

INFORMED SOURCES SAMPLE APRIL 2018

How a laptop can help your high schooler with science

Secondary students use laptops for more than keeping up-to-date on social media.

Former high school science teacher, Simon Crook, undertook a PhD looking at how much using laptops helped year 12 students achieve better results in biology, chemistry, and physics. He undertook this study when his previous boss asked the question “What will laptops do to our exam results?”, and he sought to find out.

His findings? Laptops not only helped students with engagement and motivation in senior-school science subjects; it enabled them to achieve better results.

“Given the high-stakes nature of leaving exams, these findings suggest laptops should be considered a valuable tool when used appropriately in helping students achieve their potential,” he said.

While the laptops provide new learning experiences – such as access to physics simulations, spreadsheets and science software – many students chose or were instructed to use their laptops to learn in traditional ways. Students still take notes and work from textbooks, as they have for generations, but now use word processing to take notes and refer to electronic versions of their textbooks.

This is one of the many reasons why we have a BYOD policy in place – the more students we have using technology, the better the outcomes overall.

But we understand that not all families can afford the latest and fanciest laptops, and for most things we are doing in class, older models work just fine. Where specific applications or programs are required that need a particular operating system, we will make sure no student is disadvantaged.

Simon’s research found that teachers who use more technology in classrooms have increased trust and collaboration with students – surely something we should all be aiming for.

For further information, see Mr Crook’s PhD thesis, *Evaluating the Impact of 1:1 Laptops on High School Science Students and Teachers*, which was completed through the Physics Education Research group at the University of Sydney. It has been published through the University of Sydney library and is available at <http://hdl.handle.net/2123/16129>.

MCERA, an independent, not-for-profit organisation, provides a conduit through which education research and researchers are made more accessible to the media to help improve public understanding of key education-related issues. Our Informed Sources initiative places the latest research insights in the hands of school practitioners. For more stories like this one, go to <https://www.mcera.org.au/schools>.

MCERA thanks all of its sponsors, especially our platinum sponsors.



MCERA is a registered charity, to find out more about supporting our organisation contact info@mcera.org.au

