



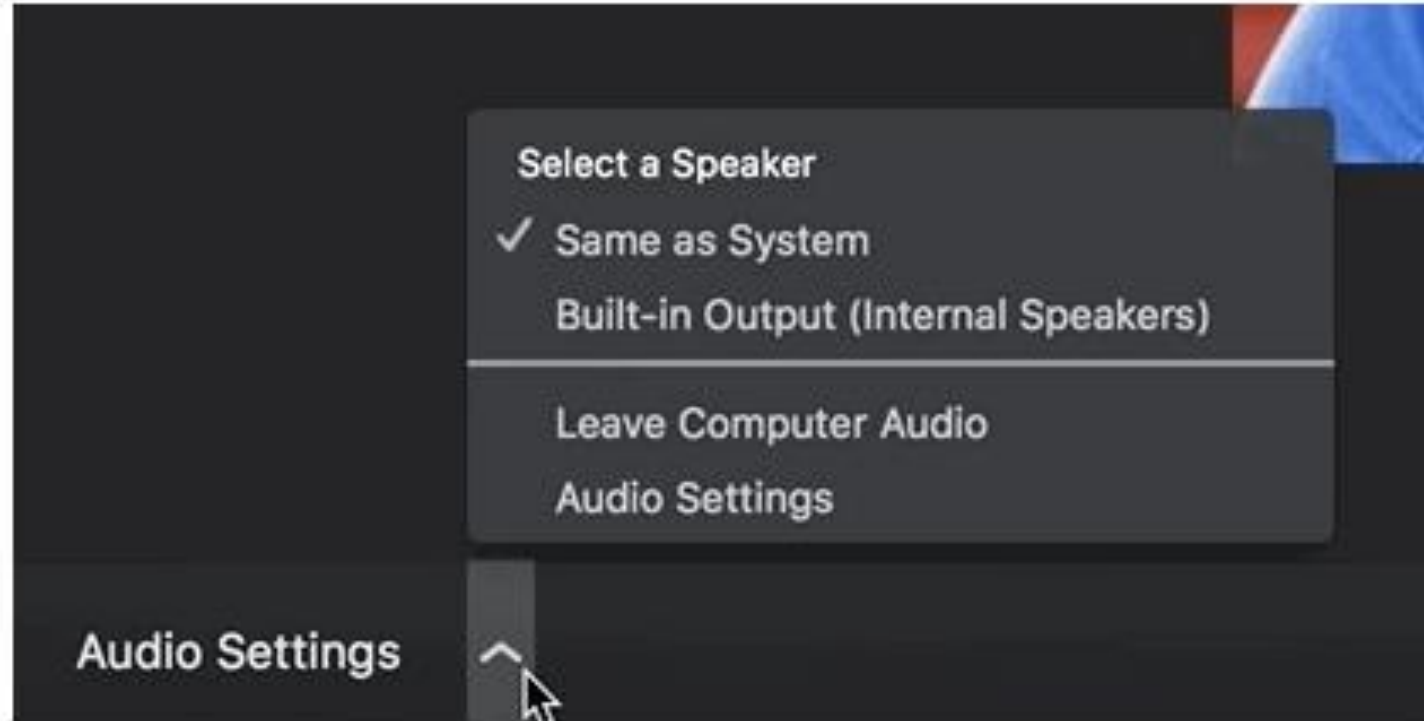
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FOR LEARNING**

Not every family has the same resources and access to technology to support learning at home. For those experiencing vulnerability, we must ensure the digital divide and lack of other resources does not turn the current achievement gap into a chasm over the coming months. While delivering the best learning possible now, systems and educators also need to plan for a positive return to schools and centres after the crisis. This must include initiatives for catching up children who will fall behind during this period.

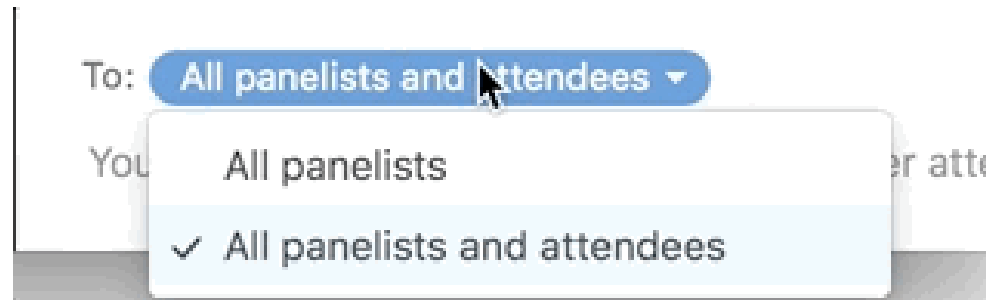
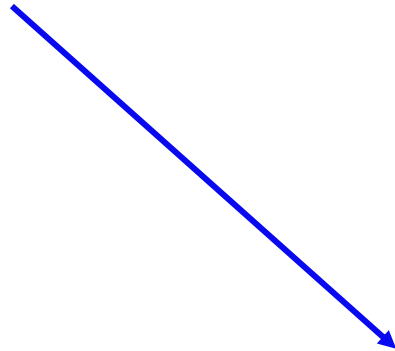
Matthew Deeble
Director, Evidence for Learning

Using Zoom Webinar

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Using Zoom Webinar



Effective Student Collaboration

Matthew McLaren, Dr Tanya Vaughan and Dr Pauline Ho
2 August 2020, Webinar



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Acknowledgement of Country

We would like to acknowledge the traditional custodians of the land on which we meet, and pay our respects to elders past, present and emerging.

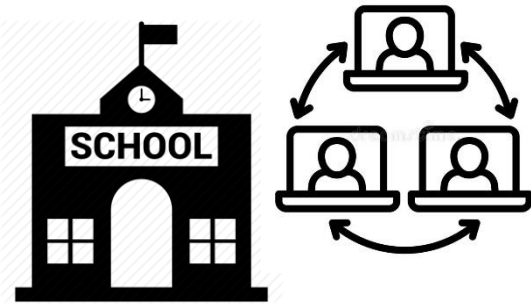


What we will cover

This webinar will look at practical recommendations for school educators and school leaders.

- Techniques, tasks and approaches for helping students work together remotely.
- Creating effective collaboration and problem solving between student groups.
- How to support and encourage students that are currently lower achieving in collaborative tasks during remote learning.

Student collaboration in remote and flexible learning



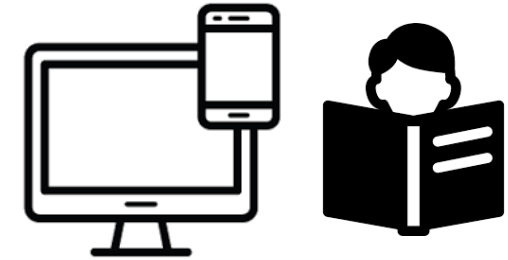
School **Online** Learning

Students collaborate synchronously in 'real-time' interaction via technology



School **Blended** Learning ('Hybrid')

Student collaborate face-to-face and online through whole-class interaction or in groups.



School **Offline** Learning

Students prepare for team tasks through independent learning (without 'real-time' interaction)

Student collaboration strategies

Whether Remote or In-person learning, we should consider:

- Learning design: 2:1:2 flexible learning (asynchronous and synchronous modes) or 'station rotations' (breakout rooms)
- Strategies: Think-pair-share, Fishbowl debate, jigsaw etc.
- Multi-layered tasks: Present students with a problem, provide structure, research, discuss, groups presentations of the solution.
- Personalised yet stimulating problems or tasks
- Check-ins: virtual meetings to provide feedback to groups (just-in-time and on-the-go feedback)
- Peer feedback and assessment: Have students evaluate their own effort and others. Teachers triangulate those assessments.
- Value-added technology: Share and collaborate on projects

How do you define collaborative learning

Please type into the chat box how you would define collaborative learning.



NTLC student commissioners from Alawa Primary prepare for their pitch. Image: YouTube

Collaborative Learning

Face to face collaborative (or cooperative) learning approach involves students working together on activities or learning tasks in a group small enough for everyone to participate on a collective task that has been clearly assigned.

Some collaborative learning approaches put mixed ability teams or groups to work in competition with each other in order to drive more effective collaboration. There is a very wide range of approaches to collaborative and cooperative learning involving different kinds of organisation and tasks. Peer tutoring can also be considered as a type of collaborative learning, but in the Toolkit it is reviewed as a separate topic.

Online collaborative learning occurs when students learn by communicating amongst themselves via the Internet and where student-student interaction and with the teacher-facilitator play a primary role in the learning process.

Collaborative learning

Moderate impact, very low cost, based on extensive evidence

The impact of collaborative approaches on learning is consistently positive.

Average cost

\$ \$ \$ \$ \$

Evidence security

🔒 🔒 🔒 🔒 🔒

Months' impact

+5

Key elements of collaborative learning

Students need support and practice to work together; it does not happen automatically.

Tasks need to be designed carefully so that working together is effective and efficient, otherwise some students will try to work on their own.

Competition between groups can be used to support students in working together more effectively. However, overemphasis on competition can cause learners to focus on winning rather than succeeding in their learning.

It is particularly important to encourage lower achieving students to talk and articulate their thinking in collaborative tasks to ensure they benefit fully.

Have you considered what professional development is required to support effective use of these approaches?

Effective student collaboration– resources to support your questions



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Have your questions ready for our panel of experts:



**Dr Tanya Vaughan,
Evidence for
Learning**



**Dr Pauline Ho,
Evidence for
Learning**



**Matthew McLaren,
Western Port
Secondary College**

Specific pedagogical techniques and approaches

Questions you asked

- What particular activities should be employed to increase students' involvement and ensure participation?
- How can we encourage students of varied abilities to work together effectively?
- How can I build effective collaboration among students who have different abilities?
- Is it best to pair students of similar abilities or a mix?
- Is mixing or pairing up a higher and lower ability learners in discussing a topic a good idea?
- Are there any approaches to work with students who are confident in their abilities and believe that student collaboration doesn't work for them?

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary:
[Collaborative learning](#)

What the evidence tells us

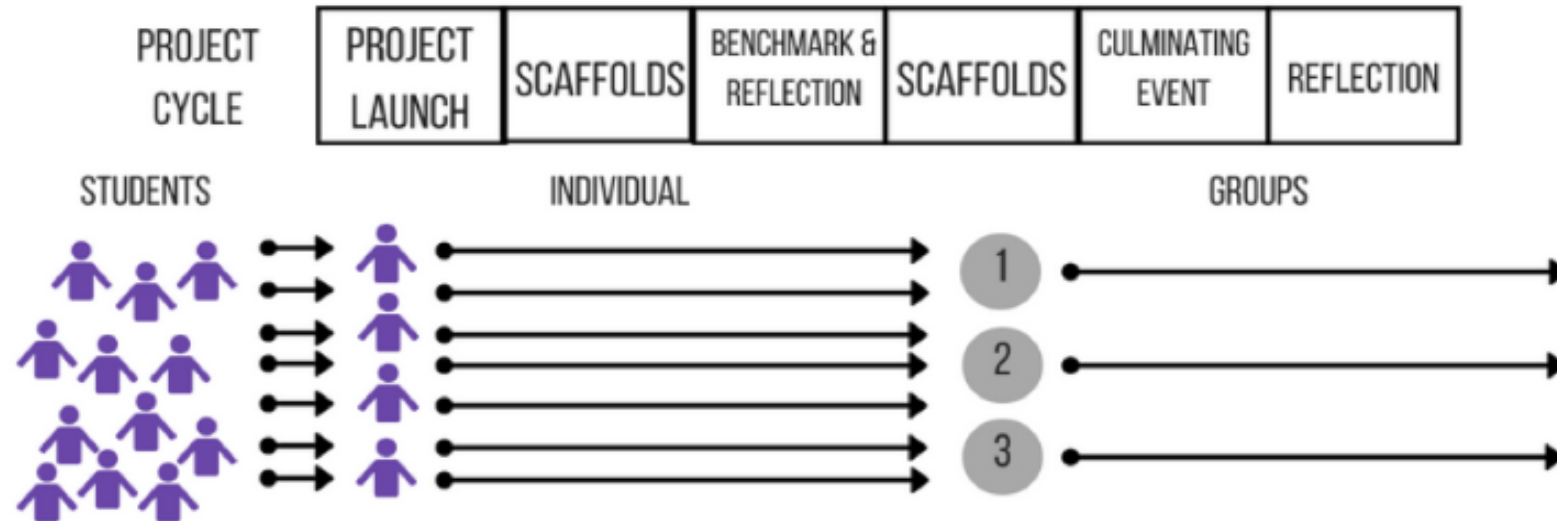
- A recent meta-analysis found that collaborative learning has a small positive impact on learning with an average effect size of 0.26 (Kumar, 2017).
- Small groups of 3-4 members are more effective than 5-7, and students with lower ability learn more in mixed groups while medium ability students benefitted more in homogeneous groups (Lou et al., 2006)
- Collaboration that are effective leads to more positive student relationships, greater motivation associated with higher levels of achievement (Roseth et al., 2008). The reviews found collaborative learning has more impact than competitive or individual learning.

“It has become clear that simply placing learners in a group and assigning them a task does not guarantee that they will work together ... coordinate their activities ... engage in effective collaborative learning processes... lead to positive learning outcomes (Erkens, 2013, p. 1).”

Collaborative versus Group Work



COLLABORATIVE GROUPING: RELEASE AND CATCH



- Phases of Learning – ‘building blocks of learning’
- How interaction and interdependence is more important than ‘divide and conquer’
- Students should demonstrate their learning of core content individually and gain collaborative skills through think-pair-share, jigsawed content learning and peer feedback during the early stages of the project.

Knowledge about student collaboration

Questions you asked

- What's the difference between inquiry and collaborative learning?
- Is there a difference in effective strategies in facilitating collaboration in a primary and secondary setting?
- How can we increase student collaboration with teachers?
- How do we effectively teach collaboration?
- Is student collaboration most effective when students have knowledge and understanding of the concepts and content they are collaborating on?
- What supports effective student to student communication?

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary: [Collaborative learning](#)

5 key considerations of effective collaboration

1. **Interaction is a primary condition of success** – well-designed, structured, scaffolding and feedback, aligned to what is to be learnt (Bernard et al., 2009; Jopling, 2012) .
2. **Moderate duration** – but students' interest and choice of content, and how learning time is designed matters.
3. **Technology** can have a significant impact on learning when combined with collaboration but the nature of pedagogy (online or face to face) and design that matter more (Borokhovski et al., 2016).
4. **Problem-based discussions** – Greatest impact found when scaffolding that are applied to problem-based learning (Belland et al., 2017).
5. **Peer and teacher coaching and assessment** – leads to high levels of collaboration and motivation (Li et al., 2019).

Supporting collaboration online

Questions you asked

- How to create effective e-learning?
- How they can collaborate if they are far from each other?
- How to guide and maximize learning opportunities with students now in the home-supported learning environment?
- Hoping this is applicable to distance / online learning.
- How can students collaborate in research projects in online education?

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary: [Collaborative learning](#)

Toolkit approach: [Digital technology](#)

Australasian Research Summary: [Digital technology](#)

Supporting students with additional needs

Questions you asked

- Particularly interested in supporting lower achieving students in collaborative work.
- Could you please reference resources or give information relating to special needs environments?

Resources

Toolkit approach: [Collaborative learning](#)

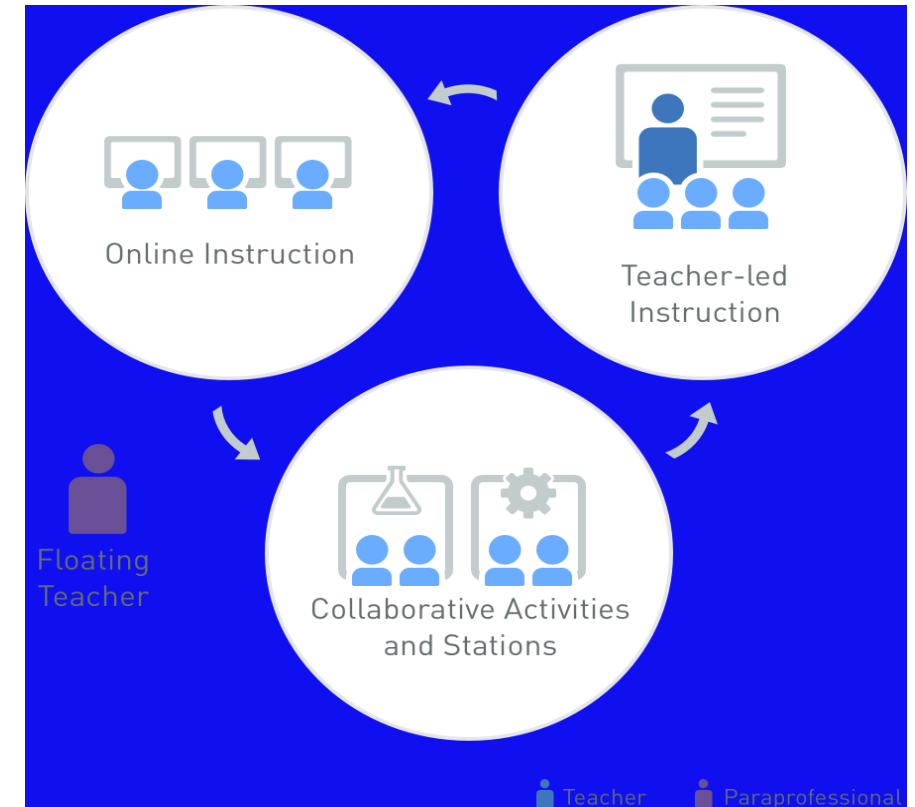
Australasian Research Summary: [Collaborative learning](#)

[Special Educational Needs in Mainstream Schools](#)
[inclusionEd](#)

A high-impact reading strategy

Abacadabra is a balanced literacy program that uses interactive web-tools and stories to develop reading.

- **Blended learning model:** Students rotate between 'stations' based on a time schedule set by the teacher to work on various tasks on computer, small group or group work.
- **Personalised:** Students should then be assigned to work individually or in ability groups and given specific instructions for activities which are tailored meet their needs.
- **Feedback:** Following the online session, the learning from ABRA is discussed during normal class-time.



What the evidence tells us?

This approach has also been found to be effective for Australian students with additional learning needs with +4 months / 0.32 (reading comprehension)

A high-impact Maths collaborative strategy

PowerTeaching Math is a structured cooperative learning program using problem-solving to empower students to improve their understanding of maths concepts.

- **Learning teams:** Students assigned to mix-ability teams to discuss challenges and errors, on-the-spot explanations
- **Compelling concept presentations:** Teachers explain a concept, pose problems on an interactive whiteboard to solve in a 'team huddle', call on a child at random from each team to represent the team with their answer and explanation.
- **Assessment for learning:** All students are individually assessed and teams evaluated based on the average performance of all team members.
- **Embedded multimedia:** Frequent, brief video vignettes illustrating concepts, graphic demonstrations, humorous live action segments and animations.



What the evidence tells us?

Students showed an effect size of +0.26 (3 additional months of learning) in a 3-year longitudinal RCT, closing the achievement gap between high and low achievers.

Student motivation and self-regulation

Questions you asked

- How to help students to focus on the set tasks when they discuss or collaborate in the class.
- How can we increase students' willingness to cooperate with other students?
- How to can we help students to be more independent in their learning?
- How teachers can play an important role in leading to effective collaboration of students and teachers?

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary: [Collaborative learning](#)

Interventions/research

Questions you asked

- What is the best method to encourage outstanding collaboration between students and a teacher?

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary: [Collaborative learning](#)

Subject-specific student collaboration

Questions you asked

- Progressing language comprehension through oral language
- What are some strategies to teach reading comprehension?
- Particularly interested in collaboration in maths.
- Something that can be adapted or directed to health and physical education teaching please.

Resources

Toolkit approach: [Collaborative learning](#)

Australasian Research Summary: [Collaborative learning](#)

Upcoming E4L webinars

August 18, 2020

Feedback to increase student learning



Anisha Ghani
AITSL



Robyn Arri
Our Lady Help of
Christians Primary
School

September 1, 2020

Improving literacy in secondary settings



Dr Kate De Bruin
Monash University



Mark Clutton
Gungahlin College

September 15, 2020

Unpacking the effective use of Teaching Assistants. More speakers to be announced.



Susannah Schoeffel
Evidence for Learning



Dr Tanya Vaughan
Evidence for Learning

Where to now?



Get in touch

tvaughan@evidenceforlearning.org.au
pho@evidenceforlearning.org.au

Any attendees will receive a attendance certificate in one week. If you have any general inquires please contact:

info@evidenceforlearning.org.au



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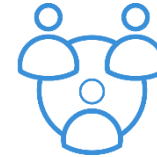
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Helping great practice become
common practice in education



info@evidenceforlearning.org.au | evidenceforlearning.org.au | @E4Ltweets