

# Technology isn't the answer to livening up lectures—good teaching is

May 21 2021, by Christopher Charles Deneen and Michael Cowling



Credit: Julia M Cameron from Pexels

With some universities returning to face-to-face teaching this year, ANU Vice Chancellor Brian Schmidt <u>noted</u> that, while his university was one of them, lectures would be much less common and not a "crutch for poor



pedagogy". Since then many have <u>discussed the issue of lectures</u>, including the deputy vice chancellor of University of Technology Sydney and the director of the National Center for Student Equity in Higher Education in Western Australia, with ideas ranging from <u>embracing the</u> <u>lecture to removing it entirely</u>.

Condemnation of lectures is <u>nothing new</u>. However, the sudden, massive shift to reliance on technology due to COVID has brought increasing calls for ending the venerable lecture. Lectures will, we are told, be replaced by superior, technology-enhanced substitutes.

Underlying these messages are two tacit assumptions: that lectures make for bad <u>teaching</u> and that using technology improves it. But are these reliable assumptions? Rather than simply rejecting lectures and embracing technology, perhaps we should be looking more closely into both, and their relationship to each other.

The "is the lecture dead?" debate again. My view is that its more complicated than that. <u>https://t.co/9CLcHC0pD9</u>

- Shirley Alexander (@SAlexander\_UTS) February 14, 2021

# **Our love-hate relationship with lectures**

Discussions about getting rid of lectures follow predictable patterns. The most common complaints center on lectures as <u>didactic</u>, <u>learner-passive</u> and <u>boring</u>. Accompanying these critiques is the oft-cited rule that students' attention span has a limit of <u>10-18 minutes</u>.

While there is <u>little to no evidence for this claim</u>, we can all identify with struggling to remain awake as we are droned at from a lectern. But most of us can also recall times we were spellbound by a lecture. Anyone who has attended a great TED Talk or even watched one on YouTube knows



what it's like to be captivated for that <u>3-18 minutes</u>.

Can lectures hold people's attention beyond 18 minutes, though? The late Professor Randy Pausch was well known for the power and quality of his lectures, especially his final one, "<u>Randy Pausch's Last Lecture</u>", which he delivered after receiving a terminal diagnosis of pancreatic cancer. That lecture comes in at a little over one hour and 15 minutes, and many consider it to be a masterwork of <u>powerful teaching and communication</u>.

Clearly, extended lectures can have great impact. Achieving that impact, however, requires understanding what makes for good lecturing and then committing to improvement.

#### Push the boundaries and reflect on your practice

Pausch challenges the stereotype of what a lecture is. He uses <u>physical</u> <u>props, multimedia and other resources</u> to push the boundaries of the lecture beyond a typical, didactic engagement. The result is a lecture that periodically shifts how the audience is engaged and, in doing so, captures and keeps the audience's attention.

Lecturing at this level requires more than just experience. We must <u>reflect on our teaching practice</u>, evaluate the quality of our lectures in relation to our intentions, and then commit to developing both our lectures and ourselves.

Professor Eric Mazur describes how, while teaching physics at Harvard in the 1990s, he came to the painful realization that <u>his lectures were</u> <u>failing</u> to keep his students engaged or serve the educational objectives of the subject. He used this realization as a springboard to improve his lectures and develop his pedagogical knowledge and skills.

Since then, Mazur has become a recognized expert in improving student



engagement. He has created a variety of solutions for academics to keep students actively engaged in lectures, even those that go beyond the apocryphal 18-minute limit. The techniques <u>Mazur advocates</u> range from integrating peer instruction into lectures to using a high-tech. <u>collaborative platform</u> to promote students' pre-lecture preparation.

## Lose the assumptions, not the lectern

So then what about the claim that technology is making the lecture obsolete? This seems doubtful for a couple reasons.

Pausch and Mazur's methods can be transferred to an online space, even if we don't label the result a lecture. We see many examples of how this works in well-regarded online learning platforms like <u>Khan Academy</u> or <u>LinkedIn Learning</u> (formerly <u>Lynda</u>). However we label these engagements, it's obvious technology can actually help lectures rather than just supplant them.





Credit: AI-generated image (disclaimer)

Now let's turn the question around: does using technology guarantee or even increase the likelihood of good teaching? Technology can make good practices easier, like the use of <u>polls and break-out rooms and</u> <u>timers</u>. Technology can even <u>open new possibilities and paradigms</u> for teaching. But there are no guarantees.

The list of ed tech failures is <u>long and dismaying</u>. Examining what goes wrong, we see some <u>common misunderstandings</u>.

One of these is that adding technology equals enhancing teaching. Technology carries no inherent pedagogical value. Swapping an iPad for a lectern does not, in itself move learning from a boring, didactic experience to interactive, lively engagement.

Just like lectures, our uses of technology and the resulting impact must first come from thoughtful commitment to improving both teaching and teacher.

## Be critical, be reflective, be better

Technology can never substitute for critically reflecting on the pedagogical value of our practice. And while technology can assist a major transformation, it should never be a requirement for improving how we teach. Whether you're a <u>high-tech</u> or low-tech teacher, you can give a good <u>lecture</u> or find useful alternatives if you remember to put the pedagogy before the technology.



We need to reject the notion that lectures will sink our students and technology will save them. Instead, let's dig deeply and critically into both, reflect upon how to improve our practices, and apply sound teaching methods and practices to create learning engagements that are captivating and profound.

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Provided by The Conversation

Citation: Technology isn't the answer to livening up lectures—good teaching is (2021, May 21) retrieved 16 July 2024 from <u>https://phys.org/news/2021-05-technology-isnt-livening-lecturesgood.html</u>

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