

The background of the entire page is a dense, overlapping field of 3D-rendered numbers. The numbers are in various shades of blue and green, with some appearing larger and more prominent than others. The numbers are scattered across the page, creating a textured, mathematical feel. A light-colored rectangular area is positioned on the left side, containing the title and logo.

Numeracy Champion Action Research Project 2024

independent
schools
tasmania

Numeracy Champion Action Research Project 2024

independent
schools
tasmania

Numeracy Champion Action Research Project 2024

First published January 2024
by Independent Schools Tasmania
Level 3, Galleria Salamanca
33 Salamanca Place
Hobart TASMANIA 7000

Telephone: +61 3 6224 0125

Website: <https://independentschools.tas.edu.au>

Content developed by: Trudy Ward, Dr Carol Murphy &
Professor Tracy Muir

Publication created by: Mark Seager

Version: 012024-2/2

Copyright ©: Independent Schools Tasmania



A unique opportunity to increase the impact on teacher confidence alongside improving student mathematics and numeracy outcomes.

A one year, spaced and comprehensive, professional learning program and action research project that will build the capacity of numeracy leaders and classroom teachers, to improve their confidence and competence within the teaching of explicit and sequential mathematics and increase the impact of their work on student mathematics and numeracy outcomes.

As we know, mathematics is an essential skill that underpins learning and outcomes in many areas. It requires explicit, systematic instruction and needs to be taught in a structured way. Ideally schools need to adopt a whole school approach that emphasises the importance of assessment, teaching and learning of mathematics through all learning areas. IST have planned a series of systematic PL sessions to be facilitated by Professor Tracey Muir from Australian Catholic University and Doctor Carol Murphy from UTAS. In 2024, we are excited to announce they will be assisted by Doctor Sharyn Livy, Senior Lecturer of early Years/Primary – Numeracy, School of Curriculum, Teaching and Inclusive Education at Monash University, Victoria and co-author of **Maths Sequences for the Early Years F-2; Challenging to Reason Mathematically**.

These sessions will support teachers and Mathematics Leaders to build their confidence, capacity, content and pedagogical knowledge in the mathematics domain. This professional learning program and action research project aims to build participants' skills and awareness of current evidence based best practice and empower them to return to their context to upskill and train others in mathematics instruction. After each session, participants return to their schools with key actions and ways forward, to improve mathematics instruction, planning, teaching and assessment at their schools.

Participants will also participate in a termly 'community of practice' webinar to discuss their experiences, report on progress, and share ideas. They will also have the opportunity to work with IST education consultants Trudy Ward (South) and Lauren Watson (North), 1:1 as required, to support them in their journey. The project includes 4 x whole day sessions, with one session being held each Term in 2024. These sessions will involve participants learning about the big ideas and misconceptions surrounding the chosen content, experience hands on activities, and strategies to use for instruction as well as diagnostic, formative and summative assessment tools to collect data for and of impact being made. A numeracy screening tool will also be embedded in the project this year, providing teachers who are a part of the project the opportunity to conduct whole school K-6 numeracy screening for their students.

Teachers will also be given access to the AISNSW screening resources hub to provide them with everything required to administer the screening tool including a video of professional learning, so they feel supported throughout the process. Assistance will also be provided as required by Trudy Ward (South) and Lauren Watson (North) from IST to ensure all teachers regardless of previous experience feel supported. The K-2 and 3-6 screeners are to be conducted three times per year for added data collection of assessment, impact, and student growth. Follow up visits to individual schools by Trudy Ward and Lauren Watson will enable the participants to develop understandings in their context as well as providing teacher support, coaching and sharing of practice. This could also involve supporting mathematics leaders to deliver bespoke PL to their colleagues within their own unique contexts and cohorts to roll out any new approaches/assessments.

The AISNSW K-2 Screening Tool has been designed to monitor students' acquisition of skills in the sub strands of Whole Numbers and Addition and Subtraction. The 3-6 Numeracy Screening Tool monitors student progress across the strand of Number and Algebra. The results from both of these screening tools are entered into a spreadsheet which allows teachers to easily identify students who may be at risk of falling behind. The data elicited from these screening tools can also be used to plan whole class instruction and differentiated teaching for students' according to their identified needs. It will also support teachers in discussions with parents around their child's progression in numeracy. Educators who attend will be expected to commit to the project for the whole year, attend all face to face and Community of Practice sessions. By the end of the year, we hope that participants will be able to report on and present the impact of their project and be able to talk about the effect of this work on their school community.

Obviously, numeracy is a highly complex process, and it takes time and effort to both change and embed practice. We have therefore designed the PL sessions to address version 9 of the Australian Curriculum and embed evidence based up to date best mathematics practice for planning, teaching, assessing and reporting. The sessions will be both informative and practical, but above all we aim to support teachers to set goals and embed their new knowledge into practice, along with gain experience in collecting, sorting and representing data to inform future teaching of mathematics at all levels required for students to achieve success. The idea will be to transition participants knowledge into facilitating the implementation of the new mathematics curriculum where it relates to numeracy concepts.

Project Content

- **Creating a greater confidence in the teaching of mathematic core concepts.**
To lessen the stress and fear around all strands of mathematics teaching
- **Primary mathematic instruction.**
How to embed instruction into mathematics tasks.
- **The Mathematic Process.**
How to provide strategic instruction at all stages of mathematical process
- **Developing a whole school approach to establish consistency in the curriculum – through quality best practice teaching and assessment.**
This consistency supports student success because teachers are reinforcing the same expectations, assessments, and effective practices. Teachers can be sure that everyone is on the same page.
- **We are all teachers of numeracy.**
How to embed numeracy assessment and instruction across all areas of the curriculum to support learning.
- **Feedback and assessment of Mathematics.**
Aligning mathematics goals, curriculum, instructional methods, and assessment practices. The aim will be to embed diagnostic, frequent formative and summative assessments to provide timely and explicit feedback to achieve student growth.
- **Creating a positive disposition towards mathematics at your school.**
Creating motivating and supportive environments for teachers and students that celebrate mathematical learning and understanding whilst ensuring children develop numeracy understanding for a broad range of purposes and audiences.
- **Ensuring your mathematics block covers all bases.**
Including all core concepts and ensuring mathematics instruction and assessment occurs.
- **Data Literacy including using assessment tools to support student growth.**
Interpreting student mathematics results and using the data from relevant Numeracy Screener and other embedded assessments from each session to inform practice. Know where the students are and where to take them.

Project Aims

By the end of the 12-month program participants will:

- Have built their pedagogical knowledge, confidence and capacity as teachers of mathematics.
- Have developed a bank of tools and resources they can use.
- Used assessment data collected to inform future teaching and learning to address all student needs in mathematics.
- Formed a community of practice with other educators and leaders in the area of mathematics to share ideas.
- Led a change project in their sphere of influence, focused on evidence-informed practice.
- Worked to build capacity in other educators at their schools.
- We're going to have a lot of fun and we're going to lead change. So why not join us?

Project Cost

- \$200 total annual cost for IST members (4 sessions).
- \$300 total annual cost (4 sessions) for Catholic Education or DECYP teachers.
- **Numeracy Screener** - additional cost for each school will vary depending on student numbers. If interested, contact Trudy Ward for exact costing.

Payment is to be made at the time of registration. See over for registration details.



Project Sessions

North:

- Tue 27th Feb, 9:30am – 3:00pm
- Tue 7th May, 9:30am – 3:00pm
- Tue 30th Jul, 9:30am – 3:00pm
- Tue 12th Nov 9:30am – 3:00pm

South

- Thu 29th February 9:30am – 3:00pm
- Thu 9th May 9:30am – 3:00pm
- Thu 1st August 9:30am – 3:00pm
- Thu 14th November 9:30am – 3:00pm

Online:

There will also be the following Numeracy Champion Networking Community of Practice Networking sessions held as a follow up each term:

- Wed 10th Apr 3:30pm – 4:30pm
- Wed 26th Jun 3:30pm – 4:30pm
- Wed 18th Sep 3:30pm – 4:30pm
- Wed 27th Nov 3:30pm – 4:30pm

Further information and links to attend the online sessions will be provided to registered participants of the project

Project Registration

To register for the Numeracy Champion Action Research Project 2024, please click the link below:

[Registration Link](#)

Or visit:

<https://independentschools.tas.edu.au>

The *Numeracy Champion Action Research Project* pages from our *Professional Learning Prospectus 2024* can be found on the following pages!





Numeracy Champion Action Research Project (North) Session One

Mathematics Teaching Approaches for Maximising Student Engagement

The pedagogical approaches that teachers incorporate into their practice have a direct impact on students' learning of and engagement with mathematics.

Session Goals

In this session we will develop a shared understanding of different teaching approaches, including explicit instruction, guided inquiry, problem solving, and making mathematical thinking visible. We will provide examples of evidence-based teaching approaches, along with opportunities to see these approaches in practice across a range of contexts and mathematical topics.



[Click to
register online.](#)



27th Feb 2024.
9:30am – 3:00pm.
In person.
Tailrace Centre,
1 Waterfront Dr,
Launceston 7250.



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





Numeracy Champion Action Research Project (South) Session One

Mathematics Teaching Approaches for Maximising Student Engagement

The pedagogical approaches that teachers incorporate into their practice have a direct impact on students' learning of and engagement with mathematics.

Session Goals

In this session we will develop a shared understanding of different teaching approaches, including explicit instruction, guided inquiry, problem solving, and making mathematical thinking visible. We will provide examples of evidence-based teaching approaches, along with opportunities to see these approaches in practice across a range of contexts and mathematical topics.



[Click to
register online.](#)



29th Feb 2024.

9:30am – 3:00pm.

In person.

St Michael's Collegiate
School

218 Macquarie St, Hob



Trudy Ward.

Lauren Watson.

Assoc Prof Tracy Muir.

Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.

Mathematics &

Numeracy Leaders.

Instructional Coaches.



AITSL

1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.

NQS

N/a.





10
Apr

Numeracy Champion Action Research Project:

Online Community of Practice Networking Session for Term One

Mathematics Teaching Approaches for Maximising
Student Engagement



[Click to
register online.](#)



10th April 2024.
3:30pm – 4:30pm.
Online



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





07
May

Numeracy Champion Action Research Project (North) Session Two

Linking Numeracy and Measurement Skills

Building measurement skills requires the application of key numeracy skills from early counting skills, to place value, multiplicative and proportional reasoning.

Session Goals

In this In this session we will explore how key numeracy skills can support an understanding of measurement and how, in turn, measurement activities can provide practical ways of progressing learning in numeracy.



[Click to
register online.](#)



7th May 2024.
9:30am – 3:00pm.
In person.
Tailrace Centre,
1 Waterfront Dr,
Launceston 7250.



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





09
May

Numeracy Champion Action Research Project (South) Session Two

Linking Numeracy and Measurement Skills

Building measurement skills requires the application of key numeracy skills from early counting skills, to place value, multiplicative and proportional reasoning.

Session Goals

In this session we will explore how key numeracy skills can support an understanding of measurement and how, in turn, measurement activities can provide practical ways of progressing learning in numeracy.



[Click to register online.](#)



9th May 2024.
9:30am – 3:00pm.
In person.
St Michael's Collegiate
School
218 Macquarie St, Hob



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





26
June

Numeracy Champion Action Research Project:

Online Community of Practice Networking Session for Term Two

Linking Numeracy and Measurement Skills



[Click to
register online.](#)



26th June 2024.
3:30pm – 4:30pm.
Online



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





30
July

Numeracy Champion Action Research Project (North) Session Three

Statistical Literacy

Statistical literacy requires an understanding of statistical information and processes, including an awareness of data and the ability to estimate, interpret, evaluate, and communicate with respect to variation in the real world.

Session Goals

In this session we will look at the big ideas, key understandings, and misconceptions to be considered when teaching and learning about statistics. We will also provide examples of practical tasks and activities, with a focus on the use of guided inquiry as a preferred teaching approach.



[Click to
register online.](#)



30th July 2024.
9:30am – 3:00pm.
In person.
Tailrace Centre,
1 Waterfront Dr,
Launceston 7250.



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





Numeracy Champion Action Research Project (South) Session Three

Statistical Literacy

Statistical literacy requires an understanding of statistical information and processes, including an awareness of data and the ability to estimate, interpret, evaluate, and communicate with respect to variation in the real world.

Session Goals

In this session we will look at the big ideas, key understandings, and misconceptions to be considered when teaching and learning about statistics. We will also provide examples of practical tasks and activities, with a focus on the use of guided inquiry as a preferred teaching approach.



[Click to
register online.](#)



1st August 2024.
9:30am – 3:00pm.
In person.
St Michael's Collegiate
School
218 Macquarie St, Hob



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.






18
Sep


Numeracy Champion Action Research Project:

Online Community of Practice Networking Session for Term Three


Statistical Literacy




[Click to
register online.](#)




18th September 2024.
3:30pm – 4:30pm.
Online




Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.






Numeracy Champion Action Research Project (North) Session Four

Geometric Thinking

The development of spatial and geometric thinking is often not covered well in primary schools with many teachers uncertain of the benefits of developing geometric ideas.

Session Goals

In this session we will look at levels of geometric thinking and the types of activities that can progress students' learning. We will model how activities can be structured to help students shift from early visual thinking to descriptive and deductive ways of thinking.



[Click to register online.](#)




12th November 2024.
9:30am – 3:00pm.
In person.
North-West.
To be confirmed.




Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.





14
Nov

Numeracy Champion Action Research Project (South) Session Four

Geometric Thinking

The development of spatial and geometric thinking is often not covered well in primary schools with many teachers uncertain of the benefits of developing geometric ideas.

Session Goals

In this session we will look at levels of geometric thinking and the types of activities that can progress students' learning. We will model how activities can be structured to help students shift from early visual thinking to descriptive and deductive ways of thinking..



[Click to
register online.](#)



14th November 2024.
9:30am – 3:00pm.
In person.
St Michael's Collegiate
School
218 Macquarie St, Hob



Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.






27
Nov

Numeracy Champion Action Research Project:

Online Community of Practice Networking Session for Term Four

Geometric Thinking



[Click to
register online.](#)




27th November 2024.
3:30pm – 4:30pm.
Online




Trudy Ward.
Lauren Watson.
Assoc Prof Tracy Muir.
Dr Carol Murphy.



Focus Area
Literacy



Primary Teachers.
Mathematics &
Numeracy Leaders.
Instructional Coaches.



AITSL
1.2, 1.5, 2.1, 2.5,
3.6, 6.3, 6.4, 7.4.
NQS
N/a.

