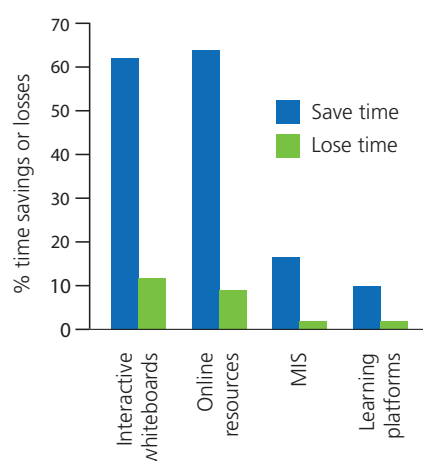


Research

Reducing stress in the classroom:

How interactive whiteboards and solution-based integration improve teacher quality of life

Primary teachers' perceived future time savings/losses from using ICT resources



The high cost of teacher stress and anxiety

Teachers worldwide report high levels of stress and anxiety. They work upwards of 50 hours per week and list excessive workloads, large class sizes and an inability to meet the learning needs of individual students as major sources of stress. Pressure to incorporate technology without the necessary support and resources is another factor contributing to this stress.

Teachers missing work because of stress cost the UK system €19 million annually. In the U.S., the cost of new teachers leaving the profession early and resultant turnover is estimated at US\$7 billion.

How interactive whiteboards reduce teacher stress

Time-savings for planning and prep

The use of interactive whiteboards enables more efficient and effective lesson planning and delivery. It enables teachers to revise and adapt lessons year over year, and allows them to save notes, equations and so on that would otherwise have to be copied out for each class.

Personalized learning

Teachers find it easier to incorporate multiple forms of media, enabling them to better address the various learning modalities and abilities in their classrooms. Storyboarded lessons enable teachers to control flow and pace, advancing slides along with class understanding, or flipping back for review. Lessons created for use on interactive whiteboards are easy to edit and tailor to the needs of individuals or groups.

Simplified resource sharing

Interactive whiteboards simplify the sharing of complete or adapted lessons, eliminating duplication of effort among teachers instructing similar classes. Digital lessons are also simple to organize and store, making it easier for teachers to locate and share resources.

	Lesson planning (%)		Lesson delivery (%)		Assessment (%)		Record keeping (%)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Save more than 2 hours	22	16	10	11	8	8	5	9
Save 1–2 hours	26	13	18	15	12	12	12	11
Save up to 1 hour	27	19	26	24	26	24	28	22
Does not make a difference	17	33	40	44	48	42	49	40
Lose up to 1 hour	5	7	5	4	5	9	5	12
Lose 1–2 hours	2	7	*	2	1	3	1	4
Lose more than 2 hours	2	6	1	1	1	2	1	2
Total: save time	74	47	54	50	45	44	45	42
Total: lose time	9	19	6	6	7	14	7	18
Base: all teachers who used ICT for each task	598	1,111	596	1,119	541	997	546	1,062

Time currently saved or lost by using ICT for different tasks.

Increased confidence for new teachers

A study conducted at the University of Virginia found that lessons storyboarded on interactive whiteboards reduced new-teacher anxiety. Student teachers felt that the technology enabled them to keep their trains of thought and remember lesson details while dealing with the stress of being in front of classes.

Why solution-based integration models reduce the stress of technology adoption

Teachers need a solution-based approach to the adoption of any technology, including sufficient training, support and resources to fully realize the benefit of the technology and to translate its advantages into genuine learning opportunities for students. Simply purchasing a product and installing it in classrooms is not sufficient for a return on technology investment.

The International Society of Technology in Education has identified six levels of technology integration, extending from non-use to refinement, that characterize an adoption curve. For teachers to advance through these levels, they need access to technical support, training, peer mentoring, professional development and resources. Choosing a product from a manufacturer who understands technology integration within schools and supports it through accessible programs and resources is critical when making an investment in technology.

SMART supports solution-based interactive whiteboard integration by creating highest-quality products and backing them with content and resources, professional development, community initiatives, service and support.

[Learn more](#) about SMART's complete solutions and [read the entire white paper](#) on the SMART website.