T R A N S C R I P T

LEGISLATIVE COUNCIL LEGAL AND SOCIAL ISSUES COMMITTEE

Inquiry into the State Education System in Victoria

Melbourne – Wednesday 12 June 2024

MEMBERS

Trung Luu – Chair
Ryan Batchelor – Deputy Chair
Michael Galea
Renee Heath
Joe McCracken
Rachel Payne
Aiv Puglielli
Lee Tarlamis

PARTICIPATING MEMBERS

Melina Bath
John Berger
Georgie Crozier
Moira Deeming
David Ettershank
Wendy Lovell
Sarah Mansfield
Richard Welch

WITNESS

Dr Greg Ashman.

The DEPUTY CHAIR: Welcome back to the Legislative Council Legal and Social Issues Committee inquiry into the state education system. Dr Ashman, welcome.

Greg ASHMAN: Thanks for having me.

The DEPUTY CHAIR: All evidence that will be taken today is protected by parliamentary privilege as provided by the *Constitution Act 1975* and the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. You are protected against any action for what you say during the hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing, and those transcripts will ultimately be made public and posted on the committee's website.

My name is Ryan Batchelor. I am the Acting Chair of today's committee and a Member for Southern Metropolitan Region. Joining us are Michael Galea, Member for South-Eastern Metropolitan; Melina Bath from Eastern Victoria; Joe McCracken from Western Victoria; Rachel Payne from South-Eastern Metropolitan; Richard Welch from North-Eastern Metro; Aiv Puglielli from North-Eastern Metro; and joining us online is Moira Deeming from Western Metropolitan Region.

For the Hansard record, could you please state your name and any organisation you are appearing on behalf of today.

Greg ASHMAN: My name is Greg Ashman. I am not appearing on behalf of an organisation; I am an individual.

The DEPUTY CHAIR: Excellent. The way we usually do this is we offer you the opportunity to make an opening statement; then we will go through and ask you some questions. So I will hand over to you if you want to say anything off the top.

Greg ASHMAN: Just very briefly, who I am – I am a researcher; I have studied teaching methods in a quite controlled way. That is what my PhD is in. I am also Deputy Principal at Ballarat Clarendon College in Ballarat, which is an independent school. So you might think: why am I talking about state education? I am in contact with a lot of teachers in state education, because I am a blogger and I have written a number of books on education and they talk to me, and I have some views on teaching methods and things like that.

You will see from my submission that the three things that I picked to talk about – and by the way, apologies for all the typos in my submission; I only spotted those when I re-read it – are the reading, the maths and explicit instruction more generally, and wellbeing and classroom climate.

The DEPUTY CHAIR: Wonderful. Thanks so much for your submission. Where to start? I might start with cognitive load theory – not something we have heard too much about in the conduct of this inquiry. We have spent a lot of time traversing reading, so I am sure other people will get into the reading topic. I might go to this other thing you seem to know something about. What is it? Why does it matter?

Greg ASHMAN: Everyone in Australia should know about cognitive load theory because it was developed by John Sweller, a very important and influential Australian from the University of New South Wales. It uses a very well established finding in the field of psychology, which is that our working memory, which is essentially the thoughts that we are conscious of having, is very limited. We can only process about four items, maybe even three, at a time, so this provides some constraints on what we can do. The flip side of that is that our long-term memory, where we store things for the long term, is effectively limitless. One of the ways that you can get around these constraints of working memory is by drawing on things that you have in long-term memory. These constraints basically melt away if you do that.

The implications for education are significant and largely ignored, which are that instruction has to proceed in steps that do not overwhelm working memory. Sometimes if it is very, very basic things you are asking students to do, you want to actually increase the amount of challenge just so there is some grist in working memory to process, but you do not want to overwhelm working memory. The other thing is that what is in long-term memory is incredibly important, and we often ignore that. We talk about these skills like critical thinking and creativity as if they are emergent things that we learn to do, whereas they are actually built on a foundation of vast amounts of knowledge in long-term memory. As educated adults we often forget just what we have learned and we therefore downplay its value and its importance, and we want to do something more romantic and more exciting sounding in education. But actually to get to those points there is an awful lot of knowledge to build to get there.

The DEPUTY CHAIR: So the implications of the theory for thinking about how our education system is structured are that, as I understand your evidence, we need to build the base, build the foundation and get the knowledge and skills expressly before we can get to thinking that everyone can be creative.

Greg ASHMAN: Absolutely. The basic problem we have in education is that most of the people with authority and influence see the world as they would like it to be rather than as it actually is. People look at a maths class, for instance, and they say, 'Well, these kids should be doing what mathematicians do. They should be coming up with hypotheses and testing them and science, and writers should just be writing and in history we should be analysing sources because that's what professional historians do.' It confuses novices, who do not have much in long-term memory, with experts. It is not the case that the best teaching methods replicate the practices used by experts in a particular field, and that is a key finding which I think is often largely ignored.

The DEPUTY CHAIR: You talked about there being a confusion of novices if you take that approach. What are the consequences of that for learning?

Greg ASHMAN: Well, we regularly overwhelm students. We leave students behind. We do not give them enough practice. We do not do enough overlearning to make sure that that information in long-term memory is instantly retrieved. A good example that everyone can get their heads around is times tables. A lot of students in our state probably would not be very proficient with their times tables. To get that level of proficiency you have to learn them and learn them and learn them again and overlearn them and constantly pull them out of long-term memory, so not only is it stored really strongly in long-term memory but what we call retrieval strength, your ability to pull it out, is practised really well. To do that requires lots and lots of spaced practice, returning to it at lots of intervals. The value of that – if you know seven eights are 56, you just know it. You do not have to use these very limited resources, these four items of working memory, to do that, and you can concentrate on other aspects that might be a bit more exciting, word problems or something like that, but you have got to have that stuff that you can pull up.

The DEPUTY CHAIR: So you have got to do that first, or it has got to be a foundational part of the learning?

Greg ASHMAN: Well, it is not entirely linear. One of the pitfalls we fall into is when we talk about phonics and people say, 'Okay, so we're going to spend the first year of school just doing phonics.' Well, of course we are not. We are going to read kids stories; they are going to play. They are going to do all sorts of things. The idea that you do all of that first can send us off in some dodgy directions. But you do need to have the foundation and you do need to keep cycling back to it.

The DEPUTY CHAIR: Sure. Mr McCracken.

Joe McCRACKEN: Yes. Thank you very much. I know you are a well-written person as well as a well-read person. Your book *The Power of Explicit Teaching and Direct Instruction* – why are you such an advocate?

Greg ASHMAN: Because I think that explicit teaching is incredibly powerful. Explicit teaching is not what a lot of people think. A lot of people think explicit teaching is a teacher being stood in front of kids, lecturing to them, and the kids all sitting there passive. That is not what it is. If you came to my school and you saw me teach my year 7s in period 1 this morning, every couple of minutes the students are holding up an answer on their mini whiteboard. I am asking them a question, I am checking they can all do it, I am correcting, and if we have gone wrong, we do another one. But the key defining feature of explicit teaching is that all concepts are

fully explained and all procedures are fully demonstrated to students before you ask them to apply those concepts or use those procedures. The alternative is to miss bits out. We do that because we think it is good for students. We think that figuring something out for themselves is beneficial in some way, but there is actually no evidence that if you learn something by figuring it out for yourself you have learned to it any better than if someone had explained it to you.

Joe McCRACKEN: So that is an inquiry-based method, essentially.

Greg ASHMAN: Yes.

Joe McCRACKEN: So what is not good about inquiry compared to explicit?

Greg ASHMAN: Well, there is no benefit, first of all, from figuring something out for yourself, and secondly, it rapidly overwhelms working memory because there are too many things to attend to. If you ask a novice to inquire into something that they do not know much about, then there are way more things that they have to contend with. Advocates of inquiry learning will tell you, 'Yes, but we make it very structured. We give lots of guidance; we scaffold the inquiry.' My response to that would be: well, if you recognise that guidance and scaffolding is important, why not fully guide and fully scaffold novice learners to get to the point where they can do the exciting and cool stuff themselves?

Joe McCRACKEN: The reason I ask that is because a lot of the current curriculum in Victoria – and it is changing, I admit – even historically has been heavily inquiry based, even to a point where a lot of VIT certification has been an inquiry-based approach to full certification. I guess it would be quite a significant challenge to dislodge that from the system.

Greg ASHMAN: Well, it is in our DNA. If you look at the Australian curriculum, there are general capabilities in there that are not general capabilities. Critical thinking – the Australian curriculum thinks that is a general thing, so you can somehow learn to think critically and just think critically in science, think critically in maths and think critically about a novel. It is not true, but it is in there as a general capability. A lot of these ideas are sort of baked into the software that we are running on.

Joe McCRACKEN: And that is not a good thing?

Greg ASHMAN: No, it is not. For a lot of people it makes intuitive sense that if they figure something out for themselves they will learn it better than if they have it explained to them. But the ability to explain things to each other is our superpower as a species. I give the example a few years ago of when the toilet broke in my house and I had to go to Bunnings. I had to get a flush and I had to fit this new flush to the toilet, and the instructions were minimal. I eventually figured out how to do it, and I spent the next week worrying that my bathroom was going to flood every time I flushed toilet. I did not feel like I had learnt that particularly well, and I certainly had not learnt to do that better than if there had been a plumber standing next to me explaining to me exactly what to do and exactly the way to do it.

Joe McCRACKEN: Yes, that is certainly fair enough. You work in one of the highest performing schools in the state. What does a classroom for you look like when you are using explicit instruction? Where I am going with that is: what has that resulted in in terms of outcomes for students?

Greg ASHMAN: Our students do very well. We are an independent school, and so that contextual factor has to be borne in mind when we look at that. What does it look like? If you saw me teaching maths, you would see me demonstrating how to do a mathematical problem on the board at the front, and then the students would do one immediately on their mini whiteboards. Or I might get them to do a step of the problem, show me, and then I would use that step to do the next bit. It is fully guided; the teacher is guiding the learning. The other thing is I am not going home and writing the lesson plans every night; we have developed those as a team. I have to prepare the lesson, but the lesson plan is already there for me to use. That does save teachers a lot of time as well. In other subjects it would look similar, but it would look slightly different because they are different subjects. The way you teach maths is never going to be quite the same as the way you would teach English or history or analyse a source or something like that, but the key principle is that the teacher is there to actively show and to demonstrate. We do not let kids go for a long period potentially doing the wrong thing, making errors that then get embedded and that they fall into and continue.

Joe McCRACKEN: I think my time is up. Thank you.

The DEPUTY CHAIR: It is. Ms Payne.

Rachel PAYNE: Thank you, Deputy Chair. Thank you, Dr Ashman, for coming in today. Just on the proposal of structured literacy, you talk about resistance. Do you want to talk about what some of that resistance is and how you have combated those conversations?

Greg ASHMAN: There is a lot of resistance. To be fair, Jeanne Chall in 1967 solved this all for us, told us that we should be teaching kids letter–sound correspondences and gave a body of evidence that showed that. Why since then have we not adopted that? There has got to be something very powerful in the education system somewhere that keeps turning us away from what the evidence seems to show to be effective, and we can speculate on the causes of that. There is a long tradition in education, very influenced by what happened at the end of the 19th century in the US, of views about, again, what education should be like rather than necessarily going back to what it is. If you talk to education academics – and I do this quite a lot; I sometimes debate with them and say, 'What's the evidence for this? What's the evidence for that? Where can we look for the evidence?' – they will dismiss me as slightly naive because 'Evidence? That's not what we do in education. That's a thing called positivism, which we avoid. We have a more sophisticated way of figuring things out about the world' – which I do not believe is true.

The other thing I think that comes from cognitive load theory, which I mentioned in my submission, is this idea of natural learning, and I think this is the most understandable reason why people might be in favour of something like a whole-language approach. They will observe toddlers, and they will see that young people learn their local language. No-one sits them in rows in the classroom and says, 'Put your tongue in this position so you can make the "s" sound; put your mouth in this position so you can make an "oo" sound.' They observe that toddlers pick this up just by being surrounded by people talking to them, so they think, 'Why then do classrooms look the way they look, where we have the rows and it's all very regimented? It's not my romantic idea of what kids should be doing, and it's not joyous enough' – or whatever. They think that maybe if we just surround kids with books, they will pick up books and reading in the same way that we pick up language.

The reason we cannot do it that way is that reading is a remarkably recent invention. It is about 5000 years old. The ancient Sumerian clay tablets go back about 5000 years, whereas presumably we have been speaking to each other and listening to each other for many, many hundreds of thousands of years – we do not really know – so speaking and listening has been subject to evolution. We have evolved some mechanisms presumably that enable us to just pick it up by immersion. But reading, even though it has maybe been around for 5000 years, for most of that time has been the preserve of an elite. It is only a hundred or so years that mass education has been around, so we cannot have evolved mechanisms for picking that up. Just to finish that off, basically everything we do in school that is academic is applied reading and writing, so that is why it looks the way that it does.

Rachel PAYNE: You actually just took me back to my first university assignment, around the printing press. But I am curious: how does this look practically in a classroom, and do you find that the students are very responsive to this type of learning?

Greg ASHMAN: I think phonics can be done wrong. It can involve just sitting down and doing lots of worksheets, and I think people who object to it most strongly have that in mind. But if you came to see our prep class doing phonics, you would see lots of kids enjoying themselves. They are not doing it for very long. They are doing it for 10 or 15 minutes, something like that, again on their mini whiteboards. From prep to year 12 we are using the mini whiteboards at our school, and they are doing lots of other things as well. As I said earlier, and I am repeating myself, the myth about phonics is that that is all you do. In a literacy lesson in prep it is just one part, but it is a really key part. The kids are chanting things, they are doing choral responses, they are holding up letters – all that sort of stuff.

Rachel PAYNE: Great. Thank you.

The DEPUTY CHAIR: Ms Bath.

Melina BATH: Thank you. Thank you very much for your presentation. How well do you know the maths curriculum in Victoria, the state maths curriculum?

Greg ASHMAN: I do not know the state maths curriculum in Victoria particularly well. Our school is compliant with the Australian curriculum for maths as an independent school, and the Australian curriculum for maths is pretty poor.

Melina BATH: Is pretty?

Greg ASHMAN: Poor.

Melina BATH: Expand on that.

Greg ASHMAN: It is thin. There is not much in it. It is very unambitious. Our kids can move beyond it fairly quickly. I was a part of a letter – we got a lot of scientists and engineers and teachers and people to sign a group letter to ACARA when they were revising the Australian curriculum – because I was worried. The times tables were going to go away at one point, which I was really quite concerned about. They claimed that they had looked at the Singaporean curriculum, but they looked at bits of the Singaporean curriculum that probably are not the functional bits. I mean, Singapore is very strong on times tables –

Melina BATH: And PISA et cetera rankings.

Greg ASHMAN: Yes. But also, if you look at their curriculum, their expectations of what kids can do and when they can do it are pretty advanced, I would say, of what the Australian curriculum would be.

Melina BATH: I will make an assumption here – and you can challenge it or acknowledge it – that if we are having explicit instructions in maths, for example, we are removing creativity and that creativity should be the aspiration of all good educators because –

Greg ASHMAN: Yes. This is the idea that rather than me standing at the front and showing them how to do a problem and then having them do one, we should give them authentic problems to solve. Then they can act like mathematicians and learn to think like mathematicians, and this will build this sort of mathematician-ness that will make them really good. That is just not what the cognitive science says. What mathematicians do when they are being creative draws on a lot of these foundational skills, and mathematicians are the worst for downplaying that, actually. They tend to say, 'Oh, you know, I am not very good at maths,' and yet they have these foundational skills really well embedded. I think there is a role for that kind of fun element and that exploration element, but to be creative in any area – music, art, literature –

Melina BATH: You need the skills. You need the foundation.

Greg ASHMAN: You need stuff in your long-term memory to draw upon, yes.

Melina BATH: I was a maths–science teacher, and I was very scared really when year 7 students came in and they did not know their times tables. It is hard to retrofit that in secondary school as well because it is not very cool to be chanting your times table in year 7. We are going to make recommendations – we keep saying this. Give us three recommendations that are musts as we move forward for government.

Greg ASHMAN: Gosh. Stop inviting people to talk to teachers who tell them the opposite of what the science shows about teaching maths. That would be a good start.

Melina BATH: Who are they? Give us some evidence.

Greg ASHMAN: Well, Jo Boaler is the famous mathematics education professor from Stanford University in the USA who came to talk to Victorian maths teachers at a department thing last year. She would be all about this kind of inquiry approach. Part of the problem with the inquiry approach – and it links to your question about the curriculum – is that it is very inefficient. Kids might learn some things. Usually what happens is that one kid in the class figures it out and then the teacher goes, 'Oh, look. What is it that you did?' And they try and sort of teach the kids vicariously. You can get there, but it is very inefficient. In order to use it, you have to have a fairly pared-down curriculum if you are going to get through the curriculum.

Melina BATH: And the curriculum is full. So bring the science to teaching.

Greg ASHMAN: Yes. Provide training in explicit teaching for more than the one day that New South Wales have given teachers – a little bit more than that is probably needed. Professional learning that is provided to teachers should be evidence-informed. It cannot quite be evidence-based. We do not have that much evidence, but it could be evidence-informed. I cannot think of another one.

Melina BATH: What is your feeling about the Grattan Institute? Have you read anything about that institution?

Greg ASHMAN: Oh, the Grattan Institute. They actually visited my school. We have this – which I have sort of touched on – common curriculum, and this is the idea that it saves teachers about 3 hours a week in planning because you develop it together. The other thing about it is that you are not throwing your curriculum away at the end of each lesson; you can iterate it. And we have processes to do that as well.

Melina BATH: Thank you.

The DEPUTY CHAIR: Thank you. Mr Galea.

Michael GALEA: Thank you, Deputy Chair. Thank you very much, Dr Ashman, for joining us. Again, a lot of the questions that I was going to ask have already actually been covered, so I might try and do a bit of a mix and match here and there as I go. I do want to start with one part of what you have been talking about, which is phonics, and just tie in with what my colleague Ms Bath was just asking you around the Grattan Institute. They have been advocating for us to do testing of all grade 1s and follow-up testing of grade 2s if there is a need for improvement in some cases. Would you support that?

Greg ASHMAN: I would support that. I think it has been very useful in England, where they have adopted that approach. It is not a panacea. You will get people then just sort of trying to teach to that test to minimally get over that hurdle, but it does measure something, and that something that it measures is useful.

Michael GALEA: Thank you. And supposing the state of Victoria was to go down this path of implementing a full phonics base – can I actually just quickly check with you: cognitive load theory, is that the same thing as what we are talking about, or is that a different concept?

Greg ASHMAN: Cognitive load theory is a more general concept about how we learn.

Michael GALEA: Okay. Cool. If we were to go down the phonics path, what sorts of challenges would need to be addressed, socially or in schools or at a broader level, in order for it to succeed?

Greg ASHMAN: You need lots of training. You need phonics programs, because what happens in the absence of phonics programs is that schools will continue to teach literacy the way that they have done, in this supposedly balanced way, but because you have introduced an accountability measure they will just practice-test on this phonics check and hope that that will do something.

Now, the phonics check is not supposed to be like that, it is supposed to be you teach the letter–sound relationships, and then the phonics check just checks whether the kids have learned the letter–sound relationships. Without that support you will get these really strange, almost perverse practices where teachers will kind of practice-test. So you would need that, and you would need to look at some schemes that are recommended for use in Victorian schools. There are a few phonics schemes. One of them is peer reviewed; most of them are not. So you would need to look at that, but they are probably better than the kind of building-your-own approach that a lot of schools would use at the moment.

Michael GALEA: Sure. Thank you. You have touched on the UK in your answer and also in your submission. Can you talk to me a little bit more about their experiences with implementing this?

Greg ASHMAN: With the phonics check? It has been going a long time now; I think the pilot study was 2012. I might have that wrong. That was a group that tried it, and then from 2013 onwards everyone was doing this check. The problems that I have just outlined were visible in the UK. We have seen an indication that it has led to – you cannot say that this is a definite cause-and-effect relationship, but certainly the international PIRLS assessments seemed to show that it might have been having some effect. But it is still quite early days, because if you think about how relatively recently that was introduced – and yes, there has been a debate about it, but I do not think there is the level of debate now that there was in, say, 2012. You had a lot of children's authors –

again, who have romantic views about what education should be like – who sort of came out against it and there was a big debate at the time, but that seems to have petered out. It will be interesting to see what a probable change of government will do on that.

Michael GALEA: Yes. Interesting as well – if we can just jump ship to maths, I will be up-front and say that maths was a subject I struggled with most years at school, I am sorry to say, Melina.

Melina BATH: It is never too late.

Michael GALEA: It is never too late. It was better with some teachers, actually, and I found that when I had a teacher that was very, as you might say, explicit. When I understood what it was that we were learning, I understood a lot better, whereas for me personally, when it was, 'Don't worry about why this is. It'll all make sense in the end,' I just sort of lost interest. Is that sort of the heart of what you are getting at?

Greg ASHMAN: Yes. It seems odd that we have developed this superpower to communicate incredibly complex ideas to each other, and then for the most vulnerable people in our care we would choose not to. We would say, 'Well, you figure that out. Come on, what's your thoughts about this? What are your ideas about this complex situation that you've never encountered before?' It is our role as teachers who have that knowledge to explain it and tell students why things are the way they are and where this information comes from. They are then free to reject it, if they want to later –

Michael GALEA: And then challenge you back and then test the ideas –

Greg ASHMAN: Absolutely – but cards on the table.

Michael GALEA: Yes. Thank you. That is mine; I will finish there. Thank you, Chair.

The DEPUTY CHAIR: No worries. Mr Puglielli.

Aiv PUGLIELLI: Thank you. Hi. Do you think the current schooling system we have in Victoria places enough of an emphasis on the merits of reading?

Greg ASHMAN: That is an interesting question. I am not sure this is quite what you are getting at, but I think a lot of people would mount the argument that kids are reading less and kids are less engaged in reading, and, because of that, reading scores are not shifting. So what we need to do – and you see this in a lot of initiatives – is motivate kids about reading. You see initiatives where kids have got to read 20 books by lunchtime or whatever, and they can tick it off. I think it works the other way around. One of the, I think slightly flawed, ideas that we have in education is if we want to improve achievement, we need to motivate students. We motivate them and then they will become motivated, they will work and they will achieve. The evidence suggests that there is a bit of that, but probably, if anything, the other direction is stronger: achievement leads to motivation. Once you feel that you can do something, once you get some capacity at something, particularly if you did not have that capacity before, you then become more motivated.

If we got better at teaching early reading, so more kids could access books, more kids could understand meaning from those texts, would they then read more? Well, potentially they would, because that would lead them to be motivated. Of course you then throw in the mix all of the attention-sucking devices that we now have in children's lives, and that could still divert them from doing the extra reading that they are motivated to do. We have to think about that as well. I think that if you want to increase the joy of reading – which is a great aim – you need to give kids the tools to access the reading, at least as a starting point.

Aiv PUGLIELLI: Thank you. You just touched on achievement, and I suppose with achievement comes how we measure achievement.

Greg ASHMAN: Yes.

Aiv PUGLIELLI: Do you have much of a view – this might be going beyond your submission per se – on how we are currently assessing students in Victoria, and is there anything you would want to see changed?

Greg ASHMAN: NAPLAN is imperfect. I mean, it is better than not having NAPLAN. A lot of people will say NAPLAN is imperfect so we should get rid of it. No, it is better than not having it. A measure is better than

no measure, but I would improve it. For instance, if you look at the reading comprehension assessments, reading comprehension is a product of two things. It is being able to take the words off the page and literally translate them into oral vocabulary and then to understand what that is saying – to be able to build a model. The classic way I demonstrate this is I give, say, Americans a paragraph about cricket, or I give Australians maybe a paragraph about baseball. They will be able to understand what all the words mean, but they will not be able to understand what the passage is saying, because they do not have the background knowledge to apply to it. Reading comprehension measures those two things at the same time, so it confounds our ability to decode what is on the page with our understanding of the text. What this means in the reading comprehension assessments that we set – the people that set those assessments are well aware of this problem, so they select a range of different contexts for the reading assessments – is that this then advantages kids who have come from privileged backgrounds, whose parents take them to museums and talk to them about lots of ideas at home.

What we should really be doing is setting our reading comprehension assessments in the content and subjects of the previous year's Australian curriculum, because we can teach all the students the Australian curriculum, or the Victorian curriculum, and then we can level that out. Then when we do the reading comprehension assessments, we are actually assessing their ability to do the reading bit. We have taken the content off the table. The VCAA in their year 12 assessments essentially require students to do inquiry learning as part of their assessment, and most schools have to do that. I would get rid of it. I have got lots of gripes about assessments.

Aiv PUGLIELLI: I would like to hear more about it. I mean, in terms of the VCE, retaining what has been instructed so you can regurgitate it for the exam period – do you have any concerns around that and anything you would like to put to the committee?

Greg ASHMAN: I think concerns about that are slightly overdone, because when I look at VCE subjects, if I look at maths, even though I would change the assessments and make them better, the kids still have to solve problems unlike any they have seen before that are quite complicated. To do that you need to have a good understanding of maths. You are not just regurgitating something. It is the same with English and with literature. There might be some subjects where there is a lot more factual recall. I think this idea that all we are doing is training kids to regurgitate things is a little bit overdone. I think people think, 'Well, I forgot everything I learned at school,' so therefore they downplay it as well. But it is there – a little bit of a reminder and a lot of that stuff will come back.

Aiv PUGLIELLI: Thank you.

The DEPUTY CHAIR: Mrs Deeming.

Moira DEEMING: Thank you, Chair. Thanks so much. I am a huge fan of your school and your writing. I am just wondering if you could give a bit of an illustration or a description to flesh out the rhythm that you were talking about in terms of the rhythm for a lesson and the rhythm for a week and a term – just lay that all out for us a bit more.

Greg ASHMAN: That is a good question. There are lots of elements to that. For a lesson, if we are teaching some new content, we would actually start the lesson by reviewing some stuff. In maths our students would have a starter booklet, and that would be a bunch of questions based on things that they have studied previously. Why is that? Because we want to build this retrieval strength; we do not want it to be something that they did once and then they cannot recall it again. It is something that they have got to bring all the time. Then I might teach some new content. Today I was teaching solving linear equations, so I would show them how to do one, and then – well, actually we were doing steps; we were not doing a whole problem. This is the key thing about explicit teaching: breaking it down into small bits. So I was saying, 'What is the inverse operation we would do here? Put it on your mini whiteboard.' So I have not actually solved it yet. Then it is a gradual release of control. One of the phrases that we use in explicit teaching is: 'I do, we do, you do.' So I demonstrate, then we do one together and I might ask for your input on the different steps, and then 'You do' is when you practise.

Now, we are quite fortunate with our school culture that we have built that most of our kids most of the time will do their homework. A lot of the independent practice we can set for homework, and that is a good use of homework. The sort of homework where the kids have got to go off and do a project or find something out is not a particularly good use of homework; it is better to be practising something that they have been taught. So

we are doing that over the course of the year, and we are continually returning to these key ideas. Our starter booklets are an example of this spaced practice, where we keep returning to the same things over and over again.

Now, our English lessons would look very different, because we are teaching English, which is not maths and is not linear equations. But they still have starter booklets, and they might be, for instance, rehearsing ideas about grammar over and over again or spelling or something like that. The traditional model, which someone mentioned earlier I think, is where you do three weeks of this, then three weeks of that and then three weeks of something else – and then you have forgotten what we were doing. We try and disrupt that by returning to things all of the time. It is a bespoke curriculum that is based on the Australian curriculum, but we obviously developed it ourselves over time. So if we notice, for instance, that there is a particular idea that students struggle with, we build in more practice of that, and that is how we can improve it over time.

Moira DEEMING: Fantastic. Thanks so much.

The DEPUTY CHAIR: Thanks. Mr Welch.

Richard WELCH: Thank you, Deputy Chair. Thank you, Dr Ashman. It is really, really interesting to hear. A lot of the questions have been asked, so I will go to part 3 of your submission. I would love for you to expand on the classroom behaviour elements, but I will pre-empt it a little bit. Do you see any connection between explicit teaching and classroom behaviour? Is there a link?

Greg ASHMAN: There is. It is odd really that we are not talking more about classroom behaviour in Australia. We talk about it a little bit, but when I wrote my submission we had not got the results of PISA 2022. They have since come in. We were ranked 71 out of 81 in the index of classroom disruption, so our classrooms compared to others internationally are quite significantly disrupted, and that is consistent with 2018 and that is consistent with 2015. So why aren't we galvanising ourselves and saying, 'Gosh, we must do something about this'? Well, people do not want to think about it, they do not want to talk about it and they do not want to talk about what you would do to improve behaviour in classrooms, because again the sorts of things that we would do go against people's ideas of what education should be and should look like and how kids should just be enjoying and engaging, and basically if they are misbehaving, it is because they are telling us that we are not meeting their needs in some way. Unlike adults, they are never just a bit selfish or mean; it is always a signal to us. So as long as we are not talking about it and not prepared to implement anything, it will remain a problem, and we can predict that the index of classroom discipline will stay where it is for the next few rounds of PISA.

What does explicit teaching have to do with it? Classrooms are artificial environments. They are not things that kids have evolved to participate in, so you have to teach them how to be in a classroom, and you need to do that explicitly. Recently Tom Bennett, the UK government's behaviour adviser, came over. He actually spoke at my school. He spoke at a number of places in Australia. There was a backlash from some people in academia in Australia who just, again, do not like this idea that we would have strategies for dealing with these things. But one of the key parts of his approach is a behaviour curriculum. So if we want kids to behave in a certain way in the classroom, we teach them how to do it – because if you do not teach them, some kids will pick it up, but it is usually the most vulnerable kids, the most disadvantaged kids, who will not pick it up. So if they are struggling a bit with reading, they have not picked up on the cues of the classroom, they are already several steps down that pathway of being a disruptive issue in the classroom that then needs to be somehow managed.

There are other elements as well, and these are all very well researched. There is a good book by Robert Marzano from quite a few years ago now based on research that he compiled about what this looks like, and it is about rules, routines and procedures. Routines are great. If you get kids in the routine of doing something, then you do not have to tell them to do it. That is great. It saves you a lot of time and saves you a lot of behaviour problems. So you get these routines. Every time we enter the classroom we do it the same way. So I go into my classroom this morning, and the kids have given the starter booklets out to each other because that is their routine; I did not have to ask them to do it.

You do have to have consequences. They can be positive, and then the bit that is really contentious is these mild negative consequences that schools will sometimes apply, like keeping kids back maybe for a couple of minutes at recess or something like that. That is really controversial and really contentious, but it does need to be part of the mix. Just like people will speed if you do not have a fine for speeding, you do have to have some

negative consequences as part of the mix. But over time you build a culture. There is a school in the UK called Michaela, run by a very flamboyant figure, Katharine Birbalsingh. They have what they call the behaviour pyramid, and at the bottom is 'I do what I'm told because I don't want to get into trouble' and at the next step 'I do as I'm told because I want to get praise'. At the top of the pyramid is 'I do the right thing because it's who I am'. And you gradually build this culture over time. I was saying most of the kids at our place do their homework. They are the same as kids anywhere else, but that is part of the culture that we have built, and you do it gradually through all these little steps.

We really do need to grasp this nettle. It is painful and people do not want to do it, but unless we do, you can do all the explicit teaching you like, but if the kids are then disrupted and they are in an environment where they are feeling anxious and they are not feeling safe because they are worried about what another student might do, it is not going to have the effect.

Richard WELCH: I think I will thank you for that. I think we will run out of time for any other meaningful questions, because I have got lots of questions you could follow on from there.

Greg ASHMAN: Sorry.

Richard WELCH: Can I just throw a random one at you. Cognitive overload, electronic devices and even the advent of AI: I see there is some sort of relationship that goes into that if we are allowing kids to get to the solution without a process, without deep memory. What is your view of AI in education?

Greg ASHMAN: Well, it is pointless setting kids a task that they go off and do unsupervised, because they will just use AI to do it. This is another thing that people will not like, but the conclusion that you have to draw from that is that if you want kids to be able to do complex things, you have to sit them in the room, take their devices away and ask them to do it in that room while they are supervised. Some people will say, 'Well, they don't need to do that anymore, because AI will do it all,' but AI generates at least 10, 15 per cent rubbish.

Richard WELCH: Can I just sneak a quick one: does that also then relate to working with handwriting as opposed to keyboards?

Greg ASHMAN: There is a lot of evidence that handwriting helps with learning to read, with literacy skills more generally, yes.

The DEPUTY CHAIR: Dr Ashman, thank you so much for coming in. As is clear, you have sparked some interest from members of the committee in your work. We really appreciate your time and the clarity with which you have given your evidence today. This brings this session to a close. We will have a short suspension.

Witness withdrew.