



Impact of  
**Catalyst**  
2020 - 2023

Our approach to  
Learning and Teaching





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# From the Director

In 2019, we created a vision and program of change, focusing on our teachers, to improve the learning experience across the Archdiocese. I am delighted to report that we are now seeing real evidence that demonstrates the positive impact of the Science of Learning. The momentum continues to grow nationally, with other Systems looking to adopt similar evidence-based approaches to improve the academic outcomes of students.

Catalyst aspires to transform lives through learning. It is a fundamental shift in our pedagogy-applied consistently across every school, every classroom and every lesson. Through this program, we empower our leaders and teachers to change their practice to become more efficient and effective. We do this by providing professional learning, resources and support, informed by research.

In the design of Catalyst, we drew on research grounded in the Science of Learning and the Science of Reading in how students learn best. We sought input from leading national and international educators and experts along with insights from our leadership and teachers.

From the start, the anecdotal evidence about Catalyst was overwhelmingly positive with increasing engagement of students. During our journey we have continued to monitor, adapt and evolve the program, to ensure we move from implementation to embedding and sustaining the practice change long term while staying true to our bold goals:

1. Every student is a competent reader
2. High Impact Teaching Practice (HITP) is visible in every classroom

We can now see student improvements in the NAPLAN results that point to a positive shift in student achievement across our system, further supporting our belief in the effectiveness of the practice change we have adopted. These results confirm our belief that the teacher is the most important learner.

I would like to acknowledge the willingness of teaching staff and school leadership to embrace and embed Catalyst, which has created a positive shift in academic achievement. I commend their hard work and congratulate them on these outstanding results.

I look forward to the journey ahead with all teachers and staff across CECG. With our continued effort, focus and dedication our students' lives will transform through learning.



Ross Fox

**Director,  
Catholic Education Archdiocese  
of Canberra & Goulburn**





# Catalyst report card as of Term 3, 2023

Commencing in 2020, Catholic Education Canberra & Goulburn (CECG) launched Catalyst by implementing evidence-based teaching practice in every school in the Archdiocese. In less than three years, 56 schools, 1,700 teachers and over 21,000 students have engaged in the Catalyst journey.

## PEDAGOGY



**Over 1,200 teachers**

trained in High Impact Teaching Practice



**400+ teachers**

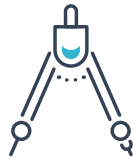
trained in evidence-based, whole class literacy instruction



**90%+ schools**

using evidence-based literacy intervention across K-12

## CURRICULUM



**Full scope**

and sequences for K-6 English and Mathematics developed



**75%+ schools**

implementing Spelling Mastery



**200+ teachers**

trained in The Writing Revolution

## ASSESSMENT



**Assessment schedule**

across all participating schools to inform approach



**Evidence-based assessments**

e.g. DIBELS, Phonics Screening Check

## SYSTEM ENABLERS



**100%**

schools engaged in Leadership Sessions and Annual Improvement Planning Meetings

# The Catalyst Journey

2019-  
2023

2019

MARCH AND SEPTEMBER

## **CECG embarks on Evidence Forum Series**

40 Leaders undertake an intensive learning experience, working towards the discernment of greater coherence, clarity in pedagogy, curriculum and assessment across the system.

2020

MARCH

## **Catalyst Microsoft Teams environment launched**

School-based Teams created to foster school-wide communications, supported by shared System resources.

JUNE

## **CECG's Learning Agenda defined**

Based on evidence and deep analysis CECG co-designs and develops a set of key initiatives that will build the capacity of teachers and leaders and underpin improvement in academic performance across the system.

AUGUST

## **New statement on learning and strategy**

The new statement on learning articulates the system's purpose, values, bold goals and practices. A new professional learning program is designed to achieve two bold goals.

SEPTEMBER

## **Catalyst launched**

Despite COVID restrictions, Catalyst launches at Catholic Leaders' Day for all Principals, followed by a system-wide announcement video sent to all staff from the Director.

2021

JANUARY

## **Inaugural Catalyst System Day**

Featuring leading Australian and international Science of Learning advocates, over 2,000 educators commence a professional development program to improve the learning outcomes of all students in their system. Featuring Tom Sherrington, Ollie Lovell and Toni-Ann Vroom.

SCHOOL YEAR

## **First Wave teacher training**

480 teachers trained in evidence-based literacy programs. 250 teachers trained in High Impact Teaching Practice.

APRIL

## **Catalyst online units launched**

Three online units go live, with five more to be co-developed and launched throughout 2021.

JUNE

## **Catalyst leveraged in recruitment campaigns**

Catholic Education Canberra Goulburn positioned as an employer that focuses on continued teacher and leader development.

AUGUST

## **Building community support**

Supported by a suite of curated materials, Leaders begin briefing their families and communities on the changes they can expect to see in the classroom.

AUGUST TO NOVEMBER

## **Teachers share their Catalyst experience**

A suite of six reflective case studies from teachers across the Archdiocese are published.

## 2022

JANUARY

### **Deloitte Access Economics engaged to monitor Catalyst's impact**

Undertake an independent analysis of the monitoring and evaluation of Catalyst and its impact at school and classroom level.

SCHOOL YEAR

### **Second Wave teacher training**

360 additional teachers trained in evidence-based literacy programs.

510 additional teachers trained in High Impact Teaching Practice.

APRIL

### **Launch of system-wide Resource Hub and Curriculum Hub**

Foundational research and high-quality curriculum resources made available for every teacher.

MAY

### **Catalyst featured in Online Family Forum**

CECG shares the Catalyst teaching approach with engaged parents and the community.

SEPTEMBER

### **Catalyst recognised by NSW State Government**

Former NSW Premier, Dominic Perrottet, references the Catalyst program as a great example of effective teacher professional learning which sets both teachers and their students up for success.

OCTOBER

### **First HITP Intensive**

Led by Dr Lorraine Hammond AM, this immersive experience helps educators better understand what the Science of Learning means for classroom practice and the impact it has on student achievement.

## 2023

JANUARY

### **Faith in Learning System Day**

Over 2,300 educators from across the Archdiocese gathered at the National Convention Centre Canberra to hear from twenty five nationally and internationally recognised education leaders. The flagship event captures national coverage, including:

- Teaching model used in ACT Catholic schools praised, ABC News.
- Noel Pearson urges schools to follow evidence, praises Canberra Goulburn Catholic education Catalyst program, Canberra Times.
- Pearson backs Catholic schools' 'Catalyst' reform, Catholic News.

SCHOOL YEAR

### **Third Wave teacher training**

70 additional teachers trained in evidence-based literacy programs.

470 additional teachers trained in High Impact Teaching Practice.

APRIL

### **Catalyst featured in National Science of Learning Conference**

Co-hosted with Catholic Education Tasmania, teachers and leaders from across the nation join together to learn about evidence-based teaching practices, the research, the process of change and the outcomes.

JUNE

### **Teacher Insights into Catalyst Podcast series launched**

Director Ross Fox, and teachers from across the Archdiocese share their knowledge and change journey with Catalyst.

JULY

### **Leading media recognised CECG as spearheading an Education Revolution**

ABC News recognises Catalyst as leading professional learning to prepare teachers for the classroom and excel in their vocation.

### **Science of Learning UK tour**

CECG sends seven Leaders to learn from the United Kingdom's decade-long experience in implementing evidence-based practice.

AUGUST

### **Positive NAPLAN results released**

CECG Year 3 and Year 5 students above the national averages in both reading and numeracy.

OCTOBER

### **Low-Variance Curriculum Resources**

Full suite of curriculum resources launched for K-6 Mathematics for use across Term 1 to Term 4.

“ The teachers are absolutely more confident in the classroom because they have that knowledge base of the Science of Learning and the Science of Reading. We're setting the students up for success. ”

**Jo Wain**

Principal,

St Bernard's Primary School, Batemans Bay, NSW

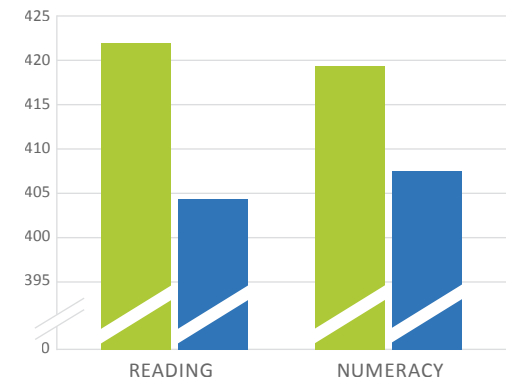
# Catalyst makes clear gains

NAPLAN achievement data supports the positive work occurring in Catalyst across the Archdiocese. CECG has made the largest positive shift of any large Diocese in Australia for both Year 3 and 5 Reading and Numeracy as measured from the National Average between 2019 and 2022. The results continue to build in 2023, with Year 3 and 5 students outperforming the national averages in Reading and Numeracy. Positioned in the top 4 improved Diocese for 9 of the 10 NAPLAN domains, CECG stands out as a significant improver from the National Average of 2019 and 2023.

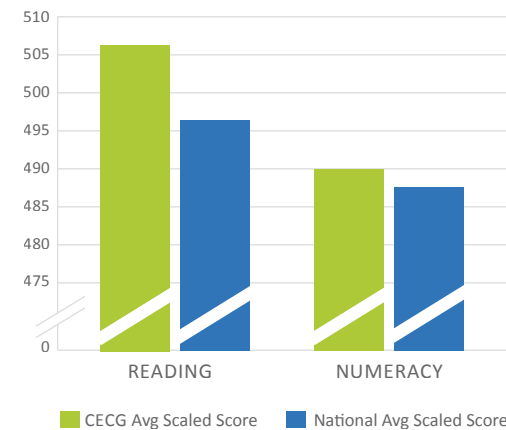
The reading results provide data to support the achievement of the bold goal of ‘Every student is a competent reader’. These positive results are encouraging and support the teacher initiatives and shifts in practice which the Catalyst agenda has instilled. After almost three years of implementing Catalyst, HITP has been embraced in the Archdiocese, evidenced through an array of learning days, seminars, peer-to-peer sharing and online sharing—combined with Leader support. Low variance curriculum resources have also been made available to every school in the Archdiocese allowing teachers to focus on their practice, rather than spending time looking for content for each lesson.

## Comparative Performance 2023 (CECG aside National Average)

### Year 3 Comparative Performance



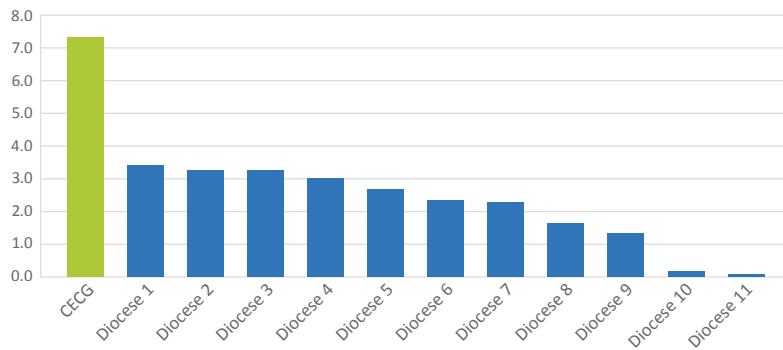
### Year 5 Comparative Performance



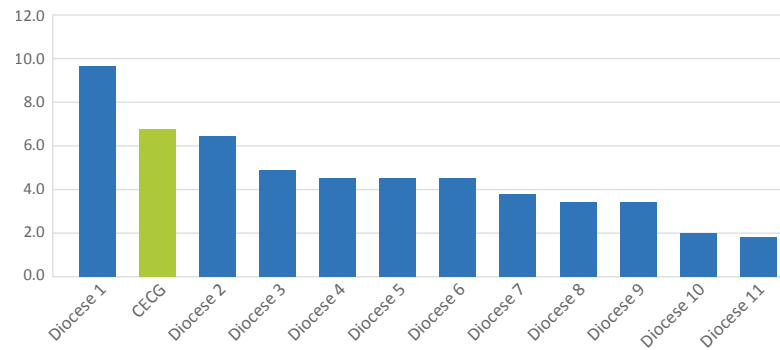


## Change in Distance from Similar Student Average for the years 2019 and 2022 (CECG aside Other Diocese)

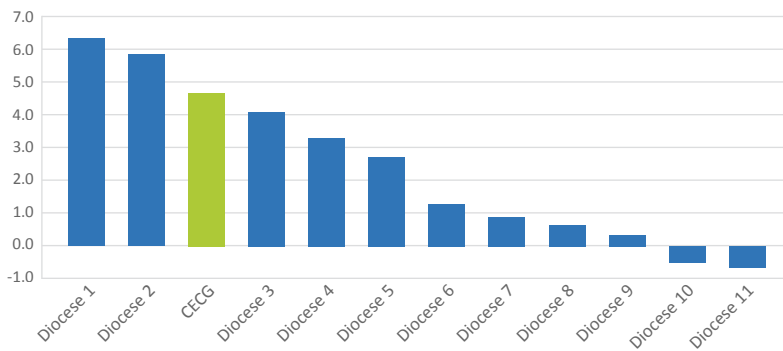
Year 3 Reading



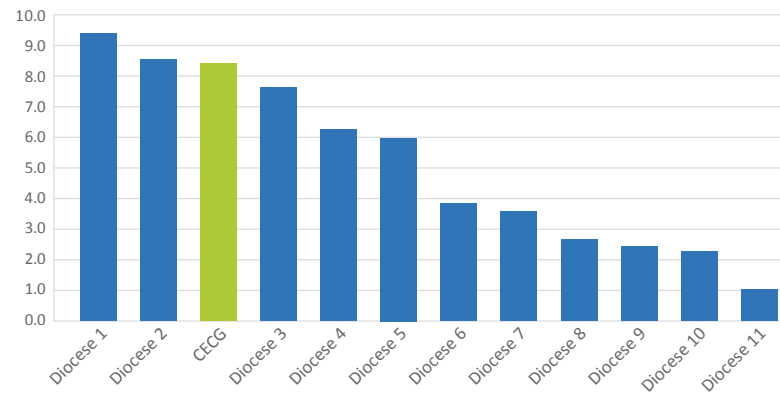
Year 3 Numeracy



Year 5 Reading



Year 5 Numeracy



CECG  
Year 3  
and Year 5  
students  
are above  
2023  
national  
reading and  
numeracy  
results



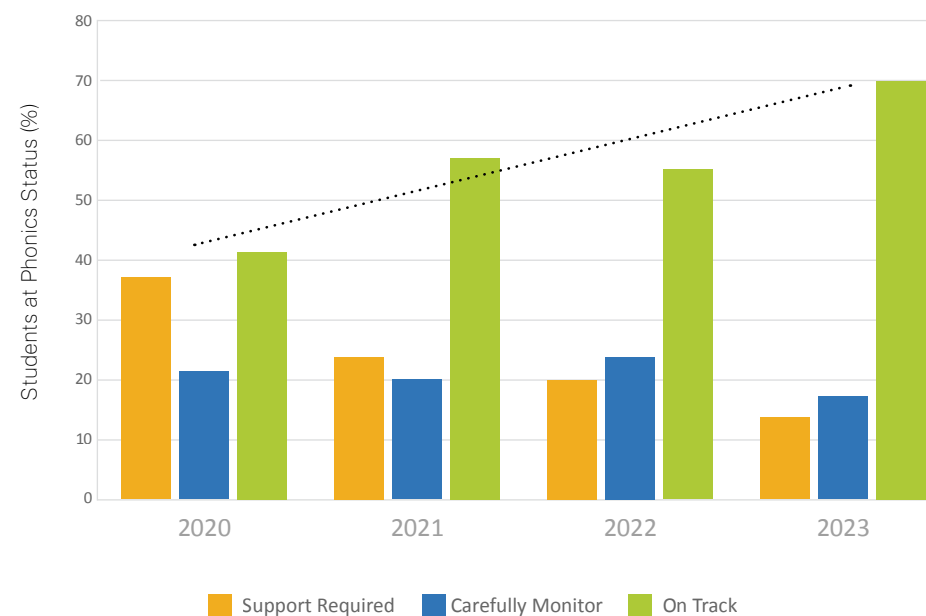
Data is an extract of the top 12 of 28 Diocese across Australia.

# Strong evidence emerging

In addition to the robust NAPLAN results, in earlier years, notably in Year 1, there has also been significant improvement. The Phonics Screening Check is funded and endorsed by the Australian Department of Education. It assesses student understanding of the written letter and sound relationships. The results demonstrate that through systematic intervention, teachers have facilitated student success while also reducing the number of at-risk students.

CECG's system wide use of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) further evidences the impact of Catalyst and HTP. This empirical assessment tracks student achievement for each of the building blocks of reading, enabling teachers to diagnose and action interventions. The composite score is a reliable indicator of student reading capability and their likelihood of experiencing future reading difficulties. Over 75% of Kindergarten to Year 2 students are doing very well and are at low risk of future reading difficulties.

## Phonics Screening Check Results 2020 to 2023



2020 and 2022 results were based on elective, not compulsory participation.

# Teacher support

Across the Archdiocese, there has been overwhelmingly positive feedback. Principals and Leadership teams have reported how the low variance curriculum frees up teachers to focus their time and energy on what matters most- teaching.

The teachers surveyed have reported up to 6 hours are being saved each week with core curriculum resources and instructional material being provided to them. They noticed the impact explicit teaching has on their students' ability to learn and recall what has previously been taught. Students' confidence has risen, with parents commenting on the positive impact on their children's attitude to learning.



# 84%

of teachers noted improvements in student participation in their classes.



# 78%

of teachers reported students are focused with their learning and they don't waste/lose time.



# 97%

of teachers would recommend High Impact Teaching Practice to other teachers.



UP TO

# 6 hrs

can be saved per week. Teachers report significant reduction in workload over the year by using curated curriculum resources.

# Catalyst reactions

“ There is a sense of order and rigour in the teaching at Catholic Education Canberra Goulburn. It has not only transformed the academic lives of the students, but changed the culture of schools too. ”

Lorraine Hammond AM  
**Associate Professor, School of Education,  
Edith Cowan University**

“ Catholic Education Canberra Goulburn are a beacon for the community, and I couldn't be in more furious agreement with the reform agenda you have for your schools. ”

Noel Pearson  
**Founder of Good to Great Schools Australia**

“ It's a great delight and privilege for me to work with a system that is pulling the (intervention) lever so hard and so intentionally, and with such incredible vision for the children in your system. ”

Professor Pamela Snow, PhD, MAPS  
**Professor of Cognitive Psychology,  
La Trobe University**



**The Sydney Morning Herald**

National NSW Education

OPINION  
*How to help children learn: the evidence is in*

Ross Fox  
Education Leader

July 8, 2023 – 4:00pm



**The Canberra Times**

Noel Pearson urges schools to follow evidence, praises Canberra Goulburn Catholic education Catalyst program

By Sarah Lansdown  
January 31 2023 - 2:00am



**ABC**

Canberra's Catholic schools celebrate strong NAPLAN scores as ACT students perform better than national average

By Niki Burnside  
Posted Wed 23 Aug 2023 at 4:12pm, updated Wed 23 Aug 2023 at 4:19pm

**The Sydney Morning Herald**

'Do the opposite to what progressive thinking says': Pearson slams teaching trends

Paul Sakkal and Lucy Carroll  
January 30, 2023 – 6:46pm

**Riotact**  
Local voices. Stronger communities.

Catholic schools show way as new 'explicit teaching' approach reaps NAPLAN rewards

23 August 2023 | Ian Bushnell

**Riotact**  
Local voices. Stronger communities.

Catholic school teaching program 'the most important thing I've seen in 20 years', says Pearson

31 January 2023 | Genevieve Jacobs

31 January 2023 | Genevieve Jacobs

**THE AUSTRALIAN**

\$662bn debacle: One in three kids fails NAPLAN

Australian students are twice as likely to fail than to excel in maths and English, shocking results from this year's NAPLAN tests reveal.

**EducationHQ**

'Failing to see 50 years of evidence': Noel Pearson slams inquiry-based learning

By Sarah Duggan  
Published January 31, 2023



**CathNews**  
A MEMBER OF THE AUSTRALIAN CATHOLIC BISHOPS CONFERENCE

Pearson backs Catholic schools' 'Catalyst' reform

2 February 2023

**ABC**

**CATALYST PROGRAM**

ABC NEWS



**The Canberra Times**

NAPLAN 2023 results proves science of reading, explicit teaching works, St Peter and Paul Primary School principal Cameron Johns says

By Lanie Tindale  
Updated August 23 2023 - 11:48am, first published 3:30am



**WINNEWS**

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# Looking ahead

All teachers across CECG have now engaged in professional learning and the majority specifically trained and coached in HTP. The next stage is to embed HTP with a low variance curriculum in every school to sustain long term benefits.

Building on this milestone achievement, CECG leadership are now looking forward, leveraging the Science of Learning in pursuing better outcomes and opportunities for future generations.

# Research foundations of Catalyst

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- Centre for Education Statistics and Evaluation (2017). *Cognitive load theory: Research that teachers really need to understand*. Retrieved from <https://www.cese.nsw.gov.au/publicationsfilter/cognitive-load-theory-research-thatteachers-really-need-to-understand>.
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- Hirsch, E. (2018). *Why Knowledge Matters: Rescuing Our Children From Failed Education Theories* (3rd ed.). Massachusetts: Harvard Education Press.
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- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist* 41(2), 75-86.
- Kirschner, P., & Hendrick, C. (2020). *How learning happens: Seminal works in educational psychology and what they mean in practice*. Routledge.
- Lovell, O. (2020). *Cognitive Load Theory in Action*. London: John Catt Educational Ltd.
- McDonald, T. (2010). *Classroom Management: Engaging Students in Learning*. Third Edition. Oxford University Press.
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- Sherrington, T. (2020). *Rosenshine's principles in action*. John Catt Educational.
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- Wexler, N. (2019). *The Knowledge Gap: The Hidden Cause of America's Broken Education System--and How to Fix It*. US: Penguin Random House.
- Wexler, N. (2020). *The Knowledge Gap: The hidden cause of America's broken education system--and how to fix it*. Penguin.
- William, D., & Thompson, M. (2007). *Integrating assessment with instruction: what will it take to make it work?* In C. A. Dwyer (Ed.), *The future of assessment: shaping teaching and learning* (pp. 53-82). Mahwah, NJ: Lawrence Erlbaum Associates.

Catalyst  
Resources



Transforming lives  
through learning

**Catalyst**

[catalyst.cg.catholic.edu.au](http://catalyst.cg.catholic.edu.au)



CATHOLIC EDUCATION  
Archdiocese of Canberra & Goulburn