

## **State of Affairs event - Mind the gaps: what can we do about widening gaps in school education in Australia? – Brisbane 13 April 2016**

Learning gaps between Australian students of different backgrounds are alarmingly wide and grow wider as students move through school. Grattan Institute recently published *Widening gaps: what NAPLAN tells us about student progress*. The report finds that the gap between students with parents with low education and those with highly educated parents grows from 10 months in Year 3 to around two-and-a-half years by Year 9. Bright kids in disadvantaged schools fall two and a half years behind bright kids in advantaged schools by Year 9, even though they were doing just as well in Year 3. These students are not getting a fair go. Dr Peter Goss, Grattan Institute School Education Program Director, hosted a panel of senior leaders in school education to explore: How big are these learning gaps, and what do they mean in practice: for young Australians, for the economy and for Australian society? What should we do to enable every child in every school to achieve their potential?

**Speakers:** Dr Peter Goss, School Education Program Director, Grattan Institute  
Dr Lee-Anne Perry AM, Executive Director, Queensland Catholic Education Commission  
Ricky Campbell-Allen, Founder & CEO, EDCapital  
Leanne Nixon, Assistant Director State Schools – Performance, Queensland Department of Education & Training

PETER GOSS: Good evening ladies and gentlemen, thank you very much for coming along to the State Library tonight to listen to one of the *State of Affairs* events that Grattan Institute has been running with the State Library of Queensland. My name's Peter Goss, I'm the School Education Program Director at Grattan Institute and I will be hosting the evening.

I would like to say a couple of quick thank yous, firstly, because I usually do this one at the end, thank you to Alex who helps organise these events from our end; thank you to Erin from the State Library of Brisbane; and thank you more broadly to the State Library for working with us to do this public lecture series about topics that we think will be of interest to the broader Australian population. These are very open, we have a great panel, you've already given some of your questions which I have worked in a little bit, and we will make sure that there is time for discussion and some more questions at the end. We have an hour and a quarter together and I will make sure that I respect your time, given that you have given us your time this evening.

I'm very fortunate tonight to be joined here by three fantastic panel members for this discussion about *Mind the Gaps*, the concerning if not alarming widening gaps that we have in Australian school education. I'm going to introduce them first, I will give a bit of an overview of some of the information we found in the report, and then I will sit down and step into a moderator role and you can hear from the three people that you came to hear from. Starting with Dr Lee-Anne Perry who is Executive Director of the Queensland Catholic Education Commission. She's had a long-standing involvement in Catholic education and has led a number of schools, including All Hallows' School, Mount Alvernia

College and Carmel College, but has also worked in both Catholic and state schools in New South Wales and Queensland, so a very diverse perspective there, and has had a number of state and national roles that give her a broader perspective.

We also have Ricky Campbell-Allen who is the Founder and CEO of EDCapital, a new organisation which has a focus on school leadership development, strategy and system reform: it's all very well to do things at one school, but how do we do it at many? She's got significant leadership experience in education reform working across schools, education systems and in the not-for-profit sector. She has worked in a number of organisations in Australia including as the Director for the Centre of New Public Education, but also worked in Boston public schools. And to the extent that sometimes we think Australia as being like America but 20 years behind, maybe we can learn from some of that experience of what is both challenging but also hopeful, Massachusetts having one of the better systems in the US.

Finally, we have Leanne Nixon who is the Assistant Director General of State Schools - Performance within the Queensland Department of Education and Training. Her current priority is to develop innovative strategies to drive school improvement, which is a fantastic fit with this topic tonight: start with what we know and then how do we improve? As an educator for 28 years, Leanne has worked with a range of students in environments across Queensland from the coalfields of central Queensland to the outback community of Cunnamulla and has been both a Foundation Principal and an Executive Principal of some very large schools.

So we have people who've been teachers, who have led schools, who have led systems and who have a range of different roles. Could you please welcome Ricky, Lee-Anne and Leanne?

As I said, I'm going to take the prerogative to put a little bit of information on the table tonight about some of the widening gaps that we saw in the report that we published recently of that name. That report came out about three weeks ago, people have picked it up widely already and reported it in the press, and it puts some facts to some things I think a lot of people already suspected or knew, and these are challenging if not alarming. If any of you turned up hoping for a methodological description of the report please see me afterwards because that's not what we're going to provide, but I'm always happy to talk about it. I want to talk about what is happening on the ground in Australia and what we can learn from NAPLAN, which is this incredibly rich data source.

We are fortunate as a country to have a test like NAPLAN to help us see what happens at a system level. Now the fact that I'm singing its praises, don't let me tell you that it does everything. My previous report was about targeted teaching and it's not the thing that we should be using to target the teaching in our schools because it's not frequent enough, but it does give us the opportunity for an unparalleled view at a system-wide level and that should inform our discussions. The report *Widening Gaps* is available at our website, I would encourage you to go and download it and download it often and get your friends to do that. Every one of us in life has key performance indicators and one of mine is how often reports get downloaded.

What are some of the things that we learnt when we translated NAPLAN data into years of progress? One that is near to my heart, and I suspect that of anyone's that got the job of working in front of a class, is an understanding of how big this spread in achievement is within any given year level, because that affects the teacher's job. And when we translated NAPLAN scores, which are important but hard to understand, into equivalent years of learning whereby a student at Year 3 equivalent year

of learning is at the median for the whole country, at the average, at Year 5 the same. But because some students in Year 3 do well below that and some students in Year 9 do well above that, we can extend that and that allows us to do these comparisons.

What we find is that in Year 3 the bulk of the students - this bar represents the middle 60% of students from the 20<sup>th</sup> percentile to the 80<sup>th</sup> - are spread across about a year-and-a-half's worth of learning. That's a lot in Year 3, but it's not an enormous amount. By Year 5 that's moved up to about three years, by Year 7 about four-and-a-half years, and by Year 9 about five years; and if we take both the top and bottom 10% - these are the dots - in a typical school we would see about a seven year gap in Year 9 between the top and bottom students. Some students will be working effectively at, let's say, maybe a Year 11 level and some students will be effectively working maybe at a Year 4 level, and the job of the teacher is to help every one of those students progress as much as they can. That's tough, but we need to know it.

National minimum standards should help us identify in theory some of those who are not doing well enough, identify them early and provide support, but what we found when we translated it in these terms is that they are set far too low. The one that I'll focus on is in Year 9, so the national minimum standard in Year 9 when we track it back to our growth curve of how many NAPLAN points across years and then go down, a student who is just above the national minimum standard cut-off in Year 9 is performing somewhat below the median student in Year 5. So when we tell ourselves as a nation that ninety-something percent of students are performing above the national minimum standard in Year 9 what we mean is ninety-something percent of our students are no more than four years behind. It's not good enough. Other cut-offs are set higher. ACARA recognises this, there were political reasons why it was set at that level, and they will be introducing a competency threshold, because you can't aim high if the bar is set low.

The other thing that we found that not just that there are individual differences and those gaps grow, is that parental education and other factors really do matter. So what we did there was we looked at the educational levels of the parents, we grouped them into three levels: the top level, who had a degree or above, and the bottom level, who might not have finished school or just finished school or got a TAFE certificate. There was actually less difference within that in the data that we saw, so we grouped those together. In Year 3 what we found is that there's about a ten month gap between the students from different educational backgrounds. Again, a chunk in Year 3 but one that should feel surmountable, but unfortunately on average what happens is that that blows out very significantly to two years and six months on average by Year 9.

Now this is not the story that you get by looking at the NAPLAN data on its own. That's a quirk of the curve and this was one of the reasons we published this report, but I think every teacher that I have spoken to who has experience of these things say this is a story that resonates and is consistent with a range of other evidence. This is not in any way to deny the importance of the first three years of education, they are foundational, nor is it to deny the importance of preschool, there is huge evidence that high quality preschool matters. What it is saying is that social background, including parental education and other factors, still matter greatly in the core years of schooling between Year 3 and Year 9 and we are not as a nation going to provide every child with the opportunity they deserve unless we recognise this and act on it.

I have had some people and there have been some people in the papers recently saying, “But isn’t it all genetic? Isn’t this just a sorting factor?” which, as someone who has a PhD in population genetics, it’s like, well, no actually, for many reasons. One reason would be that if we look at students in Year 3 from the same starting point, and they’re grouped as students who didn’t start so well, students at the middle and students at the 80<sup>th</sup> percentile, but compare them by student background, the gaps still open. This is worrying, this is alarming. It’s not what I would call in Australia a fair go. Every country on the planet who has looked at this type of stuff would say there is some gap, the question is, are we willing to accept a gap this big? I suggest we should not, if nothing else because there are other countries out there who we should aim to aspire to and compare ourselves to who do better.

One in particular I like to call out is Canada. They’re big, they’re diverse and they have a federated model as well. Their gaps would be about half this size. Their average achievement would be higher. In fact, every country that has higher average achievement, they don’t have smaller gaps but they have more top performers and fewer low performers. So we should do more. This plays out at school level as well. In fact, the gaps are bigger at a school level because you have both the individual factors of parental education and then a range of other compounding factors that maybe some of our panel might unpack a bit, such as peer effects, in an advantaged school having other peers who have had a good educational experience and are being encouraged versus at the other end.

So in schools it plays out as well as from the same starting point and one of the things that we called out in the report and that has got some media is that bright kids from disadvantaged backgrounds show the biggest gaps, and when I say “the biggest gaps”, it is this comparison from the same starting point. A group of bright kids either in a top or bottom quartile of schools ranked by their socioeconomic advantage will end up up to two-and-a-half years behind if you’re in the disadvantaged one. Two-and-a-half years is enormous. It means that they will take until halfway to Year 12 to get to where the other kid got to in Year 9 and with every year’s worth of additional learning there are economic estimates that that might be worth something like \$200,000 in lifetime earnings; it means they’re more likely to complete school and go on, and we’ll hear some more about that.

These play out by location, largely by SES. This is Victoria, we didn’t have the data for Queensland, yours would look very different, but that should matter. We can’t accept, I would say, these things to become destiny and, indeed, they’re not. There are schools all over the country and all over the state who are fighting against some of these trends and doing a tremendous job. I’m going to hand over now to my panel to see how does this feel, we’ll start off with does this resonate and then we will ask a little bit what does this mean for some of the students and families involved, and then go to what should we do about it?

So let’s start, does this resonate with your experience?

LEANNE NIXON: Happy to start. The research has told us as long as I’ve been in education that this is the case and the research around poverty tells us that kids in disadvantaged areas will be disadvantaged multiple times, so it’s no surprise. Even though what you have here is an elegant solution in terms of the data, really as a practitioner, and that’s where I live, it is not telling me that there isn’t a great need here and lots of work to be done. But I wouldn’t call it alarming, I would actually call it a challenge and I think there are pieces of work going on in this state that are quite phenomenal in this area. So I do have a problem with the Victorian data because some of our outcomes are actually better than the Victorian, especially in the improvement area.

Recently we re-looked at our own data. We looked at the state's data comparing QCE results with NAPLAN and guess what we found? The same thing the research has been telling us forever, that students in low SES areas don't get as many As as students not in low SES areas, even though their NAPLAN would indicate that they should. And on the other end, students in high SES areas with NAPLAN results indicating they should be getting higher levels of As are not getting it as well. So we still have that cultural piece of if you're living in a high SES area then you need to work harder for your A than other people and if you're living in a low SES area then we really don't think that you're comparative to other kids, so we've double disadvantaged them. It lives in our data, it still exists, but my biggest challenge around this is that data and research has existed for a very, very long time.

So I suppose, while I appreciate this elegant solution around the months and years, I'm more interested as a practitioner and as schools and systems about what are the right pieces of work to do to make the difference? This state has been obsessed with NAPLAN for a long time and I worry that this conversation takes us back to being driven by data, which is the wrong driver, when we should be focused on teaching quality, we should be focused on what teachers do in a classroom, which pieces make the difference and what the research tells us will make the difference, professional conversations, feedback on practice, implementing the intended curriculum, all those pieces of work.

So I do worry with a conversation like this that we're reinforcing the discourse that in fact has driven this state's improvement. We are the most improved state in Australia. It's driven that, but there comes a tipping point where that won't drive improvement further, where we need to change the discourse back to what really matters in schools. So yes, it resonates with me, not all good though.

PETER GOSS: Thank you.

LEE-ANNE PERRY: I agree with a lot of what Leanne has said. We were asked to disagree where we could, so here's my opportunity to disagree from the outset. I agree with what Leanne's saying in terms of data shouldn't be the be all and end all and the major driver, but we need data-informed practice and I think in fact we have more rich data now that can inform our practice than we've ever had before.

LEANNE NIXON: Correct, I wouldn't disagree with that.

LEE-ANNE PERRY: Thank you. And I think that has been one of our problems, I think a consistent thing with teachers is their desire to do the very best by the students in their class, that's fundamental to every teacher, but knowing what they're doing, is it being effective? I think we've been challenged around that. Teachers have felt like what they've been doing is effective, some of the data has suggested what they've been doing is effective, and what we're finding now is that some of those practices are not as effective as they could be. So I think the work that the Grattan Institute has done and some of the stuff coming out of NAPLAN has helped give us richer data to better inform our practice, and I think that's a great thing.

In my response to does this resonate? Yes, it does unfortunately. I've been, as many of you have, in schools for a very long time and gaps have been there for a very long time. In some areas we've improved, in others areas they are there and are very stark. What's the solution? The first thing I'd say is there is no one solution. I think that's, again, been one of our problems is searching for the quick fix, searching for the simple answer, this country's doing it so we'll take than an implant it here. It's complex, it's multifaceted, and there is no simple solution. We need to get beyond the slogans or the

simple solutions and recognise the complexity and the engagement of the whole society actually in a productive conversation, a data-informed conversation, rather than “When I was at school this...” therefore that makes it right. And I know we’ve moved a little bit beyond that, but when I read the Courier Mail letters to the editor I don’t think we’ve moved terribly far sometimes.

PETER GOSS: I’m going to pick up and maybe weave this in, does the publication of the NAPLAN results on the My School website assist in solving the gap or does it perhaps make it worse? Ricky?

RICKY CAMPBELL-ALLEN: I think it’s important that we have public transparency around what the gaps are and how we’re progressing, and in any country where that’s occurred it sometimes creates a burning platform or it identifies a problem that might have been hidden. It also depends how you report the data. Reporting things in averages often hides real gaps, so disaggregated data and reporting things for subgroups of students or high need student groups is really important.

I think one of the really powerful things in a way that you’re suggesting we should think about when interpreting or reporting NAPLAN data is actually putting it in a unit that folks understand. Every teacher, parent, anyone who’s been school, and most people in this country have been to school, can understand the idea of one years’ worth of progress. We’ve seen in other countries where that has made a real difference in policy when things have been translated into a months’ worth of learning or negative months’ worth of learning, rather than effect sizes of various research reports. As soon as you say an effect size most people’s eyes just glaze over and most teachers’ eyes will certainly glaze over.

This report did resonate with me. In my first year of teaching I was teaching Year 12 art. I taught Year 12 art three years in a row and three years in a row I had the dux of the school and students from the bottom five performers in the school in the same class. I can remember in my first year as a teacher having more than seven years, I think, of learning ability in that Year 12 class, having to try and push somebody with their writing at kind of second year uni level, and then also thinking it was a real win when I got three sentences out of one student by the end of the year and the sentences made sense and they responded to the question and the artwork that was in front of them. It was at that point that I felt that in practice.

You asked the question do these gaps resonate and I think what you highlighted was the fact that a lot of these gaps are rooted in disadvantage. There’s nothing new for any of us here. I was interested in a report that came out last year from the Mitchell Institute that was looking at educational opportunity in Australia and it highlighted the fact that 60% of kids from low SES backgrounds graduate high school in Australia whereas 90% of kids from wealthy backgrounds graduate high school. Let me say that again: 60% from low SES, 90% from high SES. That’s a big difference. We all know that makes a difference in terms of life outcomes. They looked at these four points: how ready are kids when they enter school; in Year 7 are they ready to learn; what’s their academic achievement, graduation rate from high school; and then how many of them were in full-time work and training?

When we look at where kids in Queensland are going and what happens to early school leavers, so what happens to those 40% of kids who don’t graduate high school, we know that 30% of young Australians are underemployed or unemployed and we know that in Australia, from the Brotherhood of St Lawrence monitor on hotspots of youth unemployment in Australia, there are four areas where there is 20% or more youth unemployment and three of those four areas are in Queensland, one at

28%. So we've also got this question of what are our kids transitioning to? So these learning gaps end up being employment gaps and opportunity gaps later on in life and all the research is telling us it's a lot cheaper and a lot more effective to try and solve it earlier and earlier.

Is NAPLAN reporting and being public a good idea? Yes, but let's not overplay it. It tells us there is a problem, but it doesn't tell us how to solve the problem is what I would say, and that's where we look to the rich research around what practice shifts about how do we actually get schools to improve and all those other levers, which is what we'll spend most of our time focusing on.

PETER GOSS: We will, we will get to those, these are challenging conversations and some of them are not new conversations. One of the reasons, in partial response Lee-Anne, is the face value interpretation of the NAPLAN data tells a very different story. It tells a story that students gain a lot from a low base and not from a high base, and if you look at that across the country comparing metropolitan students to remote students it would say remote students start behind but then make higher gain in NAPLAN points. Which sounds encouraging and I would love to believe that, but actually when we looked at it from the same starting point the remote students were never making as much progress. So without wanting to dwell on it, getting a clear reflection I think has value to then go into the next conversations.

But let's get down to what these gaps mean in practice and let's try and put a bit of a human face on it. Ricky, you've already started that and thank you. There are many levels that you can talk about this: what are the educational consequences and the life consequences; what are the societal consequences of the lost potential of students who started out doing well and didn't make the same level of progress or students who didn't start out so well but, because of their background, fell way behind, that's lost potential. Lee-Anne, you've recently moved from leading a school to leading the Queensland Catholic Education Commission. What did you see in the lives of students and their families and what are you learning now at the system level?

LEE-ANNE PERRY: I'm learning a lot always at a system level where you can have a broader picture, but if I can go back. When I was reflecting on this issue, gaps have been with us for a long time.

Catholic education in this country, one of the things it was designed for was actually to help move Irish immigrants out of poverty. Most Irish immigrants to Australia, originally the first settlers were convicts and were the poorest of the poor, were uneducated, came from multi-generations of people who had no education. That was a significant part of Catholic education and was a highly successful part of Catholic education, because if you look now you don't distinguish Irish people anymore in saying they are the poorest, the most uneducated. So it was actually a highly successful endeavour in terms moving, because there was an enormous gap between the Irish population and other populations in the country at that time.

PETER GOSS: Can I jump in there, because we had an audience question which was does school segregation by religion widen the gap in school education? Clearly your answer historically would be no; today?

LEE-ANNE PERRY: I don't think it was segregation per se. It had a particular focus which was that most of the Irish at the time who came to this country were Catholic. I don't think segregation - and, again, research would show just having school choice in and of itself it not a determinant factor, there's a much richer discussion around that. Catholic education obviously would focus on a whole

range of other reasons and people go to Catholic education for a range of other reasons, but I think it's an interesting reflection where gaps can in some circumstances be closed.

From my own personal experience, I know we all have varieties of them, I taught in a school which at the time was about 90% Italian-Greek, this was in New South Wales, first generation. So in the days when I'm talking about, a few years ago, they were the big group of migrants, again, coming from poorly educated backgrounds, so strategies and diversity in that school, again, seeing some significant gaps there. It was an interesting challenge because the overwhelming majority of parents didn't speak English and didn't come from a background of education themselves, so working with those. I've worked in boarding schools where you have students from Indigenous populations, rural, remote and town. That was certainly where I saw some of the biggest differences because you had students who came from very privileged circumstances in the city to those who came from remote rural properties and so forth. So the face of students in our schools, in every school, in some there are wider diversities than others, in some there are bigger gaps than others, but I think every school has gaps.

One of the other gaps, and obviously we can talk about those, a lot of focus is on those who are disadvantaged and are starting at a low base, and that's a really significant issue for schools. What I also see are those students who might be called gifted or however you define that, but the very able students and their invisibility at times or their marginalisation in schools, and I think that's an area we haven't focused enough time and attention on. Understandably, there are limited resources so where do you apply the resources? Well these ones are able anyway, these ones are really struggling, we'll put it to the struggling, but as our data is showing us we have systematically done that over a period of time.

So our top achievers are not being stretched in the way that other countries have successfully done that, and I think that's a particular challenge. I can think of individual students whose faces are before me now where I think they were students where we probably didn't do as much as we could have in terms of stretching their particular needs.

PETER GOSS: If I could pick up, an audience member had asked about some work by Jonathan Plucker in the US about talent on the sidelines of bright kids from disadvantaged backgrounds. Yes, they are seeing it in the US, there are some signs that when they focused on that as an issue they are then starting to maybe shift the dial a bit, but it's an invisible problem, as you say.

LEE-ANNE PERRY: People know it's there, but in terms of where you focus your time and attention when you've got limited time, limited attention, limited resources, I think we have, for understandable reasons, put most of it to those who are struggling students. It shouldn't be an either/or, I suppose is what I'm saying, ideally it shouldn't be either/or, we should be trying to provide the opportunities to stretch both of those. And a point I was going to make earlier, I think one of our challenges is a performance culture that we've operated in where the results are what we focus on, rather than the learning and the learning progress. Particularly with those brighter students, "Well I'm getting an A, that's okay, I'm doing well" and parents look at the report, "You're doing well" but are you learning, are you progressing to the extent that you should? And I'm not sure we are addressing that. Well, I know we are not addressing that as well as we should.

PETER GOSS: Thank you. Leanne, you've seen some of these challenges for some of the most educationally disadvantaged students, Indigenous students. That's not true for all Indigenous, the

disaggregation point holds true, but on average. Could you talk about some of those individual challenges and also some of the link to the intergenerational cycles of educational disadvantage that do exist?

LEANNE NIXON: So having worked in communities that did have intergenerational disadvantage, particularly Indigenous communities, I have a strong affinity, a strong sense of social justice around that issue, and I suppose one of the pieces of work we've been doing in the Department of Education and Training is around Year 12 certification. Students who don't get Year 12 certification, whether that's a QCE or a QCIA in Queensland or whatever it may be in other jurisdictions, the research tells us and we know from our personal experiences that they're more likely to end up in jail, they're more likely to have a shorter life expectancy, and they're more likely to have non-continuous employment. We're all aware of the research that tells us that, particularly about Indigenous students.

What we are able to see though now, and this comes back to the importance of NAPLAN data, is that we can see in our own Queensland data that Indigenous students who do get Year 12 certification, their children get better Year 3 NAPLAN results. It's a wonderful piece and I get goose bumps every time I talk about it. I get goose bumps because it just points to the fact that everything we do in education that we know makes a difference has an impact. Sometimes as teachers we don't get to see the long term impact, but in a room full of educators whenever I tell that story everyone gets excited, everyone says, "That moves me".

So every Indigenous child that we can get through Year 12 to get a QCE or a QCIA, their child will have better outcomes at school. That's world-moving stuff. It's the sort of stuff that does make the difference and it's the sort of stuff that good NAPLAN data allows us to see.

PETER GOSS: And every so often hard heads in Treasury and other places say, "Oh, but is this causal, is it really happening?" That's the type of data and the type of story that breaks it down and says no, this way of thinking about building an individual's education endowment really can change generations.

LEANNE NIXON: So knowing that piece of data and having looked at that in our own state data, last year we had an in depth focus in all state schools on Year 12 certification for all kids, but particularly for Indigenous kids. We were able to move the state certification for Year 12s in state schools across Queensland from 90% the year before to 96.3% for the whole state, and for Indigenous kids to 94.9% from low 80s the year before. Now that wasn't pushing any kids, it was more kids graduated than ever before. That's a significant move. Every one of those kids, that's a life impact that we were able to achieve. So someone who can work the maths out better than me, I think it's 1.3% the gap between Indigenous and non-Indigenous in Year 12 certification. That's pretty close to closing the gap on something, isn't it?

PETER GOSS: Fantastic. Ricky - and then we'll move on to some of what we should do about it - you talked a little bit about this issue of what does it look like, but you've also had experience in the US. Can you tell us a little bit about that and some of the broader social and economic consequences when gaps do grow too wide?

RICKY CAMPBELL-ALLEN: Yes, certainly. So I guess it highlights, and we all know this, it's not an Australian or Queensland challenge and also that point that gaps are sometimes hidden. I was working in Boston public schools. In the US, as most of you would know, education is controlled

locally, so rather than the state it's a local governance issue. Boston public schools had about 60,000 kids, we had about 125 schools, 86% of the students were black, Latino or Asian, and the majority of our schools were receiving the maximum amount of additional poverty funding. The graduation rate was about 60% from high school, so it's a classic profile of an urban district in the US with all the challenges that come with an urban district. So it's not the Boston of Boston Legal and that kind of thing, which shocks folks. The demographics are actually closer to that probably of the Bronx in New York.

One of the really interesting things while I was there was in 2012 the Massachusetts State Government implemented a new accountability and assistance framework. They created these five levels and they required schools and districts to report both progress and performance, so the progress that people had made, and absolute achievement on the equivalent of NAPLAN and graduation rates, those types of indicators. But for the first time they required people to report it for subgroups of students, so for identified high needs groups, like English language learners. Some of these schools and districts, their averages had been really high and the narrative about them was, "Oh yeah, that's a great district. You should buy a house in that district 'cos your kid will do really well if they go to that district or to that school".

Suddenly a whole bunch of schools and districts in Massachusetts slipped down the scale because it was shown that they weren't actually serving the high needs groups that well and sometimes, in fact, the kids were going backwards. So suddenly you had this accountability framework that did help identify the problem. Obviously it didn't help you get better, there were some interventions and a whole series of things then that the districts did, but it was just an interesting thing in the framing of the problem. In the US context as well you need to remember that education is really for this generation the civil rights issue, so it's the only public good. You'd all be aware of the big battles over the concept of public health care. Education in the US is the one thing that folks think everybody should have access to.

There was a really seminal report done in 2009 by the McKinsey Group and they tried to frame what is the cost of the educational achievement gap in the US? This really helped reframe how folks thought about education and the outcomes that particularly urban school districts were getting. Off their calculations and modelling - and obviously modelling in this area can be problematic, it's like media reach and the number of hits that you get, it's one of those fuzzy figures. They looked at America compared to its international comparison, so on PISA and things like that; they looked at the racial achievement gap, so between black and Latino students and white students is the way they frame it; they looked at the difference between SES, so basically the income gap; and they also looked at different parts of the country; so the flyover states versus being on the east coast or the west coast and they found that when you put all those things together the educational achievement gap in the US was the equivalent to having a permanent recession in terms of its cost on the economy.

If you think about that, so that gap, that's in terms of individual earnings, growth, GDP, and they break it down and they say if you close the educational gap for black young men that's equal 2% of GDP or something like that, just to give you an idea. But that framing of the debate really shifted how people thought about the need to close educational gaps in the US and you see it even now, Obama's administration have got a piece of policy out at the moment called *My Brother's Keeper* and it's targeted at trying to shift this outcome particularly for young men of colour, is the phrase that's used

there, for black and Latino boys in particular, trying to break their trajectory from what's known as the school to prison pipeline. There are some parts of the US where you are more likely to spend time in prison than you are to graduate college if you are a young black male and, quite frankly, for some of our schools in Boston that was the case as well.

That's a really startling statistic and even when you did get them to graduate high school and you did get them to college, so they have closed the gaps in some areas. They've closed the gap on young black men enrolling in college, but less of them graduate high school. It's like those milestones, so at certain points you can close the gap but you need to be doing it all the way along, but then the colleges that we sent those kids to was really quite confronting as well. So you have this big mismatch of young black men and young black women who have academic ability, but they choose to go to a college that will not give them as good outcomes educationally, so there's this whole area that they're working on in the US there as well.

PETER GOSS: Thank you and I think that economic work, although we do a little bit of that, we didn't put a number on it in this report because we couldn't get confident enough. The numbers are truly enormous. It is not the same size as what's come off in the end of the mining boom, but it's comparable to that.

So when we talk about funding at a national level, and that's not the purpose of today, you should be coming away with the idea that gaps of six months or a year or more, if we can even halfway close them the long run economic benefits, both to the individuals and the economy, are going to be worth far more than anything we could reasonably expect to spend on them. And if we fail to close them or they get bigger or education continues to slip, as not in Queensland but nationally the PISA tests say that has been happening, it will cost us as a nation far more than we could ever hope to reasonably save from trying to scrimp around the edges.

What that means though is figuring out what to do to actually get improvements is absolutely key and that's the next part of our discussion, so I'm going to switch the order a little bit. There are again different levels that we can address this at: what practices need to change in the classroom, in schools; what needs to change beyond the school gates is not just something that schools can address; what needs to change in some of the policies and systems that can enable change to happen at scale and what are some of the barriers? It's a wide-ranging complex thing and I remind you to start getting your questions ready because we'll shift to that part of the conversation.

I'll start with Lee-Anne. In a previous conversation we said some of the big challenges are the variation within schools. Can you fill in some details, what changes need to happen in classroom practice and how do they change the way we think about the job of a teacher if they do?

LEE-ANNE PERRY: If I could start by saying I think we have to remember what our vision for education is in this country, and we've actually got some quite good documents around, the Melbourne Declaration, Hobart Declaration and Adelaide. So we come up with great visions, but then we don't actually test anything that we do against that vision.

PETER GOSS: Sometimes.

LEE-ANNE PERRY: Sometimes we do. I think we've got to keep going back to what is our vision and our vision I think, generally speaking, is a holistic vision. It's not just about performance on tests. I

don't think that's actually most people's vision of education, so we need to keep that as our touchstone all the time.

The other is I've been and I've worked with teachers for a very long period of time and we have fabulous, fabulous teachers. I'm not someone who engages in teacher-bashing, but I also believe we have to be prepared to challenge and to question and to critique what we do. It's not a dichotomy; we have to be prepared to do that. I think one of the things we have to start with is teaching, as broadly understood, is a collective responsibility. Teachers have a core role in that, but so do principals obviously as the leaders in the school. System authorities, governments and parents have a really important role in teaching as a collective responsibility and too often we focus on pointing the finger at particular individuals, rather than that collective responsibility, research as policy makers.

But if I can just focus for a moment on teachers. Recognising all those others plan an important role, one of the things I think we need to do is actually forensically, objectively analyse the work of teachers. What is it that our teachers are doing? Teachers can give you their own individual anecdotes around that, but I haven't seen work that systematically, forensically looks at what our teachers actually spend their time doing. So we get some data around that, the question then is what do we think they should be spending their time doing? There's going to be a range of things that teachers will do, but we have to actually ask some of those questions and is some of that work that would be better performed by others?

I think we've operated in a paradigm of schools for a very long period of time and the way we staff schools and the way we understand the work of the teacher hasn't changed very much over a long period of time, and I think it's time to actually critique that, to say what do we want our teachers to do, how can we best enable them to direct their professional expertise in the way which is going to be of most benefit to the learning outcomes of the young people in our schools, and I don't think we've got that right by any stretch of the imagination. And then schools, remember schools have to sit within a context of community. One of the things schools have an advantage of is students have to be there and by and large most students are at school. We have compulsory education in this country, which is a wonderful thing, and by and large they're there. But it's not just what happens in schools, it's the health that they come with and what's happening in their home.

So leveraging off the fact that students and their parents are connected into schools and how can we build a sense of a community hub around that, not asking teachers to do everything, to be the social worker, to be the nurse, but to facilitate those connections. One of our challenges is we operate very much in silos, governments operate in silos, so you have the Department of Education, you have the Department of Health, and sometimes they talk. Now coming into a system role I'm seeing that yes, they do sometimes talk, but too often they don't. "Who's going to pay?" is often the question, rather than what's the outcome we want and how best do we achieve that? So we need to be looking at that.

We need to look at the evidence, we've got evidence, some things work extremely well and other things don't. Respecting professional autonomy doesn't mean you just let teachers do anything. We wouldn't do that with any other profession, we wouldn't say to a nurse or a doctor or a lawyer, "Just do whatever you like. Doesn't matter, you're an autonomous professional". We would say, "No, we want you to do what the evidence shows works and works extremely well".

PETER GOSS: Could you give an example of that?

LEE-ANNE PERRY: Of what works well?

PETER GOSS: Of things that don't work but that are still done?

LEE-ANNE PERRY: Someone was telling me today about how much worksheets are still used in schools, the same worksheet for every student in the class time and time again. I haven't been around for slates but I've been around for chalkboards and whiteboards and overhead projectors and PowerPoints, and the same things are done, just using a different mode of technology, and I'm sure if I was there in the slate days it would have been slates as well. So I think there are practices which we perpetuate, what I call busy work. In my day, when I was a student at school, the cover page, I did such a good cover page and you'd spend a lot of time, and particularly for girls, it was very gendered as well because girls were expected to do nice colourful neat ones, and then we replaced that with the nice PowerPoint presentation with all the frills and so on.

So I think there are some practices and our students spend time doing things which are not productive in terms of learning outcomes for them. We only have a finite amount of time, we have to use it in the most effective way and to be prepared to say, as collaborative groups of professionals, "This is working well. We are all going to ensure that we are doing these good practices. That doesn't work well and we will discontinue that". If you want to introduce something new great, but let's demonstrate that it is effective and be able to demonstrate that, be prepared to have it contested to demonstrate that it's effective. I could go on, but I'll pause for the others.

PETER GOSS: It's a great place to hand over to Leanne. I would very much endorse that vision of rethinking the use of time and the evidence, but at what level should it be happening? We have autonomy and in some places we have increasing autonomy. Leanne, should we be expected schools to lead all of these changes or what's the role of the education system in delivering change at scale?

LEANNE NIXON: There are a couple of questions there with that autonomy piece, but I'll let that one go and come back to it.

PETER GOSS: Good.

LEANNE NIXON: I'm a simple woman, I'm a practitioner, I'm a principal, I'm a teacher, that's what I am and that's what I bring to the role I'm in. I get there's a strong sense, an awareness that there's a gap between research and policy and implementation at a system level and I think a lot of systems suffer from this.

I think great data shows us what the issues may be and as systems we've got really good at admiring the problem. As a system we're good at wringing our hands and sitting above it and going, "This data is awful, we need to do something about it" but where's the leadership from the system level to schools about how you actually implement that change? It's okay to keep admiring the problem if you've got some solutions for it or if you're supporting schools to actually make a difference. I think that there's a big piece of work to be done there because you can't do it without data, absolutely right, but the system is the one that actually has an oversight of the data and can see where the pieces are needed.

So I know that in our system we provided pieces of work, we've them thrown out, and this is true of most systems, we go, "Here's the data, these are the issues. Here's the problem of practice we can see generally, let's throw these pieces out and hope the right schools pick them up". What happens? It's never the right schools that pick them up. It's like in a classroom. In a classroom as a teacher how do you move the data of your class, how do you move the outcomes for the children in your class? You know the kid, you know what they need to do to move from here to here and then you address it; you put in place some teaching and learning pieces to make that happen. You move it child by child. In a school you move it class by class by knowing the individual, and it isn't any different from a system. A system must have the capacity to see into the data and to know where the support should go.

That's what needs-based resourcing should be about, what's the problem of practice that we need to lead a school to and then supply the pieces that actually make a difference, so it's that gap. All the policies in the world and research can tell us the same things over and over again, but I think there's a big piece of work in this space to actually move to what does that mean for implementation in school? Where's the actionable playbook about how you actually do that as a practitioner? In this state, and this is only speaking for the state system, 40% of our principals are Bands 5, 6 and 9. Now for those that don't know, that means they're probably beginning principals. We expect them to be able to pick up all these pieces and balance and juggle all those pieces just like classroom teachers, yet we're not providing the level of guidance and support and focused guidance and support that's needed.

So I think that's not just about our system, I think generally there's a lot more work that could be done in this space about how do you actually make the difference? It's okay for us to talk about teaching quality and lifting teacher capability, but what do I do as a principal to action that, and I think that there's a big space in there for system work.

PETER GOSS: Thank you, very passionately and eloquently spoken. Could I ask, within that, what's the role of being able to help the principal, whether they're a new principal or an experienced one, or help the teachers to see what does good look like in practice, rather than to say, "Read it off this book and start doing it"?

LEANNE NIXON: What Lee-Anne said previously about the place of good data is absolutely vital in that, having a data-literate culture for our teachers and for our schools. The word "data" gets a flogging, we know that because people go, "Oh, it's just numbers". It's not, it's actually kids and, as I said, it's knowing what this child needs to move from here to here and then providing that piece of learning. That's what real data is about.

LEE-ANNE PERRY: And ensuring that our teachers actually know how to progress them, and I don't think we can assume that.

LEANNE NIXON: No, absolutely.

LEE-ANNE PERRY: I don't think we can assume that all teachers know what to do, what is good practice. Again, I go back to every teacher I've met is willing, they want the best for their students, they want the best, but I've seen it often and I've had it myself, particularly when I was a younger teacher, I just didn't know what to do. I've tried this, I've tried this, it's not working, I know it's not working, but I don't know what to do. So it's about identifying good practice and - and this is a constant, it's not just for initial teacher training, it's ongoing - sharing that, scaling it up, breaking

down, and, because I'm largely a secondary background, this is my classroom. I think we've moved in terms of collective approaches, collaborative approaches. No one person has all the answers and no one school has all the answers. How do we share expertise within schools, across schools, across sectors?

We've got a great platform in this state, I think this is probably one of the most collaborative states in terms of educational sectors, and we need to build on that. We've got a great base because we actually talk to each other, we share practice. I think we have a real commitment to what's in the best interests of young people in this state, but we have to keep doing that. I've known teachers who would be seen under certain criteria to be really good teachers who share nothing. In my opinion, that's not a really good teacher because one of your responsibilities as a teacher is if you're doing things which are working really well, you share that with others.

LEANNE NIXON: One of the other fascinating pieces in that space is we talk about evidence-based practices, but what does that really mean? We haven't had a common language about what evidence-based practice is in our system or across our state and I'm not sure that it actually exists. There are a range of pieces that you can read about that, but when you talk to a classroom teacher about having an evidence-base, what's the rigour around that, what is the language around that? I think it's an absolutely vital piece of work. At the moment we've developed across the Department everyone in central office, through regions and through schools a common set of evidence and evidence framework.

So I think it's a really powerful piece, because I don't think we can keep saying to teachers that this is the gap between research and policy and implementation. We've got to actually lead people to understand what evidence means.

PETER GOSS: I saw that today for the first time and it was really an interesting thing to see and a very encouraging development. My answer to what does evidence-based practice mean is not "I read the John Hattie book and did those" or "Read McDonald" or whatever.

LEANNE NIXON: That's right.

PETER GOSS: It's a group of professionals saying, "We are choosing practices that are evidence-based, but then we are putting them into practice, we are tracking the progress of our own students, we're seeing whether they are having an impact with our own students and a sufficient impact in the way that we're teaching them, in the common context". Evidence has to be based on is it working to improve student learning and that must require local decisions. Ricky, I was going to bring you in but you can probably get the first audience question, because we've got 15 minutes left and I can feel some questions in the audience.

AUDIENCE: I'm a classroom teacher. We do data walls, we do data cafés we call it, we have students pictures next to their data, they come with us data-rich. It's so fantastic, we know so much about them and I go to my classroom, I sit with my profiles and I do it all on here tonight. Then I find out that there's no broadband at home, then I find out that they're between homes, then I find out that mum's left, then I find out they're looking after their little sisters, they can't make it to school, they're not attending. I get really frustrated with the lack of community involvement and the outreach by our schools to those parents who aren't particularly educated or value education. What can we do about this? Talk to that please, if you would.

PETER GOSS: Thank you, great question, a tough one.

LEE-ANNE PERRY: Part of it would go to the comment I made before about teaching is a collective responsibility, it's a society responsibility, and what are we asking schools to do, what are we asking teachers to do?

We've gone some steps towards that with the welfare workers and counsellors and so on, but I think we need to do more of that and it would needs-based, depending on the needs of the community. So you as the classroom teacher are not the one trying to ring up home or to sort out the problem or to buy lunch for the child who's turned up without lunch, but we have resources, trained professional resources whose skill is in that area to engage with families and so on. That's what I mean about I think we have to rethink our understanding of schools and do some more connecting, but our government structures, which are in these segregated departments, doesn't facilitate that.

I'm not trying to be a Department-basher or anything, but we have to look at a more integrated approach and we're starting to do that. I heard today there's some work being done around the Deadly Ears Program for Indigenous people and hearing which is a collective endeavour of Health and Education and cross-sectoral. So there's an example where the problem's been identified, how we can address that problem, and it's not just the teachers and the schools need to be making sure that the children can hear but how we're going to do that. So I think it's a real issue and that's where we can't just say, "We'll just get schools to do it". Our model of schools I think has had its day and needs to change.

LEANNE NIXON: I'd agree with all that about needs-based resourcing is vitally important and how we as a system need to identify the problems better, I suppose, and ensure resources across our whole of government are there but, having said that, the State Government has invested a great deal in that area.

Can I encourage you to dig deep into the moral imperative about why you became an educator, because there are a million reasons why that child shouldn't turn up for school every day, there are so many blockers always in life about why it shouldn't happen, but the best thing you can deliver is a quality teaching and learning environment so that that makes a difference, that child gets that Year 12 certification or whatever other achievement they get, first in family to go to university. That's a life-changer, that's a world-changer, that's an intergenerational changer. So I'd just encourage you to do that.

PETER GOSS: Can I supplement on that very briefly, I've seen a number of disadvantaged schools in New South Wales recently, some of which had got into the instructionally-led and then put it behind the other resources, which is what you're describing; you need the other resources. That is going to change lives. Just trying to make life a little bit better on a day to day basis helps a little bit, but is not going to get them through Year 12.

LEANNE NIXON: Absolutely and Queensland, the QSLRS research has had two phases run now in Queensland twice and tells us we're all great at loving our kids. It's okay to love them, we need to do that, but we also need to teach them. I get very frustrated when I see schools and teachers using their energy about the caring and loving, which they should do, but they have to focus on their main job, they're the only people in those classrooms that are paid every day to ensure that those students learn or that they can.

RICKY CAMPBELL-ALLEN: I think a key thing there is what is the sphere of influence of the school? So partnerships with organisations like The Smith Family, full service schools, all of that stuff, amazing, needed, they're all the preconditions for learning. A lot of that stuff's brokered by the principal and stuff done there, but as a classroom teacher relentlessly focusing on those kids and working with your colleagues, not just being solo hero girl or rock star, so that you are collectively more rapidly moving their progress. I know it's frustrating, but looking at what your sphere of influence actually is.

I think as educators we can shift to the fact that we can go into the parent blame game. That conversation can quickly happen on a Friday afternoon at drinks and it's really important that it doesn't and that we solve for what we can solve for, which is the use of the data, collaboration and of principals focusing on what matters, which is leading teacher development and training focused on practice, and that we do it together. I think that's a big shift for us and it was coming up in this conversation from both of the Leannes that we go there as a society.

AUDIENCE: One of the names that we haven't used tonight is GONSKI, yet the report talks about that in terms of needs-based funding at a system level. I was a colleague of Ken Boston, so I know that he doesn't write fairy tales and GONSKI has been accused of writing fairy tales. That I think is because the needs-based funding was compromised by every school won't be disadvantaged, in other words there wasn't a reallocation of a limited number of funds but there had to be more funds. Do you want to comment on whether GONSKI is now a fairy tale and we all forget about everything they ever wrote, including Ken Boston?

PETER GOSS: Yes, I'll start with that and then any of my colleagues can choose to jump in. I've spoken to Ken Boston about this report.

I would say the first rule of funding is don't start by talking about funding, what do we want to achieve, where are we today, what needs to happen, which is the conversation we've been having, and then, for specific reasons, where are additional funds needed, and then link that back in. The GONSKI that we have today is not the original, the ideals, the principles of GONSKI, the needs-based sector-blind funding, there's not a person on this panel who would disagree with that. How do we get there? I have argued with this report that this shows that funding is not fully going to address need, it's a combination of funding and practice and other things, this report should inform that needs-based funding.

We also need to make sure that we are spending every dollar and every minute that we can as effectively as possible, but I would say this report strongly shows there needs to be more funding for some schools and, if we can't afford that from the budget, then that may mean that some schools need to have less.

LEE-ANNE PERRY: I think the GONSKI report reframed how we thought about educational disadvantage in this country, I think it's got a lasting legacy there. I think at state levels, New South Wales has modified its funding formula within the state system and has rebuilt it around those areas and loadings for disadvantage. You need big changes in data systems to do that. It's taken them three solid years to do it and they've not fully implemented it yet, so the money is moving around there. There have been some smaller shifts in Victoria, but they had more of a needs-based funding model to start with. I think WA has done it but hasn't advertised it.

So I think we've had shifts and yes, the promise of no school losing a dollar and also it being framed as an election issue were the things that really took something that was supported by all three sectors to becoming a political football. But I think there is a lasting legacy of GONSKI and you see it operating at the state level.

AUDIENCE: In GONSKI it did show that state schools got more than their fair share of, you might say, problem students or low socioeconomic students, and we're seeing in society this move towards private schools and religious schools, this segregation that was touched on before. What I'd like to ask is, is this widening the gap, this segregation which is funded by the Federal Government through its funding of mainly private schools, whilst states are funding mainly state schools? So are we seeing this widening gap purely due to this Federal funding? Just another point with Lee-Anne, did you make the case that Catholic education is no longer necessary because that was 100 years ago?

PETER GOSS: You can think about the answer on that one. As a matter of fact, this report did not talk about the widening gaps over time; it talked about widening gaps as students move through school. Other people have done work that suggests that maybe the level of segregation is increasing. I think the vision of GONSKI is that they are all our kids and that getting great practice in all schools and getting the stories out from that is the strongest lever in some ways that we have to change the patterns. I think it's damaging if a parent thinks, "I must go to a private school because I can't get a good education otherwise". I don't think that's true, but at times that story is damaging. We need to counter that with stories and data showing that actually kids are progressing well in all places.

LEE-ANNE PERRY: Yes, I have to respond. I obviously feel Catholic education still has an important place to play. I'd go back to the comment about GONSKI and I think GONSKI articulated in a way that hadn't been articulated. We've always had some form of needs-based funding actually, but it articulated the rationale in a really comprehensive and nuanced way of addressing need. I don't think we should lose that. It's become politicised and all of those things, but it goes back to my comment before that we've got some wonderful, like the Melbourne Declaration and those. We have them then we lose sight of them, so I don't think we should say that GONSKI is a myth or anything, it's a lasting legacy.

There's much that happens which is probably not visible. If I talk specifically about Catholic education in Queensland, for a considerable period of time, well before the GONSKI report, we have had our own what we call "group funding distribution mechanism" where we redistribute amongst all Catholic schools in Queensland based on need. We work through a very complex process. It's a collective endeavour that says we have a collective responsibility and those with the greatest needs should get greater resources. So we do that. Many people, unless you're in Catholic education, wouldn't know that, but that's a commitment that we have as we've always been committed.

Is segregation increasing? Actually, in terms of proportions of students with high needs, disability, Indigenous, low socioeconomic, our figures show that that's actually changing. Proportions of students in our Catholic schools, and I can only speak specifically about those, are increasing, and part of it's to do with seeing the schools actually have capacity. If you have a student with a disability, if you have a student who has particular needs, Catholic schools are committed to them and can resource them and support them. So our proportions of students are actually increasing not decreasing. So on one measure that segregation's actually changing a little bit in what I think's a positive way, because I think all schools should be supporting a diverse range of students.

I think we're certainly seeing that that's happening and I'd like to think that the great work that was done in the early days with the Irish Catholics we will continue to do with whoever presents at our schools now.

LEANNE NIXON: I have 100% support for needs-based education obviously and this government has in Queensland's version of GONSKI sent all that funding from the centre out to schools, so there is more money in schools at the moment in Queensland than there ever has been and it has a needs-based formula attached to it as well. Having said that, there is always a space for more, but can I tell you that sometimes I feel, having been in the system for a long time and education for a long time, that the discourse around how that gets broken up often is a politics of distraction, I suppose. It distracts us from the core business, which is about how to use every one of those dollars best to ensure the best outcome for every kid. The funding gets more airplay than, for me, what is the real issue, but that's probably just my bias of where I live in terms of the work I do.

RICKY CAMPBELL-ALLEN: We've got a unique education system in Australia, we have three sectors and it's not going to be wound back. Some people hold this utopian view of us not funding every school and every student in Australia. There is a reality that the public system in Australia educates and is responsible for educating a significantly high proportion of students from low SES backgrounds with higher learning needs and that stratification has increased. One of the biggest things we can do to offer really rich and academically challenging schools, in the right way of challenge, is to ensure that we have all levels of SES in our public schools to avoid the kind of residualisation issues that can go on in some very disadvantaged communities.

AUDIENCE: One of the points that Lee-Anne made was about how teacher time is used. Now to illustrate the proposition I'd like panel members to comment on a very brief personal anecdote. In the late 90s I was the English Head of Department at a Brisbane suburban state high school and under a teacher exchange program, which Education Queensland used to participate in, it's now since abandoned it as no longer core business, I spent the year in a high school in Mississauga, which is a satellite city of Toronto in Ontario. Two schools, quite similar, about the same size, both worked a four period day, a 20 period week.

In my Brisbane school, teachers on a full load had five or six classes. As a Department Head on a reduced load I taught three classes. In the Canadian school employed as a staff teacher I taught three classes. That was because it was what the Canadians called a semestered system, so the kids only did at any one time as many subjects as there were periods in the day. So they did four courses in semester one and four courses in semester two. I taught six classes in the year, but in a very manageable way.

My proposition is that we routinely manage high schools to ask teachers to juggle too many balls at the one time. Would people care to comment on that? I don't think we get the best result out of the time and effort that teachers put in in high school.

RICKY CAMPBELL-ALLEN: Australia compared to international comparisons has quite a high face-to-face teaching time, we definitely could take a look at that. Countries that are performing more highly than us on things like PISA are making significant use of collaborative time to observe each other's lessons and do collaborative practice in a highly intentional way. That would be my initial comment.

LEE-ANNE PERRY: I don't want to go into teaching loads, these are whole industrial milieu which I think we actually have to look at in those and looking at me, I'm the spokesperson for Queensland Catholic Education on enterprise bargaining, so I don't want to go too far there. I think we do have to look at the industrial model and how we do that. So I'm not necessarily arguing that teachers have less face-to-face time, as you're calling it, but it's the time that we think reasonably teachers should spend doing their professional practice and what makes up at the moment that professional practice.

If I could just use a specific example, I was the principal of a school and, because it was an independent Catholic school, I had some flexibility around what I did. Things like sport in schools, and as someone who's taught PE I think a PE teacher's role is the physical education of young people. What comes with it is organising sports carnivals and doing all these other things. I was able to employ trained sports administrators and sports practitioners to free up my PE teachers to use their pedagogical skills. So that's one example. So it's not necessarily reducing their teaching load, but it's reducing some of the other things that go with it that impact, instead of having time to prepare work, collaborate, meet with others and develop good resources. You've only got so much time, how do you spend the time?

So I'm not necessarily arguing for reduced teaching load, but ensuring that whatever we agree is a reasonable load – and that's another debate – the teachers spend it on what I call core business, which is teaching and learning for young people. Broadly understood, because I am absolutely with Leanne in terms of yes, we have to care for students and do all those things and that goes with it, but sometimes we spend disproportionate times on those models.

LEANNE NIXON: I suppose as a principal and as a teacher, my main concern is that the time that's spent is about the things that matter. Sometimes I think our schools are constructed to suit the needs of the teachers and not the needs of our students, and that won't be a popular statement for many people. But I think that, once again, until we come back to always talking about the outcomes for kids then the debate gets distracted by a whole lot of political agendas that really are not where, I believe, we need to live in terms of outcomes for kids.

PETER GOSS: I think that's a tremendous place to finish. I have seen schools that are doing this, I've seen them that are doing the rigour, that are doing the data and that are using this time really intentionally. The teachers when you ask them say, "My job feels busier now. I feel more accountable now, because I know if my students are there" but they also say, "My job is better because this is the reason for teaching, to help children learn. It needs that other support".

I'd like to thank you all as an audience for your time, attention and great questions, but particularly to thank my three tremendously passionate and informed panel members, Dr Lee-Anne Perry, Leanne Nixon and Ricky Campbell-Allen.

END OF RECORDING