

Hello, I'm Corey Haley and thanks for tuning in to the Intersection Education podcast. My conversation today is with Dr. Ryan Dunn. Ryan is a lecturer in Melbourne University. He started his career as a primary teacher before moving to study under John Hattie of visible learning fame. Looking at the effectiveness of practitioner research as a form of teacher professional learning. He's advised educational leaders and worked with teachers and students throughout Victoria, Queensland, New York City California and now Alberta. What I appreciate about Ryan is that he brings a great perspective to conversations around education, Having both the academic knowledge, and also the lived experience of working with schools to put research into practice. He presents a great balance of research can inform what we do in schools but also how researchers can learn from working in the field. I was able to speak with Ryan during the Alberta Teachers Association You Lead Conference in Banff, Alberta. If you're interested, I highly recommend you check it out. I think you will really enjoy our conversation and learn from the insights that he brings.

C: How're you doing Ryan?

R: I'm Really good.

C: That's good. Thanks for joining me today. We are in beautiful Banff, a place that you know. I heard that you were living abroad for a year, and let's get right into it... you had a little experience in Banff. Tell me about your living abroad year.

Ryan: Well, so I suppose I'm the typical Australian that comes over and does the ski season in Canada so... I flew into Vancouver, caught a bus to Banff and yeah, spent a season here in 2000. I remember getting off the bus in Banff and it was minus 32 and I walked to the hostel I was staying at and by the time I got there I thought 'what have I done. I don't think I can handle it here. But it wasn't quite that cold for the rest of the season.

C: That's awesome. It seems like every second person that I see here has an Australian accent at least the people who are working here. But.. yeah.. that's fun. And then you, I heard you didn't stay in Banff though. You kept going hey? Kinda crossed the continent a little bit hey?

R: Yeah so I was living in staff accommodation and one of my friends I was living with, Brad, was from Halifax so we sort of decided to buy a car and drive back to where he lived. So drove from Banff all the way across to Halifax. We took about two and a half months, which was fantastic. Saw some unreal spots.

C: Now we often say that, you know, our lived experience shapes kind of what we do, so that was I imagine was before your teaching degree? What did you learn in that year of living abroad that maybe informed your next steps, so your teaching or as you progressed as an educator.

R: Yeah I mean what was interesting...I didn't have a teaching degree at that time, but I actually just finished a business degree so it was an interesting experience I suppose. My background in Australia was growing up in a small country town so I was surrounded by people that had known me all my life. And a part of traveling was really to find out sort of who I was and to have some independence and to meet people who didn't know my background... to explore that and I found Canada was a really fantastic place to do that. Canadians are very similar to Australians, very open, very caring

people. I just can't speak highly enough of the year that I spent here. It wasn't all rosy I suppose as well, I remember, and I spoke about this yesterday, that one of the things that I did was I tried to get a job as a housekeeper at the hotel we're at at the moment, the Banff Springs and had a business degree and couldn't even get a job cleaning the rooms here so... it's sort of interesting to come back and actually have a speaking engagement at a hotel that didn't think I was good enough to clean their rooms.

C: You showed them eh?

R: Yeah, maybe... I don't know (Laughter)

C: Well... that kinda leads me into my next one. A lot of people think that teaching is kind of a calling, it's something that you kind of learn that 'oh yeah this is where I need to be'. We talked a little bit about your experience going abroad, things like that but maybe walk through. Was there a moment when you kind of knew that teaching was for you? That education was a field you wanted to go, you talk about going through a business degree. What was it that brought you to the teaching profession?

R: Yeah, so I don't have any teachers in my family so it wasn't a family thing but when I was doing my teach- sorry, business degree, one of the things I was doing, was I was working at... now I'm not sure what the equivalent would be here but we have out of school house cares so before and after school care. So with working families that'll drop their kids off at school in the morning and will have people looking after them. So I was doing that while I was at university, so working with elementary school aged children every morning and afternoon and then on the school holidays, I'd work a holiday program. So for my entire business degree I was connected to elementary school children and I just found that the longer I was working in that, the more I thought well I actually do want to work with young kids. And so when I finished my business degree, I travelled like we spoke about. I came to Canada, by the time I moved back home I was pretty sure that was what I wanted to do, was education. Interestingly I had a lot of people try to talk me out of it.

C: Who's that? Tell me about that. That's interesting and by the way that's not uncommon. I've heard a lot about that. In fact I've been seeing some research saying that the single largest barrier to high school kids going into the education field are the school teachers telling them they shouldn't. (Laughter) Who is it telling you you shouldn't go into education?

R: Well my parents were really supportive but my extended family, there was quite a few people that thought I would waste a business degree if I went into teaching and I think it was probably a money thing as well. Thought that there was more money to be made in the corporate world than there would be in education so it was seen as a lesser career option at that time.

C: Yeah... yeah I definitely have heard that same story before. So tell me about what you're doing right now. Tell me about what your work is right now at the university and maybe just bring us through that.

R: So my work at the university is quite varied which is good, keeps it interesting. So the main things that I do there is I lecture in the master instructional leadership and I work closely with John Hattie and Steve Denim in their subjects. The other thing that I do at the University of Melbourne is work within a thing that we call the University of Melbourne network of schools. And the network of schools is essentially, every year the

university has 20 schools that they work closely with. The schools are cross sector so we have independent, private schools, Catholic schools as well as department of education schools. They come together and work on a common area of interest. So we go through a process of about 6 months of working out what are the things that you really want to grapple with and explore more deeply with the academics at the university. And then I usually work with a group of 6 or 7 schools out of that broader 20 on an improvement project. It can be as varied as things like data literacy, there's also a group that were looking at Stem and various other things, critical thinking... so that's a really interesting project to be involved in. And one of the things I really like about the project, it's the first opportunity I've had to work in a cross sector improvement project, so to cut through some of the system initiatives and actually just have discussions about what good teaching and learning is, it really gives a good opportunity for that to take place.

C: That's actually a really interesting thing... it's rare that I hear that universities are actually working directly with schools, in schools and they have those partnerships. That would be interesting. What kind of questions, or what kind of role do you think that academics, people working in universities... is it you giving them structures but does it also kind of feed back and form your work about what's going in? Tell me about what you get out of working with schools in the university setting.

R: Yeah so I think... one of the backdrops to why this has happened is there's an administer report released in Australia talking about initial teacher education, so... you know, how can we improve pre-service education. And one of the recommendations was that we should have structured mutually beneficial partnerships between higher education providers and schools. So that's sort of a un-opinioned principle of what we're doing at the University of Melbourne, is to make sure we have these strengthened partnerships. Really, it's about making sure that then the pre-service students have a really consistent approach to what's happening so it's not like they're at the university and taught 'well this is what good teaching and learning is' but then going into schools and being told something completely different. So we're trying to have a stronger connection between the schools and the university so it's a more seamless connection for the pre-service teachers. But I mean it's... it's a really interesting project and one of the things that has really struck me is it doesn't matter whether you're a high fee paying private school in a really affluent part of Melbourne or you're a low SCS school in a rural setting, you can still have common areas that you can work on and learn from each other on. And so that's been one of the real great things we've seen... schools that are sometimes put up on a pedestal, they've been great schools, learning things from those schools that may not get the same recognition in our sector and they can have really close working relationships and learn from each other.

C: I bet. What are some of the things that you've seen? You talk about these... let's say schools that are in more affluent areas. What are some, might I ask, of the topics that you've found, have been common between those two schools where they can come together? Maybe just the biggest ones you've seen?

R: Well I think... I suppose that's where my work has evolved into is I think in education, we're getting some pretty solid research around what the what is... in the Victorian department of education which is the state that I work in, they have the Hyne-Peck

teaching strategies. If you look at Mosano's work or John Hattie's work... I think we've got a really good sense of the 'what'. So there's not a school - I haven't walked into a school for the last four years that hasn't done some sort of work around learning intentions and success criteria. You know, feedback, formative assessment, these sort of things.. it doesn't really matter where you go in the world, people are talking about it so the 'what' is pretty solid in a lot of ways. But I think what we're really grappling with and struggling with in education systems is the 'how.' And that's how do we actually implement these things effectively. So for something like learning intentions, you know both schools have worked on it. When you go in, quite often it's a really low level approach. It might be that it's mandated that they write it right up on the board at the start of every lesson and you say 'well is that really going to get those affect sizes? Like is that really going to affect your student outcomes the way that the research is?' So a lot of my work is actually going back and saying 'let's look at some of these things that we know work. But let's see if we can get more sophisticated about how we implement it in schools in an increasingly complex way. You know, if you haven't worked on this area, this might be a really good starting point. You know, to entry jump into it. But if you've already been doing that what's the next level of work in this space? And I think that's where, and John Hattie would acknowledge this when you hear him talk. He talks about it that it sort of worries him that his research is misinterpreted in a lot of ways. That it's become this very surface level sort of scattergun approach to say 'well let's rank his affects size and say we do this, we do this, we do this.' The question is are you doing it well?

C: Absolutely, and we've talked. What I'm hearing a lot more in the research and from people is more talk around those organizational structures, so I'm glad you brought that up. That's an interesting part of your work for sure. Now you mentioned John Hattie so I think that congratulations are in order. You just graduated, or came back with your doctorate under Hattie and heard a couple, maybe a few other people but, I mean I don't want to get into your doctorate and you outlining everything because I know that's a huge amount of work. If you were looking at your doctoral research and you said 'okay what is the biggest takeaway?' what is the one thing that you would like schools to hear about what you were looking at and what you were researching... what would that be?

R: Well I think one of the things about coming to Canada that's been really interesting is you're embarking on a similar journey to what we're doing in Australia and when I started teaching, the way that we would design units of study was build around, using backward design and those sorts of processes to sort of talk about about what does a student need to know and be able to do. So we're looking essentially at skills and knowledge. And one of the big game changers in the curriculum back in Australia was we have this capabilities curriculum. We're not only now needing to teach and asses skills and knowledge but also capabilities. When we're talking about the capabilities in the Australian curriculum, we're talking about things like critical and creative thinking. So it's been nice to come over here and see that you guys are grappling with those ideas as well. For me I find it really interesting that my background is teaching professional learning and school improvement, that we need to make sure we're also thinking about those capabilities at our level as well. So how are we actually supporting teachers to become critical thinkers about their practice? And that was one of the big takeaways

from my doctoral research which was looking at designed thinking as a form of professional learning... was really making sure that the teachers that get the most out of inquiry processes are the ones that are actually doing critical thinking. It's about that disposition. So they're curious. They're really looking at innovating. They've got a bias towards action. Thinking about how we can cultivate those sorts of dispositions intentionally with our teachers is really important.

C: What are some of the structures, so you talk about these dispositions or what not... what are some of the structures that you've found, because you've been working with schools around this idea, that cultivated that type of thinking in teachers? What are perhaps, some of the actual protocols or strategies that you've found effective to get these teachers being a bit more metacognitive about their learning. Being a bit more reflective? To do, just as you said. Can we put in place, do you think, some things to encourage this thinking from teachers?

R: Yeah, definitely. And I think if you look at the Agile schools website that someone in Bixby has put together, that there's a lot of tools in there that can actually help you work through some of these processes. And listening to Simon speak yesterday, he was talking about having a healthy skepticism about some of the research. So it's encouraging that it's not putting things on the table and talking about them like they're absolute. It's looking at 'well this research says this. But this research might say that.' So how are we going to work through that. What does that then mean for our context? So it's actually putting some power back in the hands of the teachers to say, 'you know, we can make some decisions about this based on what we know about our context and where we're currently at. We can actually work through some of these things. So it's encouraging them to be not skeptical, but to really critically analyze the literature that's being put in front of them. And to go deeper into it. Like I think going back to learning intentions which I mentioned earlier, finding research that's looking at learning intentions in a rural context if that's your school. What's the research being done on that or what's the research about learning intentions for English language learners. Find some research about that. So it's not this top line that's not really specific to your context. What's being done in Canada? What's being done in your province in the type of context that you're currently working in? That becomes real important. Drill down deeper into it.

C: Absolutely. You talk about these mindsets and I just wanted to get into that a little bit because you talk about this mindset and being a reflective practitioner and getting teachers to go back on their thinking. Can you just define that term, cause I think at least in North American context as soon as you start saying mindset, people jump to Carol Dweck and this idea of.... Not an idea but they have a defined notion of what a mindset is. Is that what you're talking about here? Is this mindset of constant improvement or that we need to work on what we're not so good at as opposed to working on what we are already good at? Or is it something bigger or do you have a different definition of that?

R: It's... it's interesting when you actually look at the literature around mindsets and dispositions and capabilities. Sometimes they're used interchangeably. So depending on who you're reading, the way that I use mindsets when I'm talking about designed thinking is because that's what's come out of it Stanford. They call them designed

thinking mindsets. I suppose in my PhD I talked more about dispositions. And Perkin's work out of Harvard becomes quite important, and he talks about some different parts of a disposition. So ... have you got an inclination towards it? Just because you know that having a bias towards action is actually a good thing, does that actually mean you still do it? So it's not just about... even if you talk about Carol Dweck's work and mindsets, in a lot of schools it's taught as a knowledge base. So you go into the schools and the kids can actually write a lot about what a growth mindset is but it's not about having the knowledge. It's about having the disposition. So it's actually a situational thing, a growth mindset. Do you actually use a growth mindset when you have an opportunity to? It's not important that the kids can all talk about it. What's important is when there's an opportunity that arises, that they can either go 'I can have a fixed mindset to that, or a growth mindset. I will choose the growth mindset.' That's what's important.

C: Yeah absolutely. And I mean Carol Dweck has come out, as you know, in the past few years just saying how her research has been misinterpreted and it seems like a theme here. Mr. John Hattie, Carol Dweck ... they'll all bring out this research that perhaps doesn't get interpreted the correct way or ways that they intended and then they have to come back and be like 'oh actually...we were thinking about this.'

R: But that's... John encourages that... Going back to what we were talking about with the critical thinking. Like, he wants people to do that with his research. So you know, some of it's quite provocative. Like he'll talk about things like.. you know his research shows that content knowledge doesn't matter as a teacher. But when you hear him talk about that he's like 'well why is that so?'. And everyone says that it should matter. That you should have really good content knowledge to be a good teacher. So he would say well - and I've heard him speak about this about a month ago, he was saying that the reason that it doesn't matter is because quite often classrooms are set up around surface level understanding. Now if you've got a classroom that's set up around deep understanding of content knowledge, then the teacher has to have a deep understanding of content knowledge. So like you can hear the sound byte and say content knowledge doesn't matter. But you've got to dig deeper into that and say 'why?'. Why is that the case? And it's because classrooms are often being run at surface level understanding. I could teach physics without a great understanding of physics, if it's just about surface level understanding of physics. If that classroom is built around deep understandings of physics, I would struggle.

C: And I like that idea of that deeper and surface understanding. And obviously it comes in Hattie and some other people would say we need to learn both fast and slow and all that kind of things. How do we balance that? How do you think we can encourage people to really think about that deep learning or that slow learning? At the same time that there is a certain level of surface knowledge that we need. How do we shift the mindset or the disposition as you said, of teachers to get into thinking about deeper levels of learning? Have you had some experience with perhaps some structures or is it just knowledge they don't have? Or is it just cuing? What have you seen is effective?

R: Yeah, so going back to John's work and he would talk about that you need both sides. We don't want to get into a situation where we're talking about learning but it's at the cost of surface learning. So we want to be moving between them. And he talks about actually, how we should be moving in every lesson between surface and deep.

Not saying, you know, we've done some surface level work at the start of this unit and now we're getting into the deep learning. We're always moving between the two. That's the most effective classroom in John's opinion. But I find that some of the work we've done at the graduate school of education in Melbourne University, out of the assessment research centre has looked at this idea. So what we do is we look at developing progressions of learning and we use cognitive taxonomies to do that. So it's like well... what's this quality criteria look like? Be it the lower end of some of the cognitive taxonomies. And also thinking about what would they look like at the top end? So you might be using a cognitive taxonomy like Bloom's which is fairly popular and you know, you're starting to look at those higher levels and the critical thinking levels. You might be using something like, and John Hattie's become a solo taxonomy. But being really clear about what it looks like, we're not getting into a situation where we're sort of talking about 'oh we're doing critical thinking today.' We can get really precise on 'well you're doing critical thinking as soon as you're getting kids to do some analysis, some evaluation, some synthesis.' These things are really clear. So if you're asking kids to do that, you're asking them to critically think in that learning area.

C: Now when you're working with teachers, what does that look like? So are you developing these lesson plans together or are you bringing a bunch of teachers together to develop that understanding? Or is it a lesson plan? Is it maybe a structure? What does that look like transmitting or helping those teachers put in place in their practice?

R: Yeah, so one way we would do it is to actually develop the progression. So you need to have that underlying progression of learning that sits behind what you're doing. When you've got that underlying progression, then you can start to map out what that student can do and then what they're ready to learn next. That can look like rubrics, which are now quite a dirty word in education... but if you've got a quality rubric it can become a unit planner. You can set out and can know where this student is and I can look at what they're ready to do next.' And that's when I develop my learning activity or my learning experiences around. But once you've got a learning progression, the students can start to self regulate their learning. They can start to look at 'well this is where I think I'm at. And this is what I think I need to work on next.' And unless you've actually got that learning progression that's transparent and clear for everyone in the room, kids will never be able to self regulate their learning. So I think we use words like self regulation.. I think even if you sort of look at the three feedback questions, the 'where am I going to next'. Kids can't do that unless they know what the progression is. And quite often we talk about self regulation and use that sort of language in schools, but we haven't clearly laid out what the progression looks like. So that's a part of what we do, we make sure let's make that clear. That comes out of Patrick Griffin's research that he did in Australia and he looked at what was happening in Australian classrooms and the most disadvantaged kids in Australian classrooms are the top 25 percent. That's not the gifted, that's the top 25 percent in every classroom, and what was really happening to those kids over time is that they start to plateau and in some cases go backwards. So when they sort of delved into this deeper, they realized what was happening was that these high achieving students in every classroom, the teachers didn't know what to do with them next. 'I know they're bright, but I'm not sure what to do with them.' But then in that research they also went and interviewed people that were moving every student in

their classroom and really what the difference was with those teachers was that they had a progression. They said 'all those kids over there, once they can do that, here's what I get them to do next.' So they had a really good mean to a model about the learning progression that was laid out. That's where the assessment research went in and said start putting this down on paper and actually writing out what the progression is. And that's what a lot of their work has been based on over the last 6 years.

C: The fact that you guys are helping not only the teachers to communicate what that progression is, but it sounds like you're helping the teachers to understand what that progression is themselves. You can't communicate what the progression is if you don't understand it yourself as a teacher first.

R: Totally.

C: So that's where it starts. It starts with teacher expertise and the teacher knowledge so then it comes down to the students. I love that.

R: In modern day, when you're working with a mass of people, and I've been doing this recently, is sometimes I've been really successful in mass and the difficulty for them can actually be breaking it down. Saying what are the pre requisite skills that I would need to be able to do this task that you've given to the students. So it's a real knowledge building exercise and it's something that we always do in teams. It's not something that we'd want individual teachers to be doing because it takes time to work out that developmental continuum. You know, what is the learning progression that we'd expect to see? There's already good resources out there like first steps, which when studied in Western Australia that was a literacy resource. They had a really good continuum for learning. So there's already some things out there that you can use. It doesn't mean you have to build them all from scratch. We look at the curriculum and just try and get it down to a finer grain that actually means it can be meaningful for teachers and for students to use.

C: And that comes back to your point of, we have a good conception of the 'what'. But we need a little bit of help where's the 'how'. We put them in place, this literary resources that exists. They know it or we have access to it but what they don't necessarily have is 'how do I make this come alive in the classroom? How do I effectively use that?'. So I love that you're coming back on that same idea. And I want to move on to this next point, which again, involves the teachers. And it's something that you said the other day that I didn't have a great conception of and that's educational design research. And this is getting back into not only teachers understanding the curriculum and how to do this, but it's also them perhaps seeing them more as action researchers. Tell me about maybe what, first of all, educational design research is and your term there. And what might that look like.

R: So educational design research is a fairly new methodology so... it's only about 10 years old. Little bit longer maybe now. And it's similar to action research but the two things that sort of set it apart are that with educational design research, it's a partnership between practitioners and researchers. Which is not always the case when we're talking about action research. Action research can be a teacher doing something on their own without the support. If you look at the literature around action research that can be one of the criticisms of action research, that teachers don't often have the skills and dispositions to take the research with all the action research regal. So that's a little

problematic. Educational design research gets around that by saying 'well, the practitioners are still doing research but it's in a supportive framework where they work with the researcher.' The other things that sets educational design research apart from action research is that it has a strong emphasis on utility. What were really looking at is that the research cycle is useful for the end user. Now the end user in educational design research is students so what we're really looking at is making sure we're analyzing 'is there actually an impact of this work on the student?' Which some old action research doesn't focus on. But action research if you're thinking about things like self study. It might be that you're just reflecting on how it's made you feel. Have you improved your practices? Where as design research would say well actually you should be looking at 'has it had an impact on the students that you were working with.' So they're sort of the two things that really set it apart.

C: Yeah, that sounds great. I'm really excited to hear that universities are working closer with practitioners, which is in the classroom. I'm really excited to hear that. I think that's an amazing model that I'm interested to follow. Now one of the things that you spoke about with that is you know, this university person or researcher comes in building this design and you talk about, in some of your presentations, about there actually being a dip in achievement in the beginning. Where we come in, and I could see if there was that achievement dip at the beginning of an implementation phase, where teachers might get a bit frustrated. They might work with all these high tower university people... 'they don't get, this isn't working.' But then as they kept with it, the achievement did actually go up. What were some of the things that you were able to do to try and keep the motivation up with these teachers to get through that implementation gap and perhaps some of their small level achievements so that overall in long term they were getting these higher level achievements with this new intervention or strategy or practice or what not?

R: Yeah, so in the research that I did in California we were looking at a district wide educational design research project, one of the data collection methods that we used was we collected a survey four times over the year. So same survey, the teachers filled it out four times through the year. Between time one and time two, the teachers actually reported that the teaching practices went backwards. So we found that really interesting and the way we interpreted that was actually that when the teachers got deeper into the work, they actually recalibrated where they were at. So in time one, which was at the start of the year when we first did the survey, they actually overinflated where their teaching practices were. When we started to get into the work, they realized 'hang on. I've got a fair bit to learn here.' They actually pulled themselves back and said 'I think this is actually where we're at.' From that time two or that wave two data onwards, they kept reporting an increase. Pretty dramatic increase as the year went on. So I don't think they actually did go backwards because the other data set that you can look at, they said they went backwards but the students mathematical practices were improving. It's like.. how can your teaching practices get worse but your student practices can get better. So the way that we interpreted that was that it was a recalibration. They'd realized there was still a lot to learn in how they could teach mathematics.

C: Do you truck that up to just... you know, cognitive dissonance about learning something new and the whole idea of learning kind of being a bit uncomfortable

because you learn things about yourself? Or do you think there was maybe an initial resistance to change or... what do you think the underlying causes of that was outside of ... they overinflated their initial.. they were overconfident?

R: Yeah I think so. I think that... well we're working with maths teachers. They were pretty confident that they were doing a good job. And by and large they were, but what we had was a new set of standards that had come into the states at that time and there were some instructional shifts associated with that, that were quite clearly articulated. And when we started to unpack them, they realized they could get more sophisticated about how they actually enacted those in the classroom so I really think that it was just a recalibration. And when you're talking about dissonance, I suppose... for me getting back to when we were talking about the progressions with students, it's the same with teachers. I think the way to get around dissonance is to make things achievable. And what we can do is we can work on really big ideas in education but what we've gotta do is drill back down to say 'what's something that I can do tomorrow or next week in my classroom?' And when I've done that and I've even bettered that, what's the next thing that I can then try and even look at bettering. So I think the way to get around dissonance is to make sure that we're breaking things down... and I'm not coming in and saying that this is what you should do. But we break it down in collaborative groups, we talk about you know... what are these big ideas? Might be dialect teaching the mathematics classroom, well alright what's the first step for us. What can we do next week that will set us on this journey of starting to do some dialect teaching in a mathematics classroom. And they can be really simple first steps that any teacher could walk away and try.

C: Right. Just do something. Do one thing to improve your class.

R: Yeah which is one of the designed thinking mindsets, is have a bias towards action. So actually say, let's prototype something. Let's talk about what it could look like and let's get in and try it.

C: That's great. I want to move away from perhaps your research, or maybe it will be related to your research.. but what is one thing about education that you believe is true that most other people would disagree with you about? Is there anything about teaching and learning that you've come to know or you've come to believe true that most other people wouldn't because they just haven't got there or they just don't think the same way? Have you noticed anything where your thinking is different than the norm?

R: Oh... now that's a really tough question. Yeah I don't.... I don't know. I work in the massive instructional leadership so for me it's been a really nice shift in Australia over the last decade, that we've gone back to instructional leaders. Where if you want to be a leader in the Australian Education System, the quickest way to do that is to know teaching and learning really deeply. So when people talk to me about my career and other aspects.. or like pre-service teachers might say "look I want to be a principal." It's like, well be really good in the classroom. It's a thing in education. The quickest way to get out of a classroom is to be really good in the classroom. So that's been a shift, but it's been a shift in Australia. We've gone back to that. I suppose one of the other things that I find odd in education and I work with an academic, Duncan Simons (*sp) back at Melbourne University and he does a lot of work around the investigative approach in mathematics. I think inquiry in investigation can get a bad rap and I don't think people

really understand how much explicit instructions still should take place when we're using inquiry in a classroom. So while Duncan talks about the investigative approach, there's a lot of explicit instruction that should take place when you're going through that cycle. And I think something we don't often talk about, we see this dichotomy of you're either doing inquiry, or you're doing this explicit instruction. Not that you should be doing this explicit instruction through your inquiry processes. So if you are going to do the investigative approach through teaching and learning or inquiring process, that you really need to up certain teacher practices and those sorts of things. You need to be watching those students really closely to get the teaching points to know 'well what am I doing my explicit instruction on.' And I don't think that's something we discuss widely in education at the moment.

C: Yeah I agree. I love your comment around the best way out of the classroom is to be great in the classroom. And that kind of leads well to my next question which is, when you think of the term master teacher.... What comes to mind? And why? Who's a master teacher for Dr. Ryan Dunn.

R: Well that's a good question. Look... not one person would come to mind but I suppose.. the last few years that I was in the classroom I was considered to be quite a good teacher and one of the jobs that I was given was to do some teaching with a second year teacher that the principal at the time was a bit worried about. And when we started to work together, I learned so much off her in the two years that we talked than probably anyone else I've ever worked with. So when we think of master teacher, I think that you can learn from anyone. And years of experience doesn't always equal expertise. It can, don't get me wrong, it definitely can. But you can learn a lot off of first and second year teachers as well. So for me, Christina, was a huge turning point in my career. Some of the things that she did were exceptional. And at the time I probably would have been considered one of the strongest teachers in the school, and she was probably considered one of the weaker teachers in the school but that just wasn't the case. People hadn't actually seen her practices. They were making judgements on her personality not her practice.

C: Interesting. Absolutely. And getting into the classroom and learning. I love that answer. Great. Thanks for that. I've got a couple of questions now that are a bit faster. We'll keep you on your feet. I got five of them. Try to answer quick, not too much. So what's one of your favourite education related apps or websites that you go? Favourite education app or website.

R: There's a mass one at the moment that's just been released in Australia called Resolve, which is looking at inquiry through mathematics. It's got some really nice resources in there.

C: Awesome. What is a book that you quote or refer to, or that you have marked up and you refer to the most?

R: At the moment I'm reading Bill Lucas's book on creativity and I'm finding it really interesting.

C: Awesome. What is a school or education system that you haven't visited yet, that you'd love to visit or learn more about?

R: I'm a little resistant to policy preaching in international places so like.. I've loved coming to Canada and get a sense of what you're doing but I think the way to really

build a strong system is to focus on the already great things that your system is doing. Not necessarily... Canada doesn't need to come to Australia to learn what's going on or other places in the world. You can actually find your pockets of exceptional practice and scour them.

C: That's great. What's one thing that you do everyday that makes you better at your work? What keeps you healthy? What keeps you well so that you can attack the work that you do?

R: Try to get some work life balance and make sure that I spend some time devoted to my family.

C: Great. And what's an organization or person who's inspiring you right now? Is there anyone out there that you're really liking what they're doing?

R: Yeah I've been lucky enough to work with Simon Brexby over the last eight months and I think he's doing some outstanding work and we're starting to look at doing some work around implementation together. Bill Lucas who I mentioned before, I think he's doing some fantastic work around creativity and all the sort of learning dispositions like that. And obviously been heavily influenced by having John Hattie as a PhD supervisor and working close with him. So he still influences the way that I look at education and think about education.

C: That's great. So what's, you touched on this, but what's next for you? Doctorate done. What are some of the questions or problems that you're looking at researching or... not tackling, but investigating in the coming perhaps months, perhaps years?

R: So one of the things for me is doing a lot more work around implementation at scale. So looking at school implementation but also system implementation. I suppose my passion project over the next three or four years will be also looking at how can we better offer quality teacher professional learning for our rural educators in Australia. I think a lot of people talk about it, but not a lot of people are actually doing anything about it. So one of the projects I'm on back home this year is working with a group of schools that are about four and a half hours outside of Melbourne. So it's quite challenging in that it's a fair time commitment to get there but we really want to sort of develop a model that can be meaningful for them, but also something that we can scale and work with for larger groups. So I think really supporting our rural educators is something that is front of mind for me at the moment.

C: That's great. So thanks a lot for speaking to me today. What are some ways that people can connect with you if they're interested in your work or interested in what's going on? How would they be able to get a hold of you?

R: Yeah, so I'm on Twitter @dunneducation, so if they're on twitter they can follow me there. Send me a message and I'd be happy to talk about teaching and learning with anyone.

C: Thanks so much Ryan. Have a great rest of your trip and safe travels back.

R: Cheers. Thanks for having me.