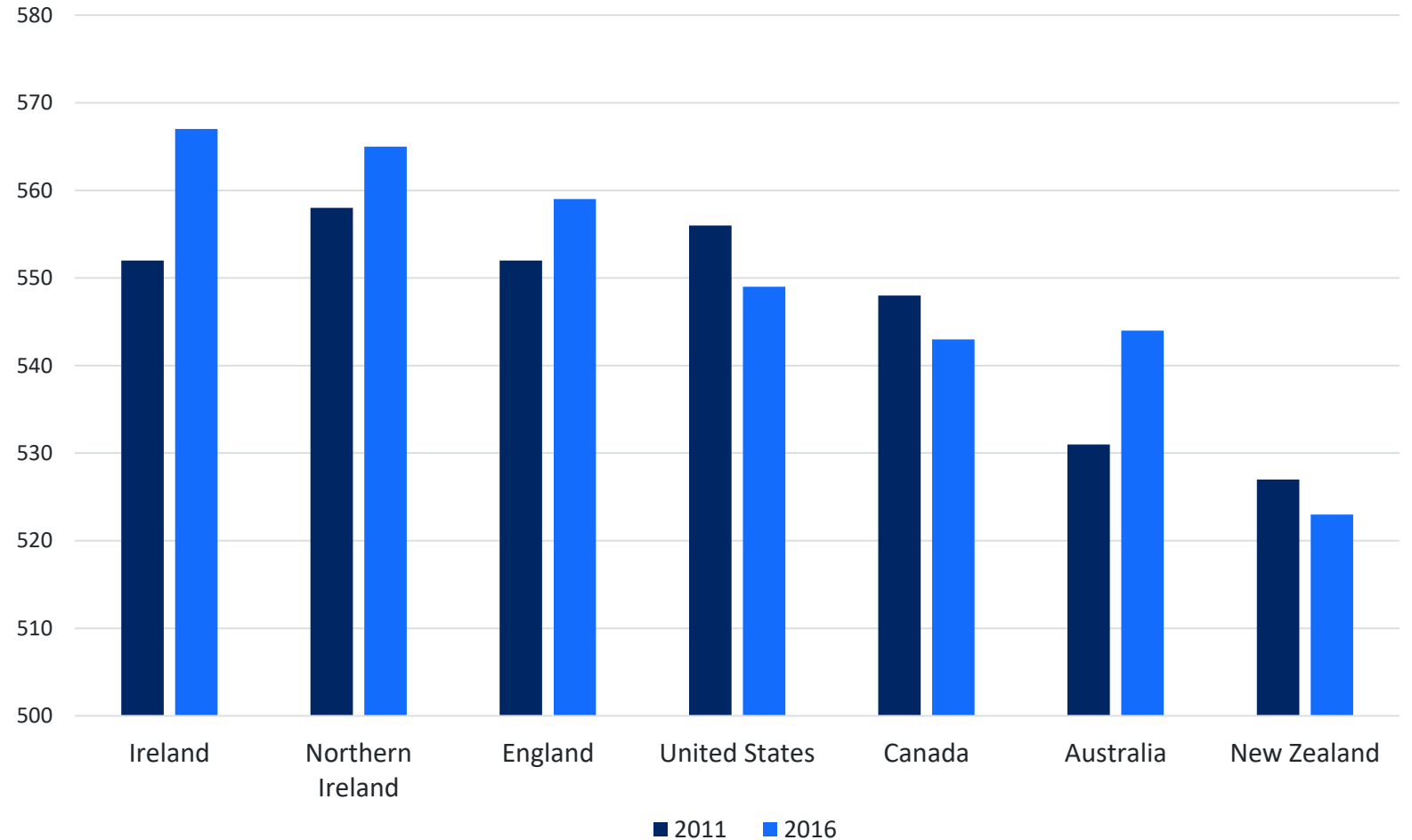
- 12 schools
- 24 education officials
- 27 academics and researchers
- 52 teachers and principals.

What prompted this research?

PIRLS mean scores, 2011 & 2016

Scotland and Wales did not participate in these years. Scotland will be re-joining from 2025

2021 results were released after I returned.



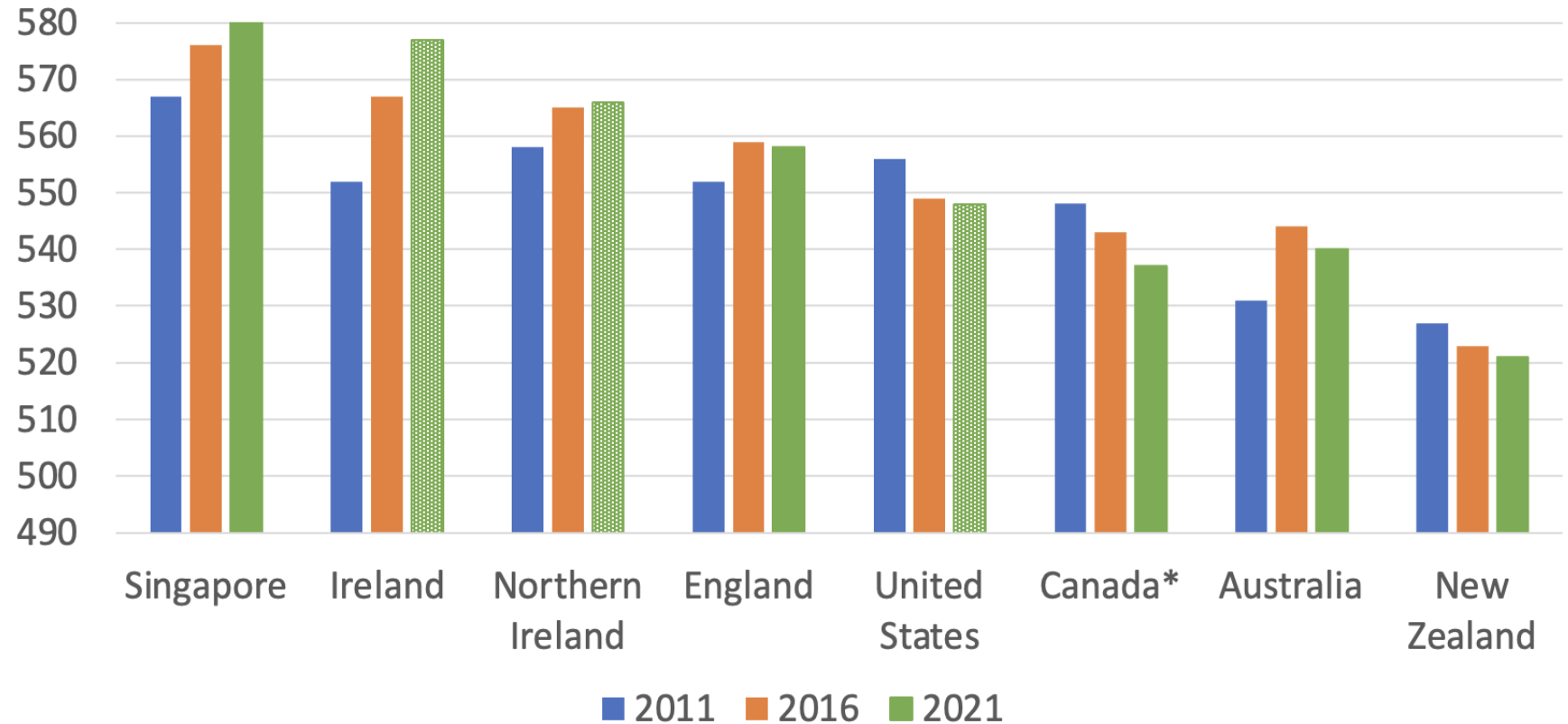
PIRLS 2021: English-speaking countries

Progress in International Reading Literacy Study (PIRLS) 2011 - 2021
mean scores

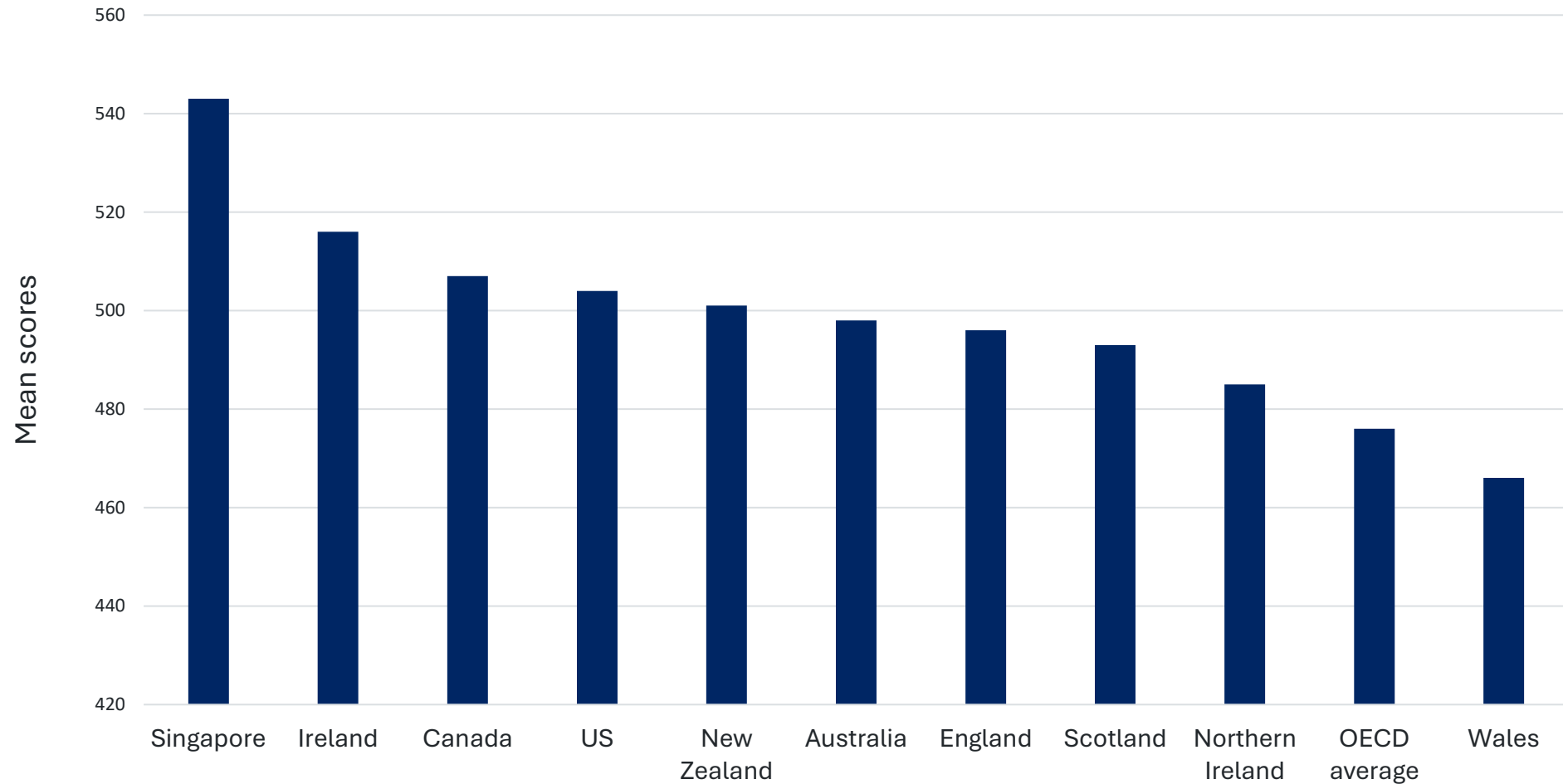
End of G4: England,
Canada, Australia
and New Zealand

Start of G5: Ireland,
Northern Ireland and
the United States.

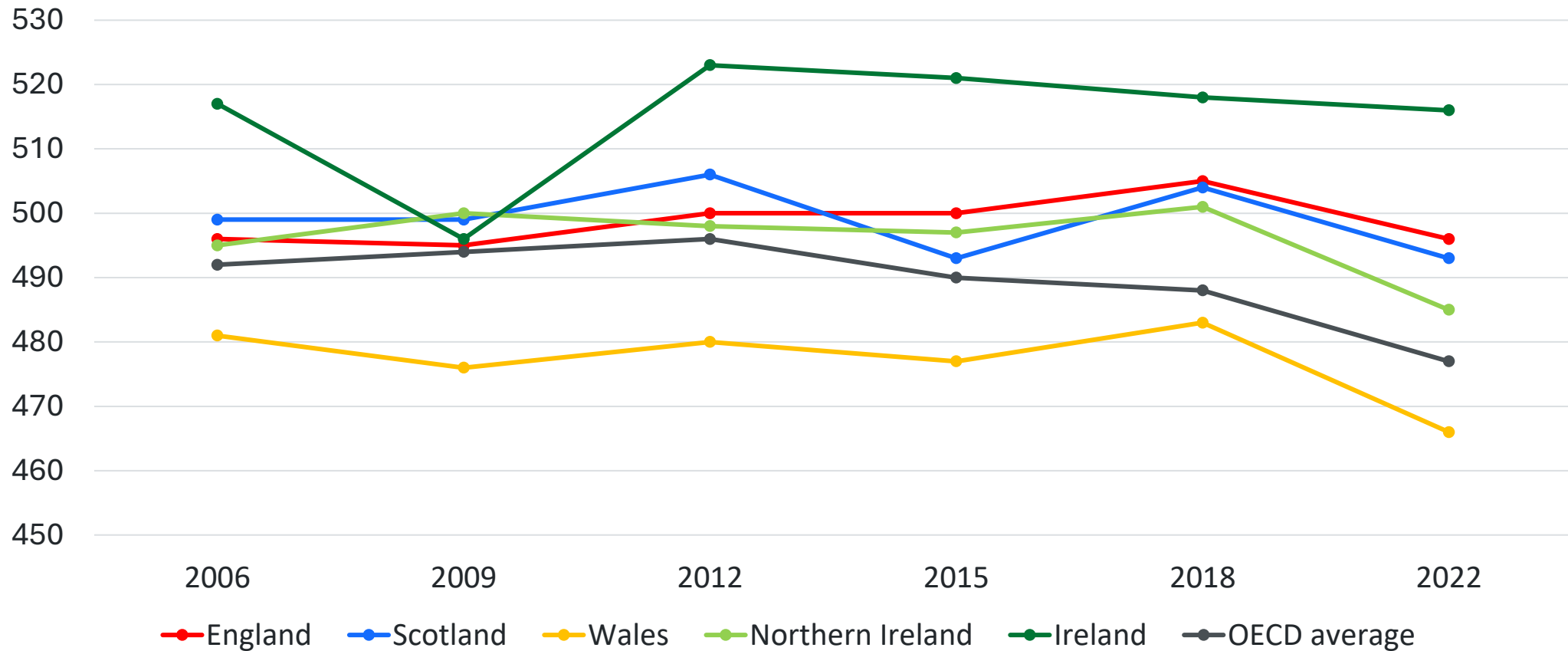
*Canada's 2021
score is the simple
average for Alberta
and British Columbia.



PISA Reading 2022: English-speaking countries

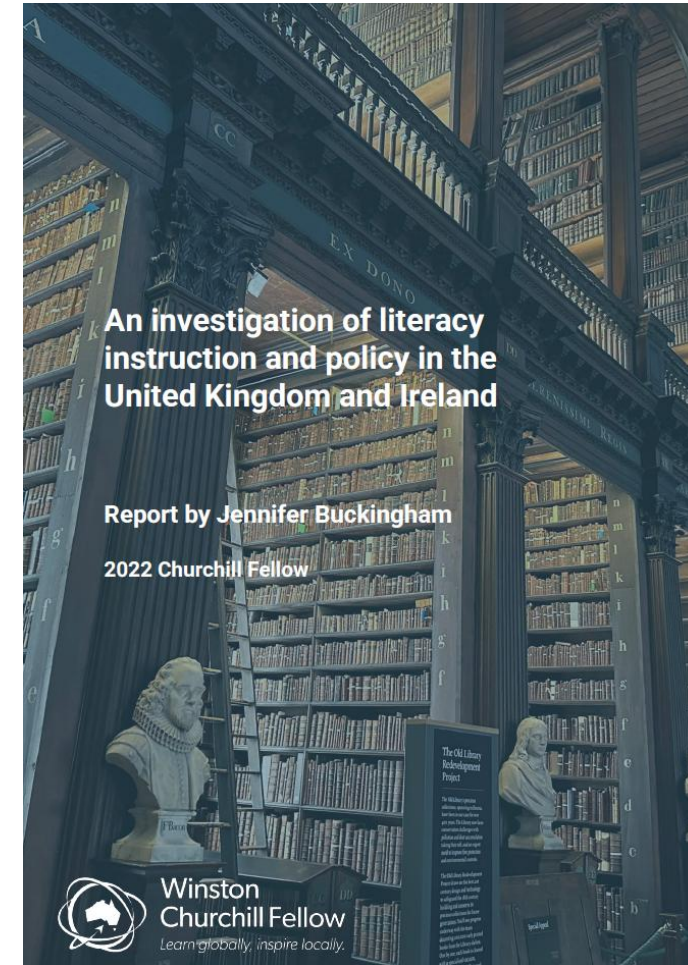


PISA Reading, UK and Ireland 2006-2022



Key factors contributing to reading development

- Curriculum
- Reading instruction
- Teacher education and workforce
- Assessment
- Inspection
- Culture
- Demographics



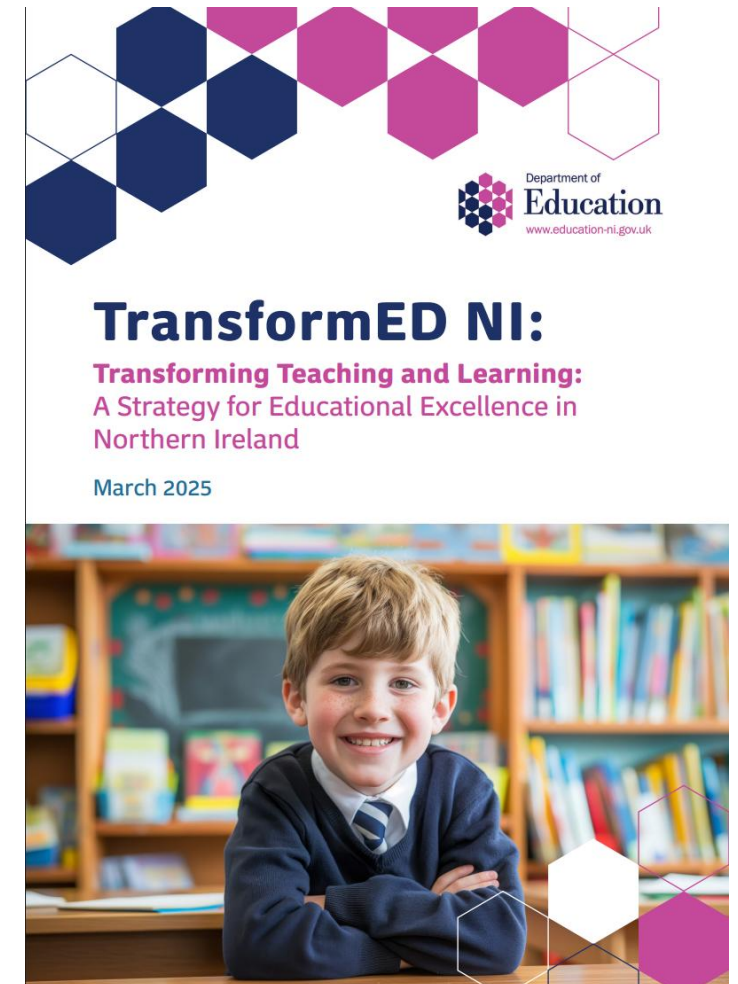
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- Teachers in Ireland are high academic achievers with rigorous teacher education, leading to respect and professional autonomy. Low teacher attrition allows a focus on quality over quantity in teacher education. Low teacher attrition despite workload issues.
 - Mandatory testing and reporting, and inspections are accepted.
 - Teacher education and primary language curriculum align with evidence-based practices.
 - Systematic phonics instruction has been a constant feature in reading instruction. However, there are mixed messages about systematic synthetic phonics, with some ambivalence and criticism influencing perceptions.
 - Despite high national literacy rates, there is a persistent literacy gap in DEIS schools (low socioeconomic status communities). The dominance of Reading Recovery in DEIS schools is criticised for its ineffectiveness, with calls for more effective interventions.
 - Ireland's high literacy rates are supported by a strong cultural and social value placed on language and literacy. 8.8% of students had a first language other than English or Irish.
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- There have been increasing calls for a review of the use of Reading Recovery in Ireland, based on the persistent poor results in disadvantaged schools where it is the main funded and endorsed reading intervention.
- After the National Literacy and Numeracy Strategy was implemented in 2011 in response to the sudden and unexpected drop in PISA scores in 2009, reading score targets were met nationally but not in socioeconomically disadvantaged schools. The lowest achieving students in disadvantaged schools did not improve.
- The Institute of Education, University College London, has been RR HQ for Europe since 1991 and recently announced it would be giving up this role in July this year.

- Reading instruction is a mixed picture – traditionally phonics has been part of reading instruction, including published programs, but there is some anti-phonics influence.
- Curriculum was published in 2007. It was influenced by Scotland – ‘progressive and skills-based’.
- Policy stasis because no stable parliament for several years – no inspections.
- Teacher education is similar model to Ireland. Entry is competitive and candidates are high academic achievers.
- Relatively demographically homogeneous – 7.8% are ‘newcomers’.
- Most education reform is focused on structural issues around religious schools and selective schools.
- The policy for students with special educational needs is very bureaucratic and slow.
- Most students sit ‘transfer tests’ in the final year of primary to gain entry to grammar schools

Northern Ireland update

- The Northern Ireland Department of Education has commissioned a review of the curriculum to benchmark it against research evidence and high performing systems.
- An International Ministerial Advisory Panel has been appointed to provide Education Minister Paul Givan on reform of the system (including me).
- In March this year, a new strategy was launched after consultation with the Panel. It has a 10-point plan that includes introducing evidence-informed literacy and numeracy teaching, more regular national assessments, and a knowledge-building curriculum.



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- Mandated systematic synthetic phonics for early reading instruction after the Rose Report in 2006 but quality is still an issue.
 - 97% of schools use a 'validated' phonics program, of which there are 45.
 - National curriculum contains a requirement to teach phonics
 - A lot of guidance for teachers on teaching reading
 - Initial teacher education is diverse. Variety of entry methods including university and school-based pathways
 - Schools and ITE are inspected by Ofsted. Schools inspected on a five-year cycle with public reporting
 - National assessments in Year 1, 2 and 6 for primary
 - Education is politically and culturally charged
 - High numbers of new arrivals and EALD – 18.8%
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- In July 2024, the UK government announced a Curriculum and Assessment review.
- The interim report was published in March. It acknowledges that international assessments have been favourable and recommends maintaining and building on the knowledge-rich approach and the current standardised assessments, including the phonics screening check, the multiplication tables check, national tests at the end of key stage 2, GCSEs, A levels, T Levels, and some wider applied general qualifications at 16-19.

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- Reading instruction is typically not a structured systematic approach. Mixed opinions about whether phonics is taught. Some individual schools are doing good work.
 - Curriculum for Excellence was published in 2004.
 - No standardised national assessment – teacher judgement of progress.
 - Local authorities (Councils) each develop and use their own approach (eg. ‘Active Literacy’). Published programs are not widely used.
 - Moves to expand play-based learning.
 - Teacher education is not well-regarded.
 - Most education policy is focused on equity and deprivation (eg. Scottish Attainment Challenge) and reading for pleasure (eg. Reading Schools).

- In September 2024, Education Scotland published new literacy guidance for schools that refers to the 'Big 5' and includes systematic explicit instruction in phonics.
- *Learning to Read in the Early Years* has a modules on developing phonemic awareness and implementation of phonics approaches and is drawn from the scientific evidence base.

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- Reading instruction is generally not systematic or explicit. Systematic synthetic phonics is widely used for teaching Welsh but not for teaching English.
 - One third of schools are Welsh-medium up to Year 2 or higher. English-medium schools teach Welsh as a second language.
 - Curriculum for Wales was published in 2020. It is modelled on Scotland's Curriculum for Excellence. The previous Welsh curriculum was somewhat more detailed so the direction of travel is towards a more progressive, skills-based curriculum. Student voice/agency is prioritised.
 - There are no standardised national assessments.
 - Teacher education is not well regarded. ITE is a three year degree for undergraduate.
 - Inspections of schools by Estyn once every 8 years.

- In September 2024, ITV broadcast a report by reporter Rhys Williams that connected poor literacy rates in Wales with non-evidence-based and disproven approaches to reading instruction.
- The Department of Education responded that phonics instruction is one of a range of strategies including cueing methods.
- Very recently, in March this year, the Chief Inspector of Estyn backed in the support for a 'blended approach' that includes cueing.

Findings: UK and Ireland

| | Ireland | Northern Ireland | England | Scotland | Wales |
|----------------------------------|---------|------------------|---------|----------|-------|
| High entry standards for ITE | ✓ | ✓ | | | |
| High quality demands for ITE | ✓ | ✓ | ✓ | | |
| Evidence-based literacy policies | ✓ | | ✓ | | |
| Evidence-based curriculum | ✓ | | ✓ | | |
| Systemic assessments | ✓ | ✓ | ✓ | | |
| Evidence-based Intervention | | | | | |
| Cultural value for literacy | ✓ | ✓ | | ✓ | ✓ |

← Higher PIRLS/PISA RESULTS Lower →

The factors that affect literacy achievement were the same in each country but whether the effects were positive or negative depended on historical, social and contextual factors.

Ireland and to a lesser extent Northern Ireland have maintained a mostly systematic and structured approach to reading instruction, sometimes despite policy and curriculum.

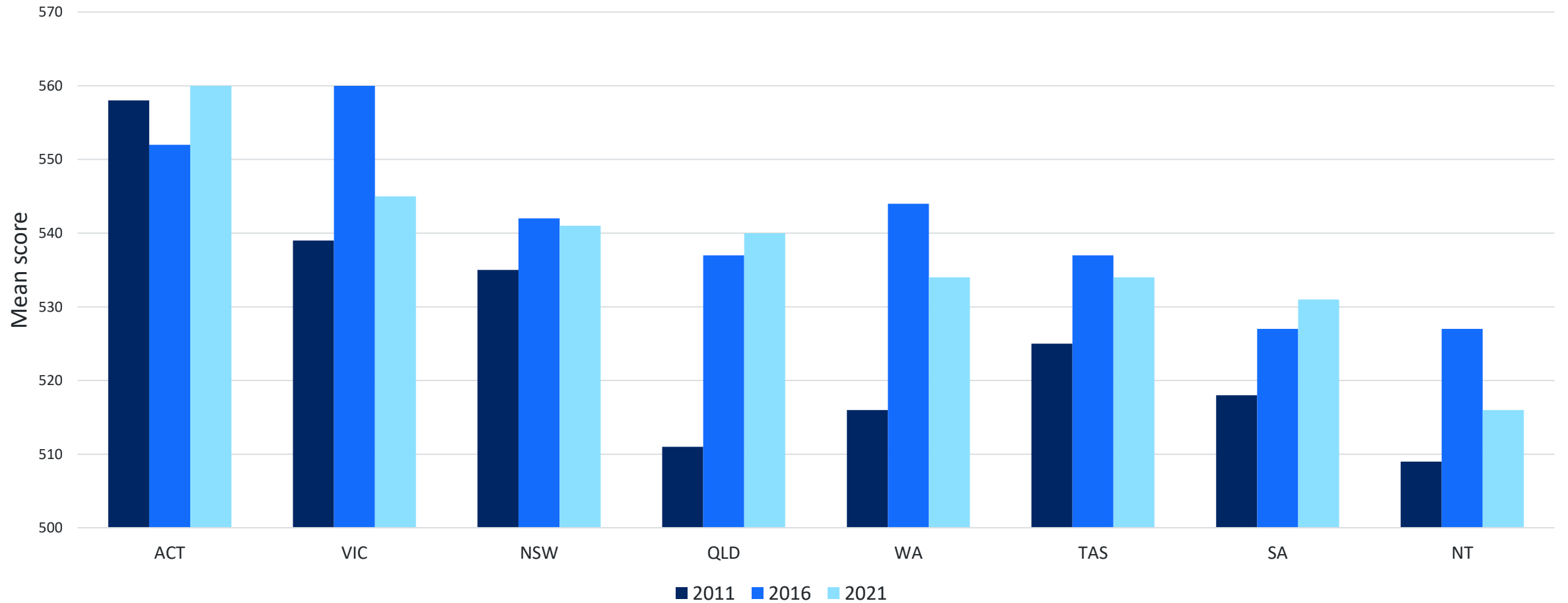
England is moving in the right direction but has numerous sociodemographic challenges.

Scotland and Wales do not take an evidence-based approach as a rule. There seems to be some recognition in Scotland of the need to do this but there is still a strong philosophical attachment to inquiry-based approaches in Wales.

Questions?

Australia

PIRLS 2011-2021: Australian states and territories



PISA 2000-2022: Australian states and territories



| Australia | |
|----------------------------------|--|
| High entry standards for ITE | |
| High quality demands for ITE | Tentative |
| Evidence-based literacy policies | Yes: NSW, SA, WA Emerging: QLD, VIC, ACT, TAS, NT |
| Evidence-based curriculum | ✓ |
| Systemic assessments | ✓ |
| Evidence-based Intervention | Varied |
| Cultural value for literacy | |

UK and Ireland

| | Ireland | Northern Ireland | England | Scotland | Wales |
|----------------------------------|---------|------------------|---------|----------|-------|
| High entry standards for ITE | ✓ | ✓ | | | |
| High quality demands for ITE | ✓ | ✓ | ✓ | | |
| Evidence-based literacy policies | ✓ | | ✓ | | |
| Evidence-based curriculum | ✓ | | ✓ | | |
| Systemic assessments | ✓ | ✓ | ✓ | | |
| Evidence-based Intervention | | | | | |
| Cultural value for literacy | ✓ | ✓ | | ✓ | ✓ |

← Higher PIRLS/PISA RESULTS Lower →

Literacy Hub



Literacy Hub website

Online Year 1 Phonics
Check



[Home](#)

Understanding literacy ▼

Plan and prepare ▼

Teach and assess ▼

For families ▼



The Literacy Hub



The Literacy Hub is all about helping young students to develop their literacy skills and knowledge to become confident, creative and enthusiastic lifelong learners. Learning to read is an exciting step in the literacy journey. The Hub supports school leaders, teachers and families to engage in effective literacy practices.



Available now. Sign up or log in to the [Phonics Check for Teachers](#).

Discover [more](#) about phonics and the Phonics Check.

[Register](#) for our free webinar series on the Big Six of reading

Australian Education Research Organisation (AERO)



Evaluating evidence

Using evidence – teachers and policymakers

Explicit instruction

Classroom management

Writing instruction

Early literacy and numeracy

Multi-tiered systems of support (MTSS)

Formative assessment

Mastery learning

+ Partnership with Ochre Education

Literature review



Writing and writing instruction


An overview of the literature

Published February 2022



Year 1 Phonics Screening Check





National Year 1 Literacy and Numeracy Check


Expert Advisory Panel:
advice to the Minister

April 2017

Focus on Phonics:
Why Australia should adopt the
Year 1 Phonics Screening Check

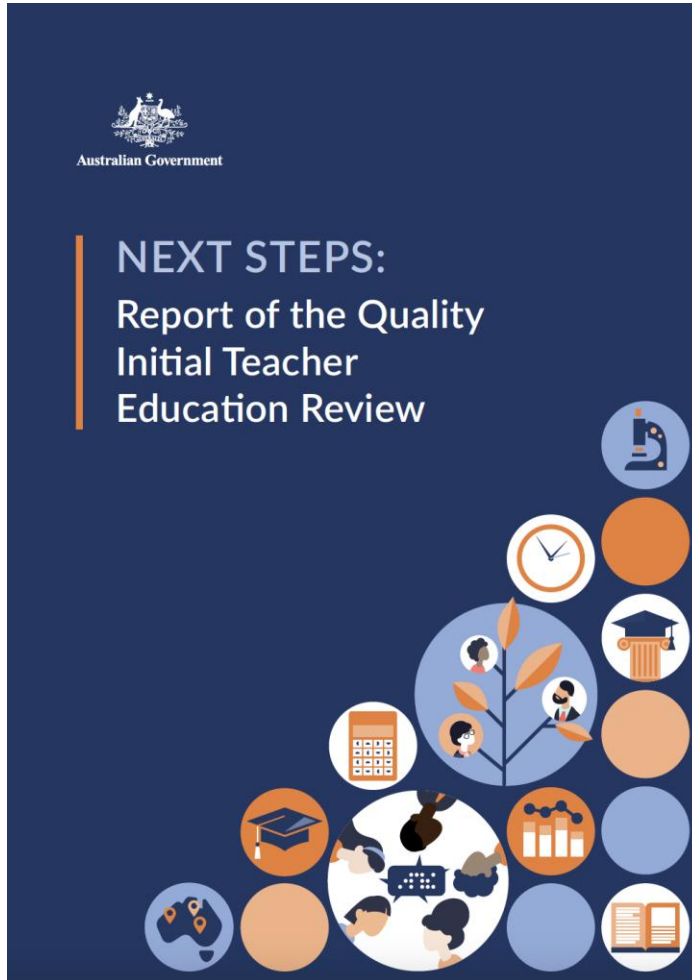
Jennifer Buckingham

MultiLit
Research Partner



- | | |
|------|---|
| 2016 | Focus on Phonics report |
| 2017 | Quality Schools Quality Outcomes policy |
| 2017 | Expert Advisory Group for Fed Govt |
| 2017 | South Australian trial |
| 2018 | South Australian state school roll out |
| 2018 | Queensland Catholic Education trial |
| 2019 | South Australian non-govt schools join |
| 2019 | Federal government online phonics check |
| 2020 | NSW trial |
| 2021 | NSW state-wide |
| 2022 | Tasmania state-wide |
| 2023 | Western Australia recommended |
| 2024 | Queensland statewide |
| 2025 | Victoria statewide roll out |

Quality Initial Teacher Education review (2021)



“Consultation with ITE graduates and employers of teachers nationwide revealed a consistent, shared concern: far too many graduates are leaving university underprepared to teach children how to read.”

“The Expert Panel has heard that variance in approaches across ITE courses, along with underexposure to rigorous research is producing cohorts of graduates who are not equipped to teach this fundamental skill”

Teacher Education Expert Panel report



Fourteen recommendations in four areas.

- 1. Strengthening ITE programs through mandating core content and increasing accountability**
2. Strengthening the link between funding and ITE quality
3. Improving practical experience
4. Improving mid-career options for new teachers

Proposed ITE core content

1



The brain and learning

- **Novice vs expert learners**
- **How the brain learns and retains information**
 - » Short- and long-term memory
 - » Cognitive load
- **How the brain masters knowledge**
 - » Retrieval and application in familiar and unfamiliar contexts
- **Neuromyths**
 - » Misconceptions of brain research

2



Effective pedagogical practices

- **Planning and sequencing**
- **Explicit modelling and scaffolding**
- **Assessment and feedback**
- **Literacy:**
 - » Early reading/phonics
 - » Explicit reading and writing comprehension tailored to discipline-specific content
- **Numeracy:**
 - » Six strands of mathematics
 - » Explicit instruction tailored to discipline-specific content
- **Multi-tiered systems of support**

3



Classroom management

- **Rules and routines**
 - » Establishing rules and routines
 - » Teaching rules and routines explicitly and practising
- **Proactive practices**
 - » High expectations
 - » Goal setting
 - » High-quality and explicit teaching
 - » Predictable environment
- **Managing behaviour**
 - » Pre-planning and using calm, consistent, proportional responses
 - » Modelling desired behaviour
 - » Responding to persistent misbehaviour
- **Whole-school behaviour frameworks**

4



Responsive teaching

- **First Nations peoples, their cultures and perspectives**
 - » First Nations histories, cultures and perspectives
- **Cultural responsiveness, including EAL/D**
 - » Self-reflection (positionality)
 - » Culturally responsive practices
- **Family engagement for learning**
- **Diverse learning needs, including students with disability**
 - » Suitability of effective pedagogical practices for diverse needs
 - » Suitability of effective pedagogical practices for specific needs and disabilities
 - » Legislation and obligations for students with disability

Accreditation standards for initial teacher education

All ITE courses must include the Core Content by end of 2025.

Addendum

Accreditation of initial teacher education
programs in Australia: Standards and Procedures



No more Reading Recovery monopoly

Reading Recovery: NSW government ditches 30-year-old, \$55m a year program



By [Eryk Bagshaw](#)

Updated September 21, 2016 —
3.46pm, first published at 9.27am

The NSW government has abandoned a \$55-million-a-year program that teaches students to read, 10 months [after a damning review](#) found the program that has been used in up to 960 schools for more than 30 years does not work.

'Long time coming': Vic Govt shuns Reading Recovery program



By [Sarah Duggan](#)

Published June 22, 2022

Two documents supporting the discredited literacy intervention program Reading Recovery (RR) have been removed from the Victorian education department's website, following a campaign from a dyslexia support group.

Better and Fairer Schools Agreement



All states and territories have now signed to the Better and Fairer Schools Agreement, which is a funding agreement between the Commonwealth and the states and territories.

The specifics of the agreements for each state and territory vary, and not all have been published.

However, the Head of Agreement requirements for states and territories include:

- access to high-quality evidence-based teaching that is inclusive
- multi-tiered systems of support (MTSS)
- screening assessments for literacy and numeracy (ie. phonics check and number check)

Better and Fairer Schools
Agreement – Full and Fair
Funding 2025-2034



Literacy Guarantee Unit:

- Literacy coaches with expertise in evidence-based reading instruction and dyslexia
- Year 1 Phonics Check
- Dyslexia workshops and resources for parents
- Conferences and professional learning



Phonics Initiative:

- Schools can choose from a list of reading instruction programs endorsed by the WA department of education
- All schools must do **a** phonics assessment in Year 1 but this is not have to be *the* Year 1 Phonics Check that is being used in SA, NSW, QLD & TAS and it is to be done at a different time of year



- Year 1 Phonics Check
- Professional learning modules on implementing the assessment and on teaching phonics
- Phonics Plus lesson plans include handwriting, high-frequency words, dictation and reading fluency as well as phonic and word knowledge.
- Phonics Plus implementation guides and plans.
- Victorian Teaching and Learning Model 2.0 is based on science of learning principles.



Lifting Literacy (2024)

- 100% literacy goal by 2030
- Year 1 Phonics Check
- Supports a *structured literacy* approach that includes the 'Big Six'
- Implementation Plan 2024-2026 includes
 - At all levels of schooling, the workforce is trained and supported to deliver evidence-based, structured (systematic and explicit) literacy instruction, aligned to the Australian Curriculum.
 - Evidence-based structured literacy approaches are adopted and evaluated at classroom, school and sector levels.
 - There is a focus on literacy development from foundational skills (e.g., decoding, spelling) through to higher-level literacy skills (e.g., reading comprehension, written expression).
 - Students who need additional assistance in literacy are identified and supported throughout their school years



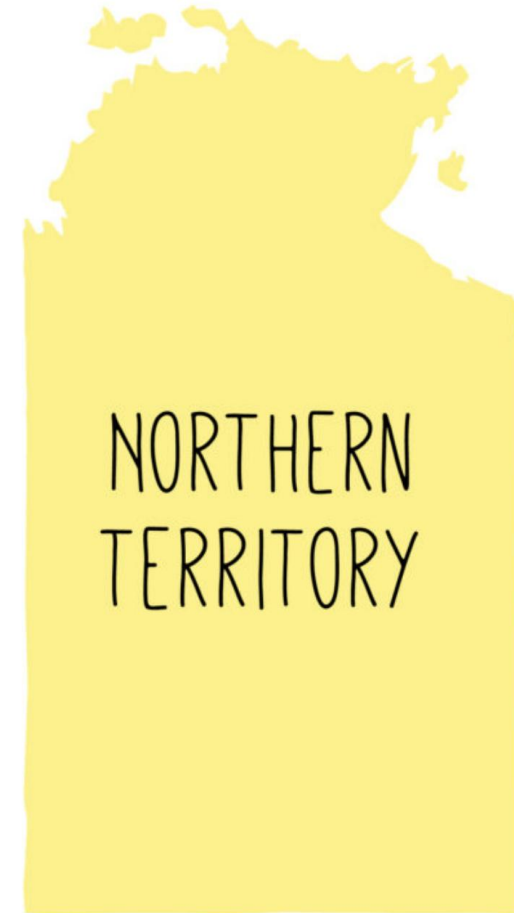
Reading Commitment (2023)

- Evidence-informed reading position statement and literature review.
- Resources and professional development for teachers focusing on the science of reading including explicit and systematic phonics instruction.
- Additional support includes classroom assistance and parent information sessions.
- Year 1 Phonics Check



Curriculum, Assessment, Reporting and Certification Policy (2025)

- Schools must implement a systematic synthetic phonics approach from Transition to Year 2.
- Year 1 Phonics Check from 2025
- Foundations of Early Literacy Assessment (FELA)
NT tests in Term 1 and Term 4 for all Transition year level learners , and in Years 1 to Year 10 in addition to PAT Adaptive Reading.



-
- The report of an expert inquiry into literacy and numeracy in the ACT was published in 2024.
 - The ACT government accepted all recommendations including
 - explicit teaching of literacy including phonological awareness and phonics
 - discontinuing the use of multi-cueing and running records
 - reliable diagnostic assessments
 - a knowledge-rich curriculum
 - multi-tiered systems of support
 - Year 1 phonics check.
 - The *Strong Foundations* program was launched in 2024.

- Detailed syllabus based on science of learning.
- Teaching guides for K-2 and 3-6.
- Universal Resources Hub with hundreds of lesson plans, webinars and other resources.
- Explicit teaching professional learning and guides with detailed information about principles and techniques.
- Targeted network support for phonics
- Centre for Education Statistics and Evaluation (CESE)
 - What Works Best series of evidence papers, practice guides and case studies
 - Research papers, including cognitive load theory



Catalyst

- Professional learning on the Science of Learning
- Coaching in explicit instruction
- Evidence-based reading instruction programs
- Valid and reliable assessment and effective intervention
- MultiLit suite, Sounds-Write & Let’s Decode

Students in ACT Catholic Schools performing ‘well below’ or ‘below’ the national average for students in similar schools in Year 3 NAPLAN

| | 2019 | 2022 |
|----------|------|------|
| Reading | 42% | 4% |
| Spelling | 71% | 13% |
| Writing | 71% | 21% |

Source: Equity Economics and Development Partners (2023)

Catholic School Systems



Canberra Goulburn: ‘Catalyst’: Professional learning on the Science of Learning, Coaching in explicit instruction, MultiLit + Sounds-Write + Let’s Decode

Tasmania – ‘Insight’: MultiLit programs, CogLearn, Lorraine Hammond

Lismore – MultiLit programs + SoundsWrite

Melbourne (MACS) – Vision statement

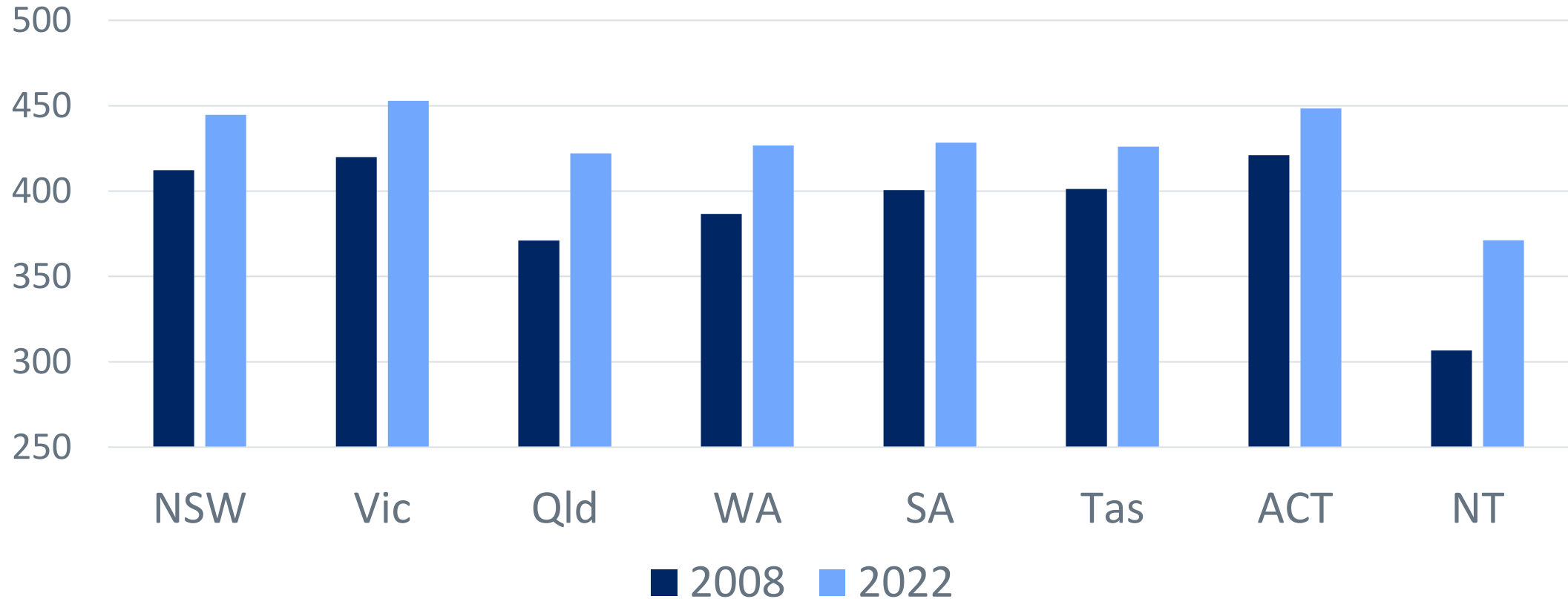
South Australia – CSO support for programs

Sandhurst – ‘Magnify’: MultiLit programs, Knowledge Society, Ochre, StepLab

+ NCEC taking a stronger approach to leadership on evidence-based practice

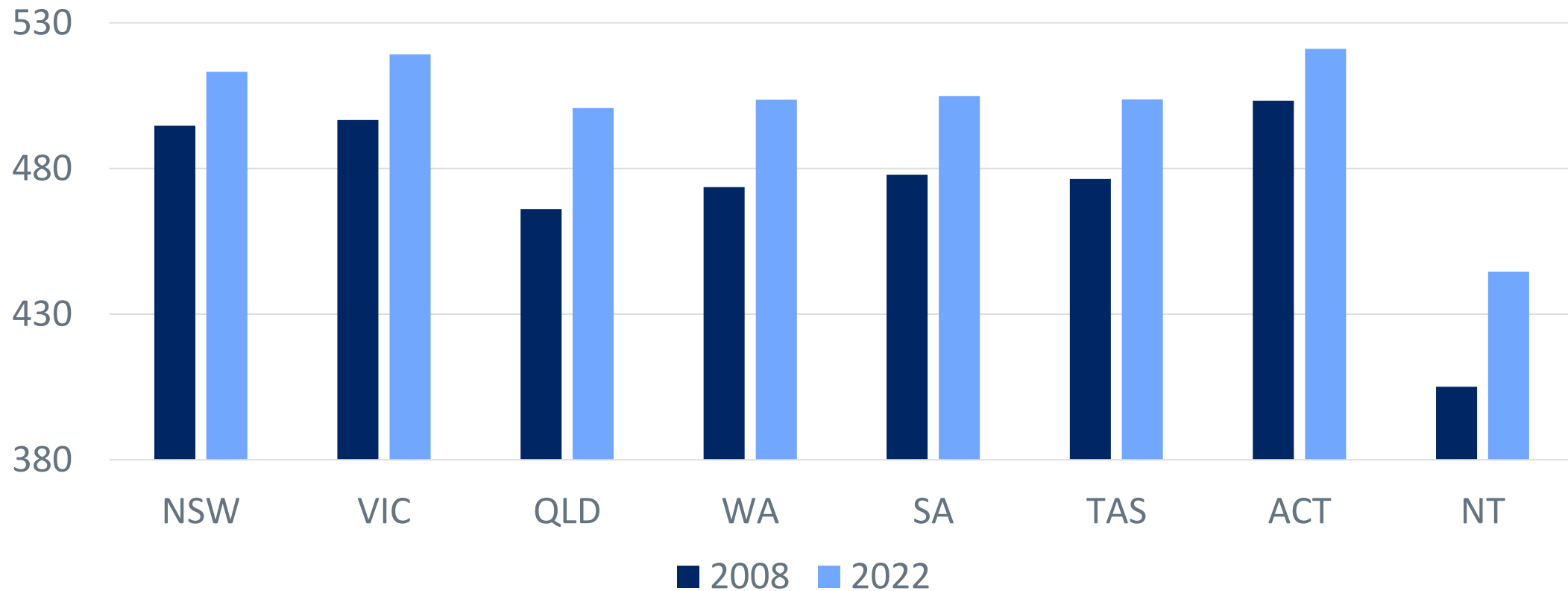
Year 3 NAPLAN Reading

A statistically significant increase in mean reading scores in all states and territories



Year 5 NAPLAN Reading

A statistically significant increase in mean reading scores in all states and territories



Where to from here?



Good teaching is present but not consistent. Implementation and scale-up are the next challenge.

Phonics is not the end goal of instruction; it's the means to an end.

ITE still not up to scratch so Professional learning is pushing up hill.

Awareness of the MTSS/Response to Intervention model is building but it is not often done well.

Questions?