# Transcript

## James Nottingham – Questioning the Essence of Student Engagement

PENELOPE ELLIS:
Hi everyone. Thanks so much for being here. I can see there's still a few people coming in, but we might make a start just in the interest of time. So thank you for being here at 4:30 on this beautiful Wednesday afternoon. Hopefully it's a sunny where you are is where I am in Ballarat. Just before we officially get started, if we can just go across to the next slide James, there's just some quick protocols there around an online meeting just to make sure we're working together positively. So there will be an opportunity to interact within the chat. There'll also be some polls and some breakout groups. So it'd be really good for you to take part in each of those. Please make sure you're on mute as otherwise, you know, sometimes we can hear some different bits and pieces coming through that you may not want everyone to hear. And in regards to the cameras, we're more than happy for people to leave their cameras off. It would be our preference for the time being. Just as sometimes it can get distracting seeing all the different faces popping up all over the place.

But we ask you, when you go into your breakout rooms, if you could turn them on. It would be really great for everyone to be present throughout the webinar. And just to let you know that the session is being recorded. So it will be put up on our website for people to view following today. I would like to... James, if we could just go to the next slide, we just have an acknowledgement of country. So I would like to acknowledge the Traditional Custodians of the many lands on which we're meeting on today and pay my respects to elders past, present and emerging. I'm on the Wadawurrung country in Ballarat. So very excited to be joining you all from there. And I do also wanna pay my respects to any First Nations people who are joining with us today or watching the recording at a later date. Without anything further. I would like to introduce our presenter for today. So James Nottingham is a highly sought-after keynote speaker and in-school consultant. He's the author of 11 books about teaching and leadership, with his 12th due out at the end of the year.

Formerly a teacher's aide and teacher and leader in schools in the UK. James also supports schools in Australia and New Zealand with questioning, challenge, feedback, growth mindset, engagement and equity. So welcome, James, and thank you for being here. We're very excited to hear from you today.

JAMES NOTTINGHAM:
Thank you, Penny. Good afternoon everybody. It's lovely to be joining you. I had to grit my teeth when you were saying it's a beautiful afternoon in Ballarat, Penny. But thanks for that. It's a cold, dark morning here on the Scottish-English border. It's a delight to work with you this afternoon. Always is when I drop in, so to speak, to Victoria and generally to Australia. I'm going to be visiting in the beginning of term one and early into term two next year as well, and looking forward to those, just putting together a plan for that and trying to put together all of the invitations. So it's a lovely problem to have to try and fit all the jigsaw pieces in together. Today we're going to talk about engagement and questioning. So if I may start with this and Penny, we're going to throughout the webinar, we're going to be inviting people to pop ideas, their ideas into the chat. And then as you say, there's gonna be a breakout. So the very first one that I would invite people to put their quick responses into the chat function on is in relation to this, how engaged our students normally.

And if I gave three categories there and together they added up to 100%, I would invite our participants to pop in three numbers. So let's say, for example, you might put 70, 20, 10. So that would refer to 70% of the kids are engaged, 20% are not engaged, and then 10% are actively disengaged. So pop in three numbers into the chat. Penny, I can't see the chat. And I've done that purposely because apparently us men can't multitask. So I'm just going to look at the screen, and I hope that you can help me to see what people are guessing at.

PENELOPE ELLIS:
Absolutely. So just a reminder, we're putting in three numbers that will equal up to 100%.

JAMES NOTTINGHAM:
Yeah. We're not going to... We won't check their maths. OK.

PENELOPE ELLIS:
Absolutely not.

JAMES NOTTINGHAM:
I mean, if it doesn't quite add up but...

PENELOPE ELLIS:
David's put.

JAMES NOTTINGHAM:
40, 50, 10.

PENELOPE ELLIS:
Yeah. David's put 40, 50, 10. Sue has put 20, 50 and 30. Bree. Bree was actually one of my mentors when I first started teaching (UNKNOWN) Bree. She's put 30, 60 and 10. Leanne, 73, 27. So the common theme, James is seeming to be, A being the highest percentage and then going down from there. A couple of people have put something different, but for the most part, yeah that A has the highest.

JAMES NOTTINGHAM:
OK, great. Well, thanks for that. And it was interesting that the first few in fact that one that's just come (UNKNOWN) the one before it, it flashed up on my screen and it was quite low and there's a few low starts. So that's surprised me a little bit. Maybe people are fed up being back for term forest. Looks like I don't want to be back. But, we have to bear in mind this is research in the US, so we might want to think that it might be different in Australia or indeed here in the UK. But these are the stats that that Gallup found. And I found to me it was a bit of a surprise. And it seems as if it's not a huge surprise to our participants. But for me it was I thought that that engaged percentage might be higher. I thought that, OK, you're not gonna engage all day, every day with every single subject that you're learning. But I thought that generally speaking, it feels as if more than half are engaged. But anyway, I mean Gallup found this and I'm thinking, OK, right. If that gives us our starting point, then that's quite a useful one than to refer back to when I talk about questioning later on and the percentage of kids that are typically engaged by questioning.

So let's just park that. But that's our baseline, so to speak. What I would like to do now is to ask what we mean by engagement. And you'll see lots and lots of photographs during my presentation. That's my sort of side hustle. Not that I make any money from it, but it's my hobby. I like to take photographs, particularly in schools, and this is one that I took in a recent working trip to Japan. Now, Penny, looking at those children, which of them would you say are engaged? And to make referencing them easier, rather than describing them, I'll give them numbers. Which of them stand out to you at least of being either engaged or the opposite disengaged?

PENELOPE ELLIS:
Oh, I think number six for me. I'm gonna assume as she looks relatively engaged. And I think about then for disengage, maybe number eight, where he looks like he's just checking out what his friend's doing next door. So...

JAMES NOTTINGHAM:
OK.

PENELOPE ELLIS:
For me six being engaged and eight being disengaged, perhaps.

JAMES NOTTINGHAM:
Why do you think that six is engaged?

PENELOPE ELLIS:
I think that she's looking at the teacher. Her hands seem to be still, so perhaps demonstrating some listening. Yeah.

JAMES NOTTINGHAM:
Mhm. OK. And number eight he or she think you thought it was a she but I'm thinking is he, but anyway mean number eight you think somewhat disengaged because they're looking at their mate's work or the person next to him. Is that right?

PENELOPE ELLIS:
Yeah. And I think the body language looks like he's potentially swinging or going to swing on his chair, sitting right at the front of his chair, his hands up near his chin. Yeah. As now do that, James, I don't know, I should be doing it when I talk about that. That's what someone does when they're disengaged. But yeah, for me, I think, yeah, number eight.

JAMES NOTTINGHAM:
Yeah, absolutely. And so that's what I wanted to start with because we can... right from the outset say we don't know. We don't know who are engaged.

PENELOPE ELLIS:
And that's what some of the commentary is coming through the chat, James, around. You know, it's difficult to do it from a picture. And that engagement looks different for everyone, particularly around neurodiversity and how people cope. So. Yeah, absolutely. And I don't disagree with those comments in any way. It was just the observation in the task.

JAMES NOTTINGHAM:
Listen, we don't know. And I'm just starting off the conversation here because absolutely as you say, we don't know. But what we tend to do in education is we do look for certain signs, such as the ones you've talked about, looking towards the front, looking towards the teacher, eyes to the front. I hear quite often about sitting up straight, you know, that sort of thing that we might place within the context of behaviour, perhaps. But let's press on and I'm gonna come back to that photo shortly. What is engagement? Penny, have you ever found yourself reading a book and you get a few pages in before you realise you haven't taken a word in? There you are. You're quite merrily going through. You're going through the mechanics of it. You turn the page, you turn the page, and you think, I've not even taken a word in.

PENELOPE ELLIS:
Yeah, very much. So, I get to a name and I think, who's this person and what are they doing in my book?

JAMES NOTTINGHAM:
Exactly. Yeah, exactly. What's this character doing? If somebody were to watch you on the Metro, let's say, sat at a cafe with your book and you've got your nose in your book and you're doing exactly as we've been talking about, I think they would think you are engaged in your book. And yet we know that we can often give the impression of being engaged and take nothing in at all. Another example. What about repeating my eldest daughter has just passed her driving test? Woo hoo! We've now got a designated driver. She thinks she's won her freedom. We now know we've won our freedom. Now, when we were practising for that, we went on a pretty long drive. She had a hospital appointment, so I said, tell you what? I'll drive there. You drive back. It's an hour-and-a-half journey back. So as we were driving, I was saying mine. There's a tight corner coming up. There's a bit of a blind hill roundabout coming up. And what I found fascinating was there was a part of the journey that I expected her to know brilliantly because she had been on that stretch of road, I would say thousands of times between the ages of zero and ten, because we passed where we used to live, and yet she didn't know the road at all.

When we stopped, she then said, oh, that's the first school I went to and that's where my friends live, and that's the park I played. But when she was driving Penny, she didn't know the road at all. And that made me think that. So even though she's done this many, many, many, many times, she's never engaged as a driver. She was a passenger, sat at the back of the car and so even going through the motions, taking part in an activity, being part of a group doesn't necessarily mean that our students are engaging. Another example. Being polite. I'm gonna ask for your secrets here, Penny. And I'm sorry if this is going to reveal too much. But, you know, when you get stuck at the office or at a party with the most dull, boring person on the planet. And of course, that doesn't include your colleagues who are taking part in this webinar right now. But imagine you are. But you want to be polite. You don't want to diss them in any way. You don't want to upset them. Could you please, Penny, now demonstrate for us how you could show that you're engaged, even though you are desperately thinking, please, somebody rescue me.

This is intolerable. I can't wait to get away. Over to you. Penny.

PENELOPE ELLIS:
Mine's like mhm. Mhm. Mhm.

JAMES NOTTINGHAM:
Uh-huh. Uh-huh, yeah. And you laugh at appropriate moments, perhaps.

PENELOPE ELLIS:
Yeah.

JAMES NOTTINGHAM:
Even though you're not even taking a blind bit of notice of what they're saying. But when they laugh, you laugh as well. You sort of lean in a little bit. You tip your head to the side. We can show absolute interest. Even though we're not taking in a word. And let's be honest, how often did you employ that as a student in school with a teacher who was deathly dull, but you wanted to give the impression that you were listening?

PENELOPE ELLIS:
Yeah. Think it comes down to that polite aspect that you're talking about, James. And even my experience as a teacher and as a principal in a school, it does come down to, yeah, people being polite at different times. And it does show that, yeah, disengagement can look different for different children and for different people. Yeah.

JAMES NOTTINGHAM:
Yeah. And, and those of us who have, what should we say? A reason to be polite and hopefully that's most of the time. But, there are kids who are pleasers. Teacher pleasers. I wonder how much energy and concentration and time is being put into exuding the sense that they are taking part, that they are engaging even though they are not. And I'm using these as examples to suggest that engagement is insanely difficult to notice in any, with any sense of accuracy. One more, one more quick example. And that is about doing. Now, what I mean by that is I was in a lesson, whenever I visit Australia, I often do lots and lots of demonstration lessons, but I also get to walk around schools and to chat with the kids andask them questions about what they're learning and how they know they're learning it and what is valued in this school so that I can feed that back to the team I'm working with. And I went into a classroom where there was a real buzz of industry, let's call it, and the teacher was projecting a or had on the board at least a, a diagram of the eye.

And the students, they would have been probably fifth, sixth grade, something like that. They were recreating images of the eye. And everybody, it seemed to me, were on task and there was a nice little chat going on between the kids. But they were they were focused, they were drawing the eye, colouring it in, making beautiful artwork. And I thought to myself, isn't this lovely seeing this sense of engagement? But towards the end of the lesson, the teacher did a bit of a quiz and she knocked all the labels off the image on the screen, and then she pointed to different parts of the eye and asked for them to call out the names of them. And to be honest, they didn't do very well. And I thought, isn't that bizarre? So they seemed to be fully engaged, and yet they didn't seem to have picked up the names of parts of the eye as well as I had expected. And as I came away and we chatted, the teacher and I, we both agreed that what they had been engaged with was their artwork. And they had enjoyed doing their artwork, and that's a good thing.

But, the purpose of the lesson was to learn the parts of the eye and to have that vocabulary. So they had been engaged, but not in the thing that the teacher wanted them to be engaged in. And then another visit in the same week to a different school. It was a science lesson and the teacher had got a glass flask. She'd put a candle at the bottom, she'd lit the candle and then put a peeled egg on the top. And we all watched. And eventually, the egg was sucked into the bottom of the jar. And the kids were like, wow, that's amazing. And they're all watching it. And they were properly engaged in that experiment. Did they know what was going on? Well, their explanation was the teacher's a magician. She performs magic. Which is lovely. But will they engage in science or were they engaged in trickery is probably the wrong word, but engaged in demonstration. And again, that made me think not only are we trying to think through how do we get our kids to engage, but we're also trying to think, well, what is engagement?

And not only that but what are they engaging in? And is it the thing that we want them to engage in? And so my first proposal today, Penny, is that we put all of that aside and we think instead of engagement as thinking. And we pair it right down to, I'm going to suggest engagement is whatever you're thinking about. So, Penny, I'm hoping you're thinking about what I'm talking about right now. And if you are, then I would suggest you're engaging in this webinar. And the same goes for our participants. But if somebody has got this on the screen going on, but there's something happening in the staffroom or there's somebody who's just come into the office and, and they're talking and they're thinking about what this other person is saying, then even though they're sat here, it doesn't mean to say they're engaging. And why this is important is all too often... It's my contention anyway. All too often, engagement is placed within the context of behaviour rather than placed within the context of cognition.

And I would like to propose that we make that switch. You see, if I talk about when teachers say, my kids are not engaged, I need to engage them. And I ask them, how do you know they're going to be engaged and what would you do? They typically talk about sitting up straight eyes to the front, not shouting out, listening intently, and so on, whereas... So notice all of that, but that's all about classroom management. And of course that's important. But if we switch engagement to be thinking about thinking. So I say to students, whenever I do demonstration lessons, the two most important things that we're gonna do today is listen and think about that. Then it feels as if we're shifting it. So what are we getting them to think about these things?. Tip of the iceberg, but these are some of the things that we would want our students to think about. If I took you back therefore, Penny, to the children in Japan and instead of asking you which of them are engaged, I ask you which of them are thinking, now which ones might you say?

PENELOPE ELLIS:
I think number four looks like he's thinking. Yeah. I think number nine (CROSSTALK) Yeah, I think about the children that I've had in my classroom and how they can look when they're thinking. And I think that when I think about thinking, I connect with more of them. Yeah. And again, people are popping in the chat around that it is problematic to determine about thinking when we're just looking at them. But I think, you know, what we're looking at here is around thinking about what engagement looks like and what thinking looks like in this picture and over very surface level. So yeah, we really want to do that.

JAMES NOTTINGHAM:
Yeah.

PENELOPE ELLIS:
James, a couple of comments came through the chat while you were talking as well around, it's like the maths lesson where you tell an elaborate story related to a concept, and the students all remember the story but have no idea about the concept. So I think that (CROSSTALK)

JAMES NOTTINGHAM:
That's absolutely right. Yeah.

PENELOPE ELLIS:
And another one is around how important is the debrief and reflection after the fun task to demonstrate engagement in aims of the task?

JAMES NOTTINGHAM:
Absolutely. And also perhaps the setup. If we're talking about the science experiment, I would propose that we don't do that experiment right at the very beginning of the lesson. I know it's a hook, but how about we talk through the theory first and what happens when you burn a candle in a glass jar? And what might, what effect might that have? And so when they see it, they see science in action rather than a magic experiment.

PENELOPE ELLIS:
Yeah. And Liane's also spoken about how she thinks and when she looks up into the air, when she's calculating a hard maths equation. So it might look like she's distracted but she's not. And I think that's what I'm getting out of reflecting again on this picture, is initially when thought of engagement, initially I thought, Oh, number four, he doesn't look as engaged. When I think about thinking, yeah, to me he does look like he's thinking. So yeah.

JAMES NOTTINGHAM:
Yeah, absolutely. So I'm going to totally agree that we still can't determine beyond our quick snap judgment. And it is purely that. But the important part of this is if I am thinking about engagement as behavior, my interactions follow that course. Can you please look this way? Are you listening? Are you showing some sort of focus? Can you look towards the front? Whereas if I think of engagement as thinking, my questioning becomes different because I'm now thinking, I'm saying to you, Penny, what do you think about this image here? What would you want? And so I'm not even looking at how you're sat. I'm not even looking at where your eyes are going right now. What I'm listening carefully to is the thinking, what you are talking through right now. And I'm then looking to take that further with you. Now, let me add and there was some sort of emoji where the two, I don't even know what that means, it shows my age. I'm just not down with the kids enough to (CROSSTALK)

JEFFREY SEGAL:
I have to tell you what it means, James. It means that I agree entirely. That's what it means. It's like, yes, keep going. I'm engaged.

JAMES NOTTINGHAM:
Woo woo woo! Good. Thank you. Thank you very much for that voice from the ether, Jeffrey. Thank you very much indeed. Yeah. So, and this also is so important, I assume, Penny, that we've got lots and lots of leaders joining us here. That's the conversation that I think we ought to be having with our new teacher, our team generally, that when we are visiting classrooms, we're going on a learning walk. All too often, I think teachers are expecting us to look for good behavior, whereas what I would want to do as a leader would be to be asking children, asking students, what are you thinking about? What has this lesson provoked in your thoughts? What do you think might happen next? What are the main parts of this? What's the takeaway. And so, and I'm reflecting that back. This is what the students told me they were thinking about. And we make almost no comment about behavior. Now obviously if it's the outliers and it was disastrous, I mean, behavior was like they were swinging from the lampshades or the alternative where there's an absolute sense of and warm, engaged, collaborativeness, then you might of course mention that.

But if you are thinking about engagement, I would absolutely advocate that our reflection back to our team is very much within the sphere of thinking. I'd like to make a connection, if I may. There's some fascinating research about what we mean by high engagement and low engagement. But before that, let's summarize some of the ways in which I hear people talking about engagement. Or some of the instructions may even go as far as some of the commands that I hear in classes when teachers are trying to gain attention from our students. Those are the sorts of things that I hear, Penny, and I'm sure you've heard similar, but let me now make that comparison to high and low expectations. So in the introduction, you were kind enough to mention my latest book, and I write books. I mean, it's just... I mean, it really is sort of swimming through treacle when you write a book, it sucks, it really does test the old grey matter. But I do it because it forces me to up my game and to dive much, much, much deeper into the meta analysis.

And writing this latest book, I found some fascinating research about the difference between high and low expectations. Now I'm just going to scratch the surface in this webinar about it, but let me share with you some of those that relates to engagement. Teachers with lower expectations, and I don't think anybody will admit to having low expectations, maybe one or two. But I think most of us are going to say, yeah, I've got very high expectations for my students. But look at the behaviors. Those with lower expectations spend more time on crowd control, whereas those with higher expectations spend more time on formative actions. Notice here it says more time, it doesn't mean to say those with high expectations don't do any crowd control or those with low expectations don't do any formative actions, but the more time. And this research, incidentally, comes from these authors, this is meta analysis that they've done. So the behaviors that we see with crowd controlling, I will give you a moment to read that those through.

Whereas with high expectations, and I noticed the question just pop up from Liz. The formative actions are the things that I do as a teacher to work out what do I do next to help my students learn more? I use that term formative in the same way that we use it with feedback. I mean, I do find it extraordinary that people still have a bit of clouded idea about the difference between formative and summative feedback. It is very straightforward. If students do something with it, if they use it to improve their learning, it's formative. Whatever you said, whatever you did, if they take it and run with it and use it, it's formative. If they think, oh, yeah, great, well done me or Oh, dear, well, I didn't do very well there, and they do nothing else, it's summative. No matter what we've said, no matter what we've done, it's not what we've presented, it's how it's responded to. And so that's how I'm using formative here. It's anything that we do that helps us to better understand where our students are right now in their thinking, and therefore what they might need next to either extend their thinking or deepen their thinking, or go back a bit and scaffold it a bit more.

So here are the sorts of things that you see or should notice when formative actions are taking place. Penny, I'm going to pause there because I've been blathering for quite some time, but get some reflection from you or from our participants. Anything there that's, and I'm particularly interested, if you wouldn't mind, making that link between what I've got here on the screen and this, the theme that we're going for, which is engagement.

PENELOPE ELLIS:
Yeah, James, there's some great reflections in the chat which I might draw upon. So the focus of, on thinking and questioning rather than behavior will remove barriers for the large number of diverse learners in every classroom, including those who are neurodiverse and culturally diverse learners.

JAMES NOTTINGHAM:
Absolutely, absolutely. I mean, that's huge, isn't it? Absolutely huge. So last Saturday, I don't know what day it is today, but OK, about eight, nine days ago, I was working in Denmark with schools specifically for children on the autistic spectrum, ADHD, OCD and so on, and they really, really, really got into this. I mean, I built a bit more, we had all day together and it was fascinating. And I, and Denmark is just about getting back on top because about when the civil war in Somalia kicked off and of course all the problems in the Middle East generally, they had a huge influx of immigration that they'd never been used to before. And that was a shock to them to go from relatively monocultural to pretty multicultural. I know in Australia, UK and so on, we've had immigration for for a long, long time, but for Denmark it was pretty new and they are learning about just what you've said there. So not just neurodiverse but also the culturally diverse as well and what that means, you know, and what politeness is, what engagement looks like.

What is a thinking pose? I spent some time this last week with some Japanese teachers? Really interesting when they, most of them, not all of them, of course not. But most of them, when they were thinking deeply, their heads were like this kind of, went up to the skies and went up like that for quite some time before they came back. And it was an interesting thing to notice. And my son is on ASD spectrum. He's he's also ADHD. And to see how he interacts and engages is very different to his sisters who are not neurodiverse, at least not, we don't think they are. So yeah, absolutely.

PENELOPE ELLIS:
I also wonder, James, I am, often think about, I have a young daughter and I think about, you know, what's expected of her and how often we put adult behaviors onto children. And think about the list that you have there around, like eyes to the front, stop fiddling, pay attention, sit up straight. Are you listening? And I think about myself in a staff meeting, and I don't know that I would demonstrate all of those behaviors, but it doesn't mean for myself that I'm not engaged. And so if I stop and think about children in the same way, which I think sometimes, you know, we forget to do, you know, whereas if I think about people checking for my understanding or asking me open questions, that would be a way to ensure that, you know, my thinking is on the right track compared to me looking at the person talking.

JAMES NOTTINGHAM:
Absolutely, absolutely. In fact, as you say that, Penny, it reminds me, and I'll keep my voice low, if I may, just for this part, 'cause I'm at home now and hopefully the kids are still fast asleep. But, yeah. So my son, who I've just mentioned, neurodiverse, he's always been super quick with maths. He just gets it, he feels it. He's always like bang, bang, bang really, really quick with it. But to process something that is written down, to process language takes a lot longer than what you might typically expect. Whereas my eldest, she has never really got maths. She's hated maths but extremely articulate, and give her a book and she'll whip through it and she'll get the key points. I mean, astonishingly proficient speed reader or reader generally. So bear in mind he is by far the most, what shall we say? Natural, if I may use that term mathematician, and she's the opposite. That both are at high school right now and of course, in most high schools in the UK, as in Australia, kids are streamed for maths.

And you know where I'm going with this, don't you, Penny? She was put in a top set for maths. And guess where he was put? Bottom set. And that had absolutely nothing, nothing to do with their relative abilities and everything to do with their social etiquette, their ability to read the context, their ability to quickly work out what the teacher wants and to move on with it. And...

PENELOPE ELLIS:
Let's go back to that point, politeness, James, that you spoke about.

JAMES NOTTINGHAM:
Totally, totally. And it doesn't matter, it seems how many times we fight the cause for our son. Certainly the schools that he's attended are not set up enough for ASD or ADHD or any neurodiversity, actually, because, you know, most kids aren't in that school. Anyway, I digress for now, but it's what you said. It reminds me that I think when we are looking all too often at behavior, and guess what? The poor lad goes on detention most days, most days. He just hasn't sussed it out. He hasn't worked out how to navigate, whereas my eldest, she's never had a detention in her entire life. I mean, she'd be beside herself if she did, you know. But then she's worked it out. She can, yeah. So engagement. Let's summarize this. Going back to the beginning, the base is students are engaged at 50% of the time. But it does make me wonder how that was calculated. Well, a good part of there's a good description on the Gallup website, and I would absolutely recommend going and checking that out, but a lot of it was about students being interviewed, What did you learn from that?

What were you thinking about? If I showed you a video of you in class now, could you tell me where your thoughts were at the time? And of course, this was all anonymous, so it was as honest as perhaps it could be. So our baseline, let's take it as a baseline. But I think the more important thing is that if we think about engagement more as thinking, unless about behavior, then I think that leads to other actions. I think that leads to other interactions. And that leads me nicely, almost as if I'd planned it, to talking about questioning because... Oh, sorry, I forgot to mention this last bit. And so let me just finish this so you can see the relative effect sizes, crowd control compared to formative actions. I mean, I think I've already made the point, but it may be worth adding those effect sizes as well. So questioning, questioning is one of the best ways to engage students thinking. Because if I use questioning and say, Penny, what are you thinking about right now? Or Penny, could you have a think about?

Or if we were to look at these kids, which kids do you think are thinking? Which do you think are concentrating? Which do you think are, you know, by me asking questions, I can direct my students thinking. Problem is, the typical way that we question students is following this format, I R E, initiate respond, evaluate. Now initiate is typically the question that we ask. Respond is of course their response. And that might be to look quizzical. It might be to shout something out or we hope it would be they wait patiently, they're invited to give a response and then they give an answer. So far, so good, but Penny, where it goes wrong is the evaluation part. When we evaluate their response, we either say, yeah, very good, well done or no, that's not right, somebody else? that is by far the most common way to question students. And yet look at this. It engages only one third of students. Two thirds actively avoid being asked for an answer. Now if I might ask, first of all, Penny, the one third, what do you think are the characteristics of the one third who are willing to engage, willing to offer questions, answers rather.

PENELOPE ELLIS:
I think, James, if I can draw it back to your daughter, it would probably be behaviors that you described for her. So knowing how to build a good relationship with the teacher, being able to act politely, knowing what is, perhaps us responding to the question because she knows that's what is expected of her.

JAMES NOTTINGHAM:
Absolutely. So students who are willing to, willing, maybe I should stop there, students who are willing. Students who are willing to please, students who know that they know the answer, students who are confident either within themselves and/or within their peer group and or with their teacher. And that's pretty much it. And if we think, OK, right. So what about the other two thirds then? So imagine, Penny, that you are in the other two thirds where you're not confident in this subject. You're worrying about the the answer, you're not sure if you've got it right, or maybe you're worried about your peer group making fun of you and so on. So what are you going to do to avoid being asked for an answer?

PENELOPE ELLIS:
I would avoid eye contact with the teacher, perhaps ask to go to the bathroom.

JAMES NOTTINGHAM:
Yeah. Yeah. Go to the bathroom, please. Absolutely. What else?

PENELOPE ELLIS:
Yeah. Rebecca in the chats also said around students with longer processing times often don't have the chance to even think about it before the cycle is completed and moved on.

JAMES NOTTINGHAM:
Absolutely, yeah.

PENELOPE ELLIS:
Yeah (UNKNOWN) relatively. Yeah, I think I would avoid eye contact. You know, I imagine, I think about children that I've had in my class and the class that I taught most commonly before moving out of the classroom full time was I taught VCAL or as it's now, VM, which James, I don't know if you're aware of VCAL students in Victoria?

JAMES NOTTINGHAM:
I do know, yes. Yeah. I know, yeah.

PENELOPE ELLIS:
And I think about them and they would misbehave or they would redirect my attention to something else, you know. And now I know that I wasn't perhaps, I was only meeting the needs of maybe up to a third of them.

JAMES NOTTINGHAM:
Yeah. Yeah. Penny, I know the term VCAL because a demo lesson, I was doing, and we're talking a decade ago now, I was working with this group and I said, So what are you studying? And they said VCAL. I said, what's that? They said, the Victorian Certificate of Applied Learning. I says, I'm sorry, I still don't know what that means. And to a student, they said it means we're dumb. I said, what do you mean? They said, well, the clever kids do VCE, but if you're dumb like us, you do VCAL. I mean, (UNKNOWN).

PENELOPE ELLIS:
Yeah. Interesting, James, there (CROSSTALK) was a review - I think 'review' is the correct terminology - done recently. It's undergone some changes. But I just think of them when I think about engagement and what it can look like.

JAMES NOTTINGHAM:
Yeah. Absolutely. So, questioning is, arguably, the best way to engage students' thinking. But the typical way to question follows this pattern of initiate, respond, evaluate, and that, generally speaking, engages only one-third. So, two-thirds are doing exactly as you say, Penny. They're not giving you eye contact. They're saying, can I go to the bathroom, please? How many kids sort of put up their hand? And when you ask them they go, oh, forgot or they give the impression that they're thinking really hard, but they're also giving the impression I'm thinking so hard but I haven't really come up with the answer yet. So, don't bother asking me because I haven't quite got there yet. I was in Newcastle, New South Wales, last month or two months ago and it was with a kindy class. And ten minutes in, this little fella puts up his hand and I hadn't asked anything and I thought, OK, he's gonna ask to go to the bathroom. Puts up his hand and he says, when are you leaving? I say, not yet. And the teachers were absolutely beside themselves (UNKNOWN).

There was 30 teachers sat at the back and they all had their head in their hands. But they told me afterwards that what he meant was he was enjoying it and he didn't want me to leave. And I don't know if they were being polite or not. So, we have lots of routines, lots of strategies to avoid being asked. Or if none of those work and you get asked, we say either oh, I forgot or pass, or you repeat something that you've heard somebody else say. So, how do we make this better? Well, it starts off pretty well, but the absolute gem, the way that we ought to be engaging our students is instead of evaluating, we should explore. When we explore with our students - and that means we don't confirm or deny. Instead, we ask for more. So, you give a response and I'll... Interesting. Would anyone else like to add to that? Is anyone thinking a similar thing to Penny? Tell you what, just pause a moment, turn and talk with each other. What do you think of what Penny just suggested there? It's a really interesting idea.

So, we're not saying... Very good. Well done, Penny. We're not saying no, that's not right. We are taking what they are offering and we are extending it through exploration and look at the impact. Still not perfect. Still not perfect, but a lot better. A lot better than it was. Go back to the baseline. And that's why I started with that baseline. I mean, if typically 50% or 47% are engaged, then I'm gonna take 66% all day long. Aren't you?

PENELOPE ELLIS:
Yeah. Of course, I still worry about the 34% that are left over, but...

JAMES NOTTINGHAM:
Absolutely. Yeah. If anybody knows of a strategy that engages 100% of the kids 100% of the time, could they please, please tell us all and we can stop doing all this flipping PL, and we can just get on with the thing that nails it. But thus far, we haven't found it. And so, how do we get this right? So, whenever I share this, a lot of people say, oh yeah, that makes sense. But it's a lot harder to do than it first appears. But it's the maths teachers that particularly go, but what if they give the wrong answer? Are you really, truly saying I shouldn't evaluate? And what I'm saying is you should not evaluate publicly. Privately, you're still going to be thinking, oh, I wonder why they got that answer. I wonder if it was a slip-up. I wonder if it was the pressure of the moment, or I wonder if they've got a misconception here that I'm going to need to work on with them later. But you don't evaluate publicly. So, let me stick with maths for a moment, and I'm going to ask everybody to pop in the answer to a maths question.

Put that into the chat, please. This is not a competition. It's not who can do it first, who can do it quickest. Have a think about it. Don't use your calculators. Use your minds. And what is the answer to that? So, if I'm in the classroom, I'm going to have everybody write down their answer on a whiteboard or a piece of paper and hold it up so that I can see everybody's answer. I'm not going to give any praise at all for whoever was first because although they might be proud to be first, I don't wanna put additional pressure on the kids who are taking time to process it. But I am looking around the room to have a sense. And this is something that we won't linger on today, Penny, but something that I find utterly bizarre. Questioning routines in classes, typically, teachers get one, two, three answers or rather answers from one, two, three kids, and then they move on. That's just weird. 30 kids in the class, and we get up to 10% of them to respond before we move on. That's not a particularly impressive sample size.

So, I think every classroom, every single classroom ought to have, whether it's iPads or whiteboards or some way to share their first responses. That's important. Jot down your first thought. Jot down your first answer. Now, I think that's enough time. We've had a lot of responses there. Penny, what's your answer?

PENELOPE ELLIS:
My answer is 225. (CROSSTALK) You go.

JAMES NOTTINGHAM:
I was gonna say, that's interesting. Could you tell me how you solve that?

PENELOPE ELLIS:
So, for me, I went (25 \* 4) + (25 \* 4) + 25, which is interesting because I see in the chat some ways that other people worked it out. And I look at that and think, oh, I really like that way too.

JAMES NOTTINGHAM:
So, why did you do (25 \* 4) + (25 \* 4)? Why not 25 \* 5, for example?

PENELOPE ELLIS:
So, for me, I knew that 25 \* 4 = 100, and I felt more comfortable then being able to go 100 + 100 + 25.

JAMES NOTTINGHAM:
So, you recognise there's a pattern, or what would we say? There is a... Well, where do you see 25? Why did you know that four 25s makes a 100.

PENELOPE ELLIS:
Probably through percentages would be where I would see it most commonly.

JAMES NOTTINGHAM:
Interesting. Interesting. So, you recognise there is this shorthand that I know four lots of 25 makes 100. And I mean, in the US, they have quarters, don't they? Which four quarters make a dollar. And that's interesting. So, you say that there are other ways to do it in the chat. What are some of the other ways then?

PENELOPE ELLIS:
So, Leanne put in 250 - 25. So, she, I think, has gone 25 \* 10.

SPEAKER:
(INAUDIBLE)

JAMES NOTTINGHAM:
What's that? Sorry.

SPEAKER:
(INAUDIBLE) what we're expected to do. But it's a lot. Yeah. I don't disagree. Yeah, but I know I need to record it. (CROSSTALK).

PENELOPE ELLIS:
I've just muted them, James. I think we had an accidental unmute. I'm not sure they were solving the same problem as us, but that's OK. Yes, Leanne had put in her way. Jeffrey, he'd been a little bit cheeky and he'd used some indices and whatnot for his. So, some brackets, some multiplication. But I think, yeah. Leanne had two ways of working it out, she said. So (25 \* 10) - 25 or, 9 halved and halved again is 2.25 and then times it by 100.

SPEAKER:
OK. So, for each of those in the classroom, I would spend time with them and I would ask, 25 multiplied by ten, and then take away 25. Why did you do that? And the kids say, well, it's easier to multiply by ten. Well, why is it easier to multiply by ten? And here's why I'm giving that particular example. Because all too often students will then say, well, because you just add a zero. And so, you don't need to publicly evaluate, but you do gently say, well, it's not so much adding the zero, is it? Because if you had $10 and I added $0 to you, how many dollars have you got? And then, no. Alright then. But if you multiply, it means it becomes a hundred. So, what's going on? And then we talk about the decimal place. But this is not a maths webinar. My point is that even with something as defined as there is one answer here. There's just one answer. It's not like me saying, what do you think is the best sport, where there's lots and lots and lots of different answers, and it's really easy to do exploration with that because, oh yeah, why do you like that one?

How is it similar? How is it different? Do you think it's right that sports people are paid such varying amounts of money? It's quite easy to get into exploration when it's very open, but when it's closed, like this, you can still get into exploration. How did you solve it? How many different ways could you solve it? Which is the quickest? Which is the easiest? Could you show us how to draw this? So, you're giving them lots and lots of different opportunities to explore. I am still evaluating, but I'm not doing so publicly at all.

PENELOPE ELLIS:
Thanks. I wonder... Liz was quite honest in the chat with us saying that she saw the question and quietly melted in fear inside, so perhaps was having some maths anxiety around answering the question. Some other people are making some discussions around that as well. So, I guess, what could you do to support a student in that way in regards to that?

JAMES NOTTINGHAM:
Yeah. So, I'll come to that, actually. That's a really interesting example and I promise to come to that next. But we have to, first of all, take an exploratory approach because one of the reasons that people have anxiety, and perhaps this is why Liz has got that anxiety, is there is that sense of people move very quickly, bang, bang, bang. People get praise for getting the right answer, and by association they therefore feel criticism for not getting the right answer. There is a sense of pressure. There's a social pressure, there's a peer pressure. There's all sorts of things going on and we have to reduce that somehow. We have to reduce that somehow. Now, I did have some other examples, but I'm not going to spend time on these ones just right now because I'm keeping an eye on time. But just I was gonna flash that up and say, look, this is not about maths. It could be with anything. But let me then address Liz's point, particularly. What goes with this is timing as well. Here is a... I'm gonna run a poll on this one.

This is the first poll of the afternoon. What do you think is the average amount of time between a teacher asking a question and somebody answering, or the teacher continuing to talk? And the options I'm going to give you are these. And what I'm hoping, Penny, is there's a poll is going to appear on the screen for everybody to select one of those options, whether it's less than a second, more than a second, more than one and a half, more than two, more than three or more than five seconds. So, please vote in the poll.

PENELOPE ELLIS:
Yeah, I think it's just gone its way.

JAMES NOTTINGHAM:
It's popped up on my screen, yep. Give another 15 seconds for those people who would like to vote, to do so and then we'll close the poll.

PENELOPE ELLIS:
I know for me, James, I just was chatting to someone on the side saying I couldn't find the poll. So, if you don't have it on your screen, the three little dots to the right-hand side above your clock. If you click on that, there's an option. If you click polling, it will pop up.

JAMES NOTTINGHAM:
Thanks, Penny.

PENELOPE ELLIS:
Yeah. That's better. We're seeing lots more responses come through now. So, we have 22% of people with 'A'. 35%... Oh, sorry. Not that one. 13%... Let me start at the start. 'A', 22%, 'B', 4%, 'C', 9%, 'D', 13%, 'E, 9% and 'F', 9%. So, definitely the most popular being 'A' followed by 'D'.

JAMES NOTTINGHAM:
OK. So, can we share the the poll results with attendees, please?

PENELOPE ELLIS:
Yeah. So, they all should be able to send their polls.

JAMES NOTTINGHAM:
Was that a pair? Thank you very much. Well, yeah. So, what Mary Budd Rowe found was the average amount of time that we give for thinking after asking a question is less than a second, 0.9 Seconds. I mean, it's astonishing. Absolutely astonishing. And this is part of what Liz is talking about, I think. A big part of it. So, if I was to say to you right then, I'm gonna give you another maths question, everybody, and this is a competition. Who's going to be the first person to pop in that answer? Are you all ready for this? What is 25% of 30? So, Penny, tell me, who is the first person to answer that question, please?

PENELOPE ELLIS:
Taylor, closely followed by Leanne.

JAMES NOTTINGHAM:
Well done, Taylor. Now, let's be honest. How many people thought it's a maths question and it's a timed competition? I'm never gonna be the one to be the first. How many people think that? Liz didn't even try. And she's a teacher or a principal. And it was like I'm waiting for Jeffrey. And that's exactly what Leanne just said. That's what most kids are doing. They're thinking, well, she's gonna answer it, or he's the one who always shouts out. And so many students just think they're same for me. I am never going to be the one to be able to answer this. And so, they disconnect from it. Now, look at what happens when there is this very, very short wait time. Students compete for turns. Very little indication that they're listening to each other. And out of typical class of 30 kids, look at that. Six or seven dominate. And we use this so often. It's fast-paced, it's evaluative. And just look at that impact. It almost blows our mind that we would continue to do this so often, this fast-paced thing and then throw in neurodiversity.

My son's asked a question. You're still processing it 30 seconds after that question has been and gone and moved on to something else. And so, what are you gonna do? Imagine he actually engages in the question that's being asked and he thinks about it and he's wondering about it, and then eventually puts up his hand and the teacher says, yes. Well, what's the answer? And he gives the answer to the previous question, and then his mates laugh at him for it. I mean, why on earth would you ever put yourself in that situation? So, what do you do? You sit and wait. You just sit and wait. Let's ask this question then. What's the average length of time a student talks for when answering a question? Again, we're gonna run a poll. Hopefully, we all know where the poll is this time and the options are the same as before. But what do you think is the average amount of time that students speak for when answering?

PENELOPE ELLIS:
James, there are a couple of questions, but maybe we can dive after them after the poll. I just don't wanna have to keep going on with people reading and yeah.

JAMES NOTTINGHAM:
Fine. Happy with that.

PENELOPE ELLIS:
The last few people are just finishing off. So, it seems that we have four... So, there was... Someone popped through a question that the poll question must depend on context, which I think is something we've continued to chat about. But for the responses we've got 'A', 17%, 'B', 9%, 'C', 4%, 'D', 30%. So, our highest being 'D'. 'E' is 4% and 'F' is 4%.

JAMES NOTTINGHAM:
OK. Interesting. Interesting. Well, what Mary Budd Rowe found - and absolutely right about the context. But this is taken across middle school classes in all subjects that are typically taught in middle school age range. So, the answer they came up with, 1.3 seconds. Now, that's the average. Quite a lot of kids are saying yes, no. Quite a lot of kids are talking for a long time. But 1.3 seconds. And so, Penny, if I say I want you to give your answer, but you've got maximum of 1.3 seconds, you feel rushed, I assume. You feel that you need to give just one, two, three-word, four-word answers. It's not conducive to thinking. And if we go back to the beginning and we say 'engagement is thinking'... Then we consider Mary Budd Rowe's research, and we think this is crazy, absolutely crazy, how fast-paced it is. So, what... And I know there are questions and I will come back to them, I promise you. But what Mary Budd Rowe found that if we can increase wait time to at least 2.7 seconds - 'at least to'.

Let's round it up to three, but at least 2.7 seconds. Look at those outcomes. And notice the parentheses in number one even more for at-risk students or vulnerable students. So, if you do have neurodiverse or you do have culturally diverse, or you do have students with special needs, or you do have students who just like a bit more time just because that's who they are because they enjoy thinking deeply. Look at that. Now, Penny, you said there were some questions. Over to you.

PENELOPE ELLIS:
There are. So, Liz put that it's hard to engage the quick thinkers, and we've got to wait for those who think a bit slower. So, more so a statement than a question. And then there's one around, like, what do we do with those who quickly see the answer or quickly find the answer during the exploration time? So, they're both kind of linked to one another.

JAMES NOTTINGHAM:
So, getting them into the habit. Getting them into the culture of we're gonna take more time here and we're not gonna evaluate. We're going to explore. Those students that you've just described there, very quickly get the idea that the one-word answer, the quick answer ain't gonna cut it. I'm gonna need to think of reasons. I'm gonna need to think of examples or further explanations. And we invite that. Now, remember, I would also be absolutely advocating using whiteboards, and I'm astonished how few classrooms I visit use them regularly and often. Now, a lot of most classrooms, it seems, have them, but they don't make regular use of them. At least my interpretation is that they don't because when I ask them to get their whiteboards out, there aren't any procedures. The kids are like, huh, where are the whiteboards? Where have they gone? And then they faff on with them and it's almost like a little treat and they get their whiteboards and they start doodling on them and so on and so forth.

Whereas if they use them every single day, day in, day out, lesson in, lesson out, then it wouldn't be anything other than, right, I'm ready. But nonetheless, those quick thinkers, as was described in the questions, they're gonna write down the answer and then they're gonna hold it to you, show it to you, but you're gonna give no praise or recognition - certainly not public recognition - that you are pleased that they were the first. You might make eye contact as if to say bravo for putting down your first answer. But as the way you phrase the question as well, I'm gonna ask you a question. I'd like you all to think about it and pop down your first thoughts about it. So 'what is', and then they give their first thoughts. And if you've already got your first thought, think about what other ways there might be to explain it or a reason or a purpose or an example. And so, you're asking them to explore even when they're very quick with their responses.

PENELOPE ELLIS:
Thanks, James. That's all we have at the moment.

JAMES NOTTINGHAM:
Oh, OK. Thank you very much. So, let me add a few more parts to this - when we increase to at least 2.7. And when you dig into the meta-analysis, this 2.7 seconds is the tipping point. Waiting less than 2.7 seconds, you don't see these gains. So, it has to be at least 2.7. But look at the changes when we give that wait time. I'm going to add something else to this. There are two different wait times. Now, let's do a caveat here that I've just mentioned. It has to be at least 2.7 or more, but here are two aspects of it. One, there's Wait Time 1 and that is after I have asked a question and I'm waiting for my students to respond. But Wait Time 2 is once a student has responded. And what I find absolutely fascinating is Wait Time 2 is even more powerful than Wait Time 1. And for me, it's been a game changer, a complete game changer. I found the shift from evaluation to exploration pretty straightforward. I mean, my background, I was trained in philosophy for children. I enjoy exploring, but wait time almost kills me.

I mean, I enjoy quick sort of bouncing back and forth, quick repartee. I go to the pub and it's fast-flowing. I enjoy that. And if a student says something that I think I can turn into a joke with them - not at them, but with them - then it's almost like, oh, when I'm not supposed to respond. But it is an absolute game changer if we wait after they have responded. You don't give any response at all. So, Penny, what do you think about that?

PENELOPE ELLIS:
It's probably something I haven't come across, to be honest, James, around Wait Time 2 and thinking about when someone responds. I know I often... Currently, I'm obviously working with people around professional learning, but I do use the example that I've got long wait time because I've been a secondary school maths teacher, so giving people time to think. But, yeah, 2.7 seconds isn't a long time, so I think we can definitely all afford to do it.

JAMES NOTTINGHAM:
In 2016, I wrote a book called 'Challenging Learning Through Dialogue', and I went deeply into Mary Budd Rowe's work and (UNKNOWN) work and so on, and I went deeply into it. But what I find now, looking back bizarre, is that I didn't really pick up on the Wait Time 2 aspect as much as I should have. So, with this new book, it really just slammed me in the face and I thought, why did I miss that? And so, I finished the manuscript back in end of June, and so in July I was working right across Australia, including in Victoria, and a lot of it at the time I was doing demonstration lessons. And there was one week in particular, I was with five different primary schools in and around Newcastle, New South Wales. And so, I did 30 demo lessons in that week and I thought I'm just gonna see what happens by absolutely emphasising Wait Time 2. Every single person who watched those lessons on all 30 lessons, different age groups, and for me, we were all astonished just what the kids gave. Now, the first ten minutes, you could see the kids thinking, is he having an embolism or something?

Like they would look at me and think, why is he not responding? Why is there nothing? And a few times on different occasions, kids leaned across and says, is it because you're a pom that you don't understand? I said, no, I understand Australian. It's just that I was trying my level best not to give anything away. And here's what happened. When they didn't respond... Sorry. When I didn't respond at all, what do you think they did? They give more ideas. They added an example. They gave reasons. And my absolute favourite occasion was this girl said something and I gave no response, no facial expression, no body expression, nothing. So, she added an example and I still didn't give anything. So, she added a reason and I still didn't give her anything. So, a friend added an extra explanation, and then somebody else added. And then this boy at the back said, well, what she means is - and then he gave this summary of what she had said. And the teachers afterwards said, you know what? That boy is on the ASD spectrum, and he never says anything in the whole class.

I mean, he talks to his friends and he talks to us, but he never says anything in the whole class. And he has chosen for the first time to say something in front of somebody from outside and 30 teachers sat at the back. Absolute game changer.

PENELOPE ELLIS:
It links to a comment in the chat, James, around the pause time allows students to respond... Sorry, let me start again. The time after a student responds allows them to elaborate on their own answer, which is really quite important. I guess the other question that's come up... I know we're getting close to the end, but a question that's come through is around that the research is primarily based around 1986, and so just asking around if you've observed improvements in our wait time.

JAMES NOTTINGHAM:
Good question. Very good question. Well, (UNKNOWN) research is from the early to mid-2000, and you can see there at the bottom 2011 Rothstein and Santana. This has continued and continued and in... Oh goodness me. Robin Alexander here in the UK, he continues to work with Rupert Wegerif and Neil Mercer and Lynn Dawes. All of them are continuing to work on it and the research is still showing how fast-paced it is. And now somebody mentioned it earlier that context has got to be important. And so, you see different results in high school maths than you would in primary school literacy, for example. But there is not a... I have not yet come across any research that shows that it is dramatically improved, or the opposite. It hasn't worsened either. We seem to have still got that same pattern of interaction in classes.

PENELOPE ELLIS:
Thank you.

JAMES NOTTINGHAM:
Yeah. So, you did mention the time and I think we're pressed for time here. So, what I'm going to do, if you don't mind, I'm going to come out of this and I'm going to skip a few slides so that we're not doing too much repetition here. And let me put this one. So, I'm gonna summarise what we've covered, Penny, and then we'll see if there's any questions in the last few minutes before we go. So, what I would love to propose is "engagement is thinking". With that, I think it changes what we look for and more importantly because actually it's not about how we assess it or notice it, is about what we do about it. And I would like to propose that engagement is thinking and that changes my interactions in the classroom. It changes my interactions with my colleagues because now I'm going to be asking questions, I'm going to be listening to each other, I'm gonna be really... And this is not to say that classroom management is therefore unimportant. I'm just trying to remove engagement away from classroom management.

We still need to manage our classrooms. We still need those routines. We still need to get those transitions nice and smooth. I'm not suggesting we don't do that, but I would like to remove engagement away from that being polite classroom management stuff and put it much more into the cognition sphere. And thinking about that, then any interaction, any instruction, any question that causes thinking rather than causes outward expression of conformity, I think, is more - what shall we say - relevant for engagement? The IR Explore, so Initiate, Respond Explore, is much more effective than Evaluate. And that means when questioning to increase engagement, we don't evaluate, at least not publicly evaluate. Privately, I'm still going to be thinking, why did those kids get that wrong? Let me ask something else and see. Now, I do have to do a caveat. If they say something that is unethical or antisocial in some way, or might be racist, it might be sexist, and so on, then, of course, you evaluate it publicly.

Of course, that's something else. But when we're talking intellectual evaluation, then we're not doing that publicly. Thinking time. Notice I've changed it from wait time to thinking time because, of course, it's not just like queuing here. It's not like we're just waiting to get on the bus. It is thinking time and the game changer for me. And this is for me personally, but it sounds, Penny, as if this is relatively new information for you also. It's that after they have responded. And I found, Penny, that sitting down helped me. When I'm stood up in class, it's really difficult not to respond. Even might... Without thinking about it, I take a step forward or take a step back, and that's a response. Whereas if I'm sat down, I find it easier. But those are the things I've covered. Penny, that gives us five minutes for your responses. Any questions from anybody?

PENELOPE ELLIS:
Yeah. So, a couple of questions have come through, and please pop them through if you've still got some. One was around really tough demands in terms of getting through the content of the curriculum and how you embed wait times into that.

JAMES NOTTINGHAM:
Oh, absolutely. I mean, 100%. I mean, there's always a tension between content and thinking. And, yeah, sure. What's the purpose of reading a book? Is it to get through to the end, or is the purpose to really think about it and to engage with it and go deeper with it? So, absolutely. But I would rather deeply read ten books than skim read through 20 and take very little in. Now, I know that's easy to say because we've got a curriculum that we have to teach. But if we are saying that the purpose is students learning, not consuming, but learning - and by learning I mean knowing and understanding and being able to use it, so, going deeper and deeper - then we have to find a way to make it more successful. And I also find it quite interesting how much time is wasted in school towards the end of term. The kids watch videos. I know not everybody, but the number of times kids are watching videos. And anyway, I'm gonna get off my soapbox there. But absolutely, there is always a tension. But I think the only way that we can reassure ourselves is this is not about consuming.

This is about understanding.

PENELOPE ELLIS:
Thank you. The next one is around if you've explored research on the 'Think-Pair-Share' protocol to support students rehearse answers and explore their thinking.

JAMES NOTTINGHAM:
Yes, absolutely. And Think-Pair-Share is a very well-rehearsed strategy and one that I would advocate for sure. And it's quite nice to get them to share each other's ideas rather than their own. So, if you and I are a pair, we have time, first of all, to think for ourselves and then you and I turn and chat with each other. But then if invited to do so, I would represent your ideas and you would represent my ideas. And that's quite a nice convention.

PENELOPE ELLIS:
Yeah, absolutely. I'm just seeing if there's any more coming through. Just some suggestions around the Harkness discussion model and sharing our engagement goals with our students. For example, my goal as your teacher is to understand and extend your thinking and how I get this insight may look different for each of you.

JAMES NOTTINGHAM:
Brilliant. Absolutely. Yes, 100%. 100% support that idea. I think the more we share with our students our intentions, the better. Yeah, absolutely.

PENELOPE ELLIS:
James, I think we're nearly at the end of time. I know it's getting close to dinnertime. There's some really great praise going on in the chat between the different people in the virtual room, so I really love that that's been part of the conversation today. But James, thank you. Thank you for the work that you've put in preparation for today's webinar and also joining us quite early in the morning for you and sharing your insight around engagement. And there's been some really great takeaways, I know for me, and I'm sure from others in the room with us. Did you have any last reflections you'd like to share before we finish up?

JAMES NOTTINGHAM:
No, thank you very much. That's all I want to say. But sorry we didn't get time to do the... We were gonna do Padlet, weren't we? But perhaps another time or share that for people to use later. But yeah, it's always lovely to be invited to do this sort of thing and to share. If I can spend months upon months, upon months with research and then share some of - distill some of it for people as quick takeaways that can help their practice, then happy days for me. So, thank you very much.

PENELOPE ELLIS:
(INAUDIBLE). And so, this webinar will go up on the Academy website. We do have another two Thought Leadership Series coming along, so you can check out those if you're interested. One on collective leader efficacy and one on leading schools during times of disruption. But as I mentioned, the recording will go up on the website. And James, just lastly, I believe you've got a book coming out. This has been based around next year. Is that right?

JAMES NOTTINGHAM:
Yes, I do actually. Thank you, Penny. So, those are the books I've already written and published, but this is my new one, 'Teach Brilliantly'. It's coming out. It'll be ready and out in January. And I just yesterday actually wrote to my publisher to say, look, I've got a lot of Aussies wanting it for the beginning of term one, so let's make sure it's in country and out by - I know some are back at 18th of January, but anywhere between 18th and 30th I think, depending where you are. But yes, there you go. And I would absolutely hand on heart honestly say it's my best book. It's a lot in there including about engagement that we've covered today.

PENELOPE ELLIS:
Perfect. Thank you, James. Thank you everyone. I wish you all well. Head off to grab some dinner and whatever else. Hopefully, there's not too much work ahead. If you do have any last-minute questions, feel free to pop them in the chat. But otherwise, thank you so much for coming along.

JAMES NOTTINGHAM:
Thanks, Penny.