

## Research in Action: How to Get Started in Your Classroom

SMART and the University of Melbourne embarked on a research study to understand how digital technologies can improve social and academic outcomes for neurodivergent learners. This resulted in 36 recommendations on how to combine technology with teaching practices. These guides illustrate how SMART can help amplify the teaching practices you are already using to help all of your students succeed. Check out our research-based recommendations for strategies you can get started with right away.



**Teaching with Lumio**



**Teaching with your SMART Board**



**School and District Leaders**

Harrison, M., Rowlings, J., White, E., Vallenge, M., & Potemkin, N. (2024). Neurodiversity and digital inclusion: creating the conditions for inclusive education through universal design for learning. The University of Melbourne. <https://doi.org/10.17613/sj8sk-vts95>



Learn more about accessibility with SMART & Lumio

[SMART Accessibility Solutions](#)

[SMART | Lumio Accessibility Toolkit](#)

[Lumio UDL Instructional Toolkit](#)

[University of Melbourne Research Resources](#)

Lumio is a collaborative web-based learning platform that provides all learners with interactive experiences that support a diverse range of learning needs. Discover ways to use Lumio to support inclusive learning:

Strategy	Recommendation	Lumio Solution	See it in action
Support executive functioning through digital tools and supports	Provide <b>digital scaffolds and graphic organizers</b> to help students organize their thinking in a structured and systematic way	Lumio’s graphic organizers, combined with the ability to share them as whole-class, small group, or individual activities, make it easy for teachers to help students organize their thinking.	Discover activities in our <a href="#">UDL Toolkit</a> : <ul style="list-style-type: none"> <li>Brainstorming Web (p.13)</li> <li>Frustration Model (p.34-35)</li> <li>Reading Organizer (p.53-55).</li> </ul> <a href="#">English Language Learners Toolkit</a> : <ul style="list-style-type: none"> <li>Graphic Organizers (p.38-44)</li> </ul>
Integrate targeted activation of prior knowledge and daily reviews	Introduce topics with clear connections to previous learning to <b>build from prior understandings</b>	Lumio’s built-in resources make it easy to activate prior knowledge with anticipatory brainstorming, KWLQs, game-based activities, and more.	Discover activities in our <a href="#">UDL Toolkit</a> : <ul style="list-style-type: none"> <li>Whole class Brainstorm (p.5)</li> <li>KWQL Shout it Out (p.44-45)</li> </ul> <a href="#">English Language Learners Toolkit</a> : <ul style="list-style-type: none"> <li>Activate Prior Knowledge (p.2-8)</li> </ul>
Prioritizing student voice and agency	Once students develop proficiency in a concept or skill, <b>provide them with choices</b> to how they would like to apply the knowledge or skill to demonstrate their mastery	Flexible lesson creation opportunities in Lumio allow teachers to design activities that give students choice in responding to a prompt. Choice boards allow students to choose an activity. Text, audio, and multimedia response options provide even more flexibility.	<ul style="list-style-type: none"> <li>Explore choice-board examples in our <a href="#">UDL Toolkit</a> (p.15-22)</li> <li>Learn more about how both teachers and students can <a href="#">use audio in Lumio</a></li> </ul>
Supporting collaboration through structure, capacity building, and clear, targeted outcomes	Where possible, <b>assess group work contributions individually</b> rather than collectively grading as a group	When working in groups or whole class workspaces in Lumio, student contributions are attributed, allowing teachers to evaluate individual student contributions to collaborative activities	Get activities you can use with your class today in our <a href="#">Active Learning Strategies Toolkit</a> : <ul style="list-style-type: none"> <li>Affinity Mapping Activity (p.33-34)</li> </ul>

SMART Board interactive displays provide multimodal and interactive learning experiences that engage and support a diverse range of needs in the classroom. Discover ways to use your SMART Board to support inclusive learning:

Strategy	Recommendation	SMART Solution	See it in action
Support executive functioning through digital tools and supports	Explicitly teach new vocabulary and provide students with access to an <b>ongoing vocabulary base</b> for students to reference	Graphic organizers, made available in the iQ Whiteboard, allow students to connect new vocabulary to prior knowledge. All content is saved and can be revisited for student review as needed.	Learn how to add <a href="#">graphic organizers to your whiteboard activities</a>
Integrate targeted activation of prior knowledge and daily reviews	Conduct a <b>daily review</b> at the beginning or conclusion of a lesson that revises both <b>recent and historical knowledge and skills</b>	Shout It Out is an excellent tool for reviewing with students. Using text or images, students can share what they are thinking on the front-of-room display, allowing them to review and learn from their peers. An array of ready-made exit tickets makes it easy to conduct an end-of-class review.	Discover how to add a Shout It Out brainstorming session and other ready-made resources to your lesson: <ul style="list-style-type: none"> <li>• <a href="#">Shout It Out</a></li> <li>• <a href="#">Exit Tickets</a></li> </ul>
Create a safe culture for active participation and constructive feedback.	Allow <b>anonymous contributions</b> during class brainstorming activities with clear expectations in place around responding to shared ideas	Teachers can quickly capture student feedback using Shout It Out. Teachers can easily select the anonymous option so that student responses appear on the front-of-room display without attribution.	Learn more about creating both anonymous and attributed brainstorming activities with <a href="#">Shout it Out</a>
Create a safe culture for active participation and constructive feedback	Provide <b>consistent options for multimodal contributions</b> to class discussions where students can contribute using their preferred mode of communication	SMART Board interactive displays provide multiple means for students to express themselves. Students can annotate, use images, shapes, and video, or with our SMART Board RX display, add content to the board using physical stamps and cubes.	Find out how to customize SMART's Tool Explorer Stamps and Cubes to meet your students' needs: <ul style="list-style-type: none"> <li>• <a href="#">Tool Explorer 1-pager</a></li> </ul>

Creating inclusive learning environments requires more than just the right EdTech. Learn how SMART’s products and services, such as PD and on-demand training, can help you implement research-backed practices that support all learners.

Strategy	Recommendation	SMART or Lumio Solution	See it in action
Interactive Explicit Teaching aligned with UDL Principles	Provide time and space for <b>teachers to share planning</b> to allow the development of high-quality resources that are responsive to local culture and context	Lumio’s Organization Library provides a central repository for approved curriculum materials, lesson plans, and resources.	Discover the benefits of Organization Libraries in our <a href="#">Lumify your Curriculum Course</a>
Prioritizing student voice and agency	<b>Ask students for their feedback</b> and preferences on technology	Students have an understanding of what types of technologies work for them and what they need to succeed. Giving them a voice in the selection of tools helps them succeed.	Understand where you are in your digital strategy with the <a href="#">EdTech Assessment Tool</a>
Technology as a virtual teaching assistant for supporting all students	Teach all students to access and <b>utilize the accessibility features</b> built into the hardware and software being used in their digital ecosystem so that they optimize their learning experiences to meet their needs and preferences	SMART’s products are packed with accessibility features that allow students to adjust their user experience to meet their needs.	Discover how SMART supports inclusive learning with our <a href="#">Accessibility Toolkit</a>
Sustainable solutions to common barriers and challenges in using technologies in schools	<b>Provide training to teachers</b> on how to use the full functionality of the software and hardware available to them as teaching and learning tools, including management affordances	SMART provides all customers access to high-quality professional learning, designed by educators. Coursework at The Academy is designed to be practical, relevant, and engaging, so it is directly applicable in the classroom.	Find all the training resources to support teachers with <a href="#">SMART Academy</a>