ANN FRANCE

10. TEACHER RESEARCHER

Aren't All Teachers Researchers?

Teaching is more complex than what it appears to be; it is problematic by nature and requires a high degree of professional knowledge and skill. So how did I arrive at this understanding, how has this thinking changed my professional practice; and, how has this thinking positioned me as a teacher researcher? This chapter sets out to explore these issues through my experience as a teacher researcher.

TEACHING IS A COMPLEX BUSINESS

Teachers teach or at least that's what we see teachers doing but what else is taking place as teachers work to determine how best to respond to student needs, interests and experiences? What skills, knowledge and expertise are required as a teacher works to create opportunities for student learning? Teachers teach, all the while responding to the realities of their classroom; realities that occur consistently throughout the teaching day. How can the knowledge they draw on be further developed to contribute more widely to understanding the nature of learning and teaching?

We know that professional knowledge is key in any career but in teaching, professional knowledge extends far beyond the content and instruction and into the thinking that guides practice. Teachers research their students, and indeed their own practice every day. This researching mostly occurs tacitly or some might say naturally in a teacher's everyday thinking, however, recognising that research is a key to quality learning is vital for teachers.

As noted earlier, this chapter explores teaching from a teacher researcher perspective and in so doing, aims to promote the need for teachers to actively take on research projects within their own classrooms. From my experience as a teacher researcher, I have found the value of research projects to be crucial in further developing and enhancing learning opportunities for my students. They have also provided opportunities for me to take notice of my practice in ways that have reignited my enthusiasm for teaching.

I have participated in Professional Learning (PL) programs where I was positioned as an active learner and key decision maker. The learning conditions in these programs supported me and my fellow colleagues to think differently about our teaching and value our expertise and professional knowledge. It set me on a

path of learning which valued the use of research projects within my classroom not only for the gains they could provide for my students but the gains that I could make as a teacher. This has led to my interest in what research has suggested matters in advancing education, such as the importance of teacher and student dialogue in the joint construction of scientific learning.

THE VALUE OF PROFESSIONAL LEARNING

I have been lucky to have been involved in great Professional Learning (PL) over the years; more recently a series of PL programs run by both Catholic Education Melbourne (CEM) and the Faculty of Education at Monash University. Through such programs I met people that became mentors and today remain a continual source of inspiration for me. These programs have made me begin to think about questions such as: "What makes PL worthwhile and influential for teachers?" and, "What is quality in PL?"

On reflection I have come to see that it is the conditions for learning that these programs established that proved so powerful and influential. The conditions that had greatest impact on me, firstly as the learner, and now as the teacher were: valuing student voice and providing opportunities for students to take action; and, valuing teacher voice and regarding the prior knowledge of teaching when entering into inquiry. Such PL programs made me feel truly valued and respected, and not only was this to become the catalyst for how I established my classroom environment and viewed my students but I also began to see that a teacher's voice, my voice, was important, and that research into my own teaching would not only improve my teaching and my students' learning, but would provide the interest for me to remain in teaching.

Through one PL program I was encouraged to consider and reflect on the term 'quality learning' and what it might entail. I am sure that most teachers would say they strive to provide quality learning and that quality teaching leads to quality learning, but perhaps it is not so common for teachers to be expected to be able to state what quality learning really entails. My experience suggests that teachers seem to be expected to just 'do teaching' and that our talk is more about actions, not so much about intent or the underlying reasoning that informs our practice. So I found it interesting to be introduced to Mitchell et al.'s (2009) list of principles of teaching for quality learning through the PL programs. His principles resonated with me and encouraged me to think differently about my practice, my students' learning, and my knowledge of, and in, practice. Those principles were:

- Share intellectual control with students.
- Create occasions when students can work out part (or all) of the content or instructions.
- Provide opportunities for choice and independent decision-making.
- Provide a diverse range of ways of experiencing success.

- Promote talk that is exploratory, tentative and hypothetical.
- Encourage students to learn from other students' questions and comments.
- Build a classroom environment that supports risk-taking.
- Use a wide variety of intellectually challenging teaching procedures.
- Use teaching procedures that are designed to promote specific aspects of quality learning.
- Develop students' awareness of the big picture: how the various activities fit together and link to the big ideas.
- Regularly raise students' awareness of the nature of different aspects of quality learning.
- Promote assessment as part of the learning process.

During the PL program we were encouraged to record conversations about learning we were having with our colleagues. We discovered that quality learning can look and sound very different. Becoming familiar with the principles (above) enabled me to reflect on my own teaching more deeply and with more focus. I began to pay more attention to the ways in which my practice, including my knowledge, skills, beliefs, attitudes and behaviours, impacted my students' learning.

Becoming more aware of the idea of articulating principles of teaching for quality learning catalysed a journey to unpack and investigate my own teaching through the lens of the principles. Mitchell's principles have guided my decision making as a teacher and encouraged me to establish a classroom environment where my students are at the centre of the learning.

Despite 'students being at the centre of learning' becoming a vastly overused phrase, I purposely use it because I genuinely believe that my students must be part of their own learning. They are in the driver's seat, I provide the petrol, the safety requirements, and the road map but ultimately they must be in control of their own learning. We would never let them get into the car on their own of course, our role is vital in their success. The teacher sits beside the driver on the journey alerting the student to different signposts along the way, encouraging and supporting the driver through many of the turns and twists before reaching a destination. I must be prepared to support each student as individuals on their own journey taking their own route. Anyway, enough of the analogies.

When I recognised that expertise in teaching was about effectively responding to changing needs and conditions, I began to see personal opportunities for professional learning and growth. I think the most important thing I have learnt about teaching is that I must keep learning; to be a teacher is to be a learner. I am not referring to the professional development that schools provide during staff meetings but the notion of professionally and personally pushing myself to learn new things about my practice; learning that will directly benefit me and my students.

For me, the difference between PL and professional development (PD) that I experience during staff meetings and Professional Learning Team meetings (PLT's) is that the latter are decided by others. School leaders decide what matters for staff

learning and frame PD programs to attend to those ideas; often driven by policy or political agendas and/or mandates from above. These meetings are necessary for the school to function in an informed and consistent manner however the nature of that type of PD is in contrast to the PL I experience outside of these meetings – PL from which I have personally benefitted. Such PL has encouraged me to become an active learner, making decisions about what matters for my teaching and my own learning. Such PL has required me to take ownership of, and think more deeply about, my teaching. Understandably I know myself better than anyone else, I know what interests me the most, I know what problems I come across in teaching and the problems that my own students typically face. I am therefore in the best position to decide what I need to do to improve my teaching and develop quality learning – for me, that has meant researching my practice.

DEVELOPING DEEP UNDERSTANDINGS OF PEDAGOGY

The most recent PL I attended was titled Emerging Pedagogical Leaders (EPL). That program encouraged participants to record their conversations about teaching that they had with their colleagues (again the program's intention was to position teachers as active decision makers and researchers of their own practice). EPL created conditions for learning that I would argue rarely exist in traditional teacher PD.

EPL encouraged us to develop our teacher voice. We were encouraged to respect the voice of others and ultimately an environment was created that felt safe and nurturing. Without knowing it at the time, such conditions enabled me to pay attention to what I thought mattered and I started to learn in a way that had meaning to me, personally.

I was fortunate to be teaching Grade 2 at the time and to be working with a colleague who was also attending EPL. We found that recording our conversations, our dialogue, about our teaching and our students' learning was beneficial in numerous ways. We challenged ourselves and each other to think more deeply about our decisions as teachers; asking ourselves such questions as: "why did we do that" and, "why did we do it that way" and, "what will we do next," and so on. Having such in-depth conversations about my everyday practice enabled me to take note of my decision making; sometimes recognising decisions I had made almost without consciously thinking about the given situation. (I highly recommend having such conversations with colleagues, taping them allows you to revisit them, sometimes hearing more things than you did the first time.)

This 'talking about our pedagogical reasoning' allowed me to get to know who I am as a teacher. I came to see that we make so many decisions and actions as teachers, but they are so strongly tacit; talking about the 'what and why' of my practice helped me to tap into my inner beliefs and values are as a teacher. It helped me to value the voice of my colleagues and identify learning opportunities – opportunities that required research.

On one occasion, a recorded conversation with my colleagues resulted in identifying a need, or gap in our teaching and it became the catalyst for a research project taken on by our Level 2 team. Our conversation was based around teaching within an inquiry model (see Chapter 9 for more detail). We felt that our science lessons had become very student driven and we needed to take back the reins, if not for a short while, to explicitly model and ensure attention to a particular part of the science curriculum.

I think it is important to reflect on that role being enacted at different times in a lesson or unit of work. We discussed the importance of taking on the role of the dialogic/authoritarian teacher who encourages students to partake in a teacher led inquiry. We identified our teaching focus and recorded student engagement and learning. On this occasion we found a gap in the area of chemical science and decided to run a teacher led inquiry about food and the chemical affects they might have on people. Our students gained a lot from the week long experiment that required them to eat particular foods on each day and take note and record the perceived affect. Research projects do not have to be big, they can be simple as this was, what is important is to recognize that they enable us, and our students, to take an active role in the learning process.

This 'experimenting with food' experience has encouraged our team to reflect on our role within each new inquiry unit. We are now questioning the aspects of the unit that may require explicit teacher led learning, those aspects that we may need to facilitate but allow our students to drive, and how we position ourselves in the teaching-learning experiences we want to create. Through this process we talked our way into embracing teacher research.

TEACHER RESEARCH

Teacher research (Cochran-Smith & Lytle, 1993), or as some describe it, action research, can be defined as a collaborative process designed to identify a problem or an issue in your classroom with which you develop a plan for improvement by gathering knowledge and improving teacher practice. John Mason (2002) described the process of teachers researching practice as encompassing the act of noticing. Mason suggested that we cannot change the things we do not notice, but that we can take notice of things going on in our classrooms and choose to focus on one or two we think might benefit from change or investigation.

As I read more about researching classrooms from a teacher's perspective, I came across an effective process to more formally 'notice' what was happening from which my teacher research was initiated. The PETAA paper by Marcelle Holliday (2015) Connecting Research and Practice, offered a plan that I found useful and successfully followed on several occasions; not just in our chemical science research. The plan entailed:

• identifying a problem or issue to be tackled;
• making a plan for action;

- acting on the plan;
- observing what happens and collecting data; and,
- reflecting on the data and planning for future actions.

I most recently used this process (above) with my Grade 2 students because I became aware of the need to teach them scientific literacy skills such as challenging their own and others' opinions, providing reasons for their opinions and respectfully considering the ideas and thoughts of others to enable effective classroom dialogue. There was a diverse range of student ability in my Grade 2 class when it came to communicating with others and I identified a whole class approach to speaking and listening as necessary.

I had already read and researched widely the area of student talk in the classroom and I knew that I really wanted my students to develop exploratory talk, that is, talk that helps students to reason with one another. During exploratory talk, students' opinions need to be encouraged and valued, but the conditions need to be created for opinions to be justified and respectfully challenged.

While planning I took into consideration the teaching strategies I might try to pursue to follow this course of action, the resources, time frame and student data that would be important in shaping the pedagogical experiences.

I found a fantastic resource, a book titled *Talk Box* (Dawes & Sams, 2004) which described a program that, when I introduced it to my class, produced exploratory talk and reasoning amongst my students. The program was a 14 week program that provided 5 lessons designed to establish ground rules for talk and 11 lessons that allowed the students to practice thinking together. The program drew me back to principles of teaching for quality learning and the importance of creating conditions for quality learning to occur.

Due to the fact that 'dialogue' had been an area of interest for me over the last decade, I was aware of the suggestions and ideas that many researchers had made with regard to effective dialogue. However, as I followed the program suggested by Dawes and Sams (2004), I explicitly re-introduced the ground rules with my students and told them about the research we were all about to embark upon. My students were excited about the program and keen to hear about the improvements that they would make. I gathered the resources suggested in the book, most importantly the 'Talk Box' from IKEA, and began the lessons.

Doing Teacher Research

Over the next few weeks I observed what happened and collected data from my students. Each week the students were asked to complete a self-assessment known as a *Talk Diary* whereby they rated themselves on their speaking and listening immediately after the lesson. Dawes and Sams (2004) suggested ideas for formative assessments to be made along the way and I found myself adding these to my anecdotal notebook (and I have continued using these beyond the program).

The range of speaking and listening skills my students initially displayed was varied but mostly fairly low level responses were made such as one or two word replies and lots of statements that did not necessarily build on or connect with the other students' line of conversation. By the end of the program I noticed a huge development in terms of the ease with which each group conducted their talks in contrast to the many disruptive arguments that had previously been present. Many student were able to use 'exploratory talk' that gave reason to their ideas and opinions, enabled them to clarify their own thinking, respectfully give consideration to their classmates' thinking, and make group decisions.

Conducting this research opened my eyes to my students' range of skills. It also confirmed for me the conditions for learning that are vital in creating an environment that feels 'safe for all' to speak up, to carefully but thoughtfully question and critique, and to experience positive learning experiences together. My students enjoyed being part of a research project about their own learning and were very excited to record their development over the weeks. They began to take notice of their own actions rather than just the actions of their classmates (of which students in Grade 2 are typically very good!)

RESEARCH AND PRACTICE MATTER

It may sound strange to hear that after years of great PL I felt in need of more. However, it was due to quality PL that I had begun to look more deeply into my own practice as a teacher, particularly in the area of science teaching. Interestingly, I caught the 'research' bug and I actually didn't want to let it go.

Through my evolving researcher journey I have developed a pedagogy that I can now confidently describe as genuinely focused on the teaching and learning relationship and it is a pedagogy that I now truly believe in and one which my classroom hopefully genuinely reflects. This pedagogy revolves around a student centred classroom; where student dialogue is paramount in informing my teaching and assisting in developing my students' learning.

As I stated earlier in the chapter, I realise that 'student centred' is becoming a bit of a catch phrase in education (as is dialogue), but when I use it, I mean a classroom where student learning is at the core. It is easy for such statements to simply be rhetoric, because all too often the curriculum, the concert, the upcoming class assembly or the mandated testing, can take over. So by the end of the week, students and what they think can simply have been pushed to one side; task completion or external compliance taking precedence to engagement in learning.

My PL and research experiences have combined to shape the way I work toward creating an environment that will support quality teaching and learning. I see that I play a crucial role in the development of my students' learning and to do that well, I need to be a judicious listener.

Active listening on my part enables me to find out what my students already know (the prior knowledge they bring with them to the class) and what they need

to know. That means then as a teacher I need to be expert at acknowledging and responding to how they feel and conscious of that in which they are interested. I need to be sensitive to that which makes them feel anxious and be ready to respond appropriately to how they prefer to learn. If I approach my teaching in this way, then these all become new possibilities for me as a teacher researcher to explore on a regular basis. In so doing, I can ensure that I am purposefully pushing beyond the rhetoric of 'student centred' to better align my teaching intents with my teaching actions so that I am explicitly teaching for quality learning.

As a teacher I have been implicitly researching my way of teaching over the last 20 or so years but it is only in recent times that I have begun to acknowledge how important the role of teacher researcher is to me as a professional. Two years ago I began to feel disgruntled, for want of a better word, with my teaching and I realised that I needed more. But I didn't really know what 'more' meant. Many colleagues suggested I take on another position of leadership and take a 'break from the classroom', change schools or change careers altogether. None of these ideas felt right. I knew I wanted to be a teacher and that I still had a lot to offer. After much deliberation and some in-depth conversations with a few of my mentors, I decided to take on formal study. I thought doing so might reignite my passion as a classroom teacher and assist me in achieving the sense of professional satisfaction I felt was missing. I did not start studying in order to 'move onwards and upwards', I started to study in order to stay put – I wanted to extend my career as a classroom teacher by doing something that would inspire me to hang in there and hopefully become a more informed and better teacher.

To quench my thirst for more, I chose to complete a Masters of Education by thesis. Undertaking a thesis gave me the opportunity to research what I was interested in and to do so in ways that would be applicable to my classroom. Fortunately, I became re-invigorated, but more importantly, I found I was able to transfer my new learning back into my school and most importantly into my classroom. My knowledge of, and practice in, teaching came to encompass so much more than just 'doing teaching. I felt more informed, I felt more professional and I felt more articulate about the sophisticated business of teaching.

Undertaking study and being encouraged to consider my own classroom as a context for professional learning has led me to reconsider the important role of the teacher as researcher. Strangely, despite the fact that teachers work in an environment in which they are continually confronted by, and therefore need to manage, dilemmas in order to develop strategic and purposeful ways of addressing a diverse range of student learning needs, such professional expertise is not often captured in the research literature (or for that matter in the pronouncements of politicians and educational bureaucrats that speak in sound bites and seek simple solutions to complex problems). Hence, the teacher voice is largely missing from the very place it is most needed; the debate on quality in teaching and learning.

I am increasingly recognizing a divide between theoretical frameworks and the reality of practice, the disconnect between the outcomes of some research and the

knowledge of practice which teachers use to guide their teaching and which shapes their pedagogical reasoning.

Teacher research matters not only for teacher learning, development and growth, but ultimately for enhanced student learning. Teacher research encourages us to unpack our practice and our students' learning. By becoming more knowledgeable about the complexity of the teaching-learning relationship, teachers' professional knowledge of practice is more able to be better recognized, acknowledged, articulated and valued.

The importance of teacher voice has been highlighted through such projects as PEEL (Baird & Mitchell, 1986; Baird & Northfield, 1992), PAVOT (Loughran, Mitchell, & Mitchell, 2002) and EPL (Mitchell, Keast, Panizzon, & Mitchell, 2016). Such projects not only give credit to teachers, their ideas and findings but encourage teachers to become more knowledgeable about their actions and to develop clear beliefs about quality teaching and learning and what that entails. These projects bring the work of teachers to the foreground and illustrate that teaching is a complex job. When I read about how another teacher grapples with the same daily juggling act as that with which I am confronted, I tend to sit up and pay attention.

My research into teacher and student dialogue in the science classroom has enabled me to learn new things but to also identify many things that were present but to which I had previously not been focused on, or explicitly articulated for myself or others (France, 2017). By undertaking formal studies and through meaningful PL I have realised the rich resources that are present in my school – my colleagues. It is through more strategically supporting and tapping into that resource that I think productive educational change can be created. If that were the case, then perhaps we would see teaching become more highly valued both within and without the profession, and that would be a good outcome indeed.

CONCLUSION

Being a teacher researcher has had great benefits for my professional practice, and as a result benefits for my students. It has opened up many new doors for me as a professional. Firstly getting to know my colleagues better through developing action plans with them and talking to them about our philosophies about teaching and learning has been invigorating. I strongly believe that talking is the key; being required to justify decisions and actions really makes me consider my practice in new ways. I have come to see how having a colleague challenge my actions can help me to fine tune my practice. As a teacher I know that I must continually develop in order to deliver quality teaching and learning. I am grateful for the idea of recording teacher talks about teaching and learning. It is interesting to enter into a conversation in which the requirement is to explain a position and how that influences one's practice.

Finding colleagues at work who are willing to talk about teaching and learning is so important. I cannot stress strongly enough how important effective dialogue

is in developing understandings of the complex nature of teaching. Just as dialogue amongst our students encourages higher levels of thinking, so too the same applies to teachers. I feel fortunate to work in a school where dialogue amongst teachers is given a high priority.

I see myself as a teacher researcher not because of my formal study but because I have begun to apply more scrutiny to, and more rigorously reflect upon, my own professional practice. As I read the literature I am constantly reminded of things I do not know but I also appreciate reading about other teachers, what they do, how and why, and how that influences my understandings of what I do know and why it matters. I became aware of the need for metacognition. My teaching has not only benefitted from engaging in more higher order thinking skills but I am now enjoying my 'job' much more.

Last year our school took part in a livestream with the astronaut Chris Hadfield and he spoke to our students about the need to identify what you are passionate about in life and then to follow your dreams. He suggested that students should take note for themselves next time they stepped into a library or book shop about what sections of interest they were drawn to: gardening; cooking; and so on. He then challenged the students to become an expert on something over the weekend. He encouraged them to 'read up' about a topic and challenge themselves to take note of this new knowledge – something they did not have previously.

Our students were greatly inspired by Commander Hadfield (as was I). His message resonated with me as a teacher. By reflecting on an area of teaching I have become passionate about (student talk in particular within a science setting), I began by purchasing books and reading more about the topic. I found that much of the research on this topic confirmed the good practices I already had but equally I found many, many new ideas to enhance my teaching. I enjoyed reading up on the theory behind why many things worked with my students and was then able to apply those learnings to my teaching to ensure I created an environment more conducive to quality learning. As a consequence, I began to love being a learner all over again and I have become more knowledgeable about one particular aspect of my work, and it has made a big difference to how I know feel about myself as a professional.

As I look back now on my period of being disgruntled, I recognise that it was a turning point for me and my teaching career. I am so glad that I did not leave the classroom. Instead I took time to take notice of how I was feeling and to do something about it.

I hope that this chapter highlights the importance for Education systems of the importance of providing stimuli and incentives to teachers to reignite their passion for teaching and challenge themselves to better understand what it means to teach for quality learning. Becoming a teacher researcher allowed me to grow and develop as a teacher but now I see that it is hard to be teacher without being a researcher. We need to find ways of supporting teachers in making that work more explicit, more meaningful and more applicable not only in their work, but also in their students' learning.

REFERENCES

Baird, J. R., & Mitchell, I. J. (Eds.). (1986). *Improving the quality of teaching and learning: An Australian case study – The PEEL project.* Melbourne: Monash University Printing Service.

Baird, J. R., & Northfield, J. R. (Eds.). (1992). *Learning from the PEEL experience.* Melbourne: Monash University Printing Service.

Cochran-Smith, M., & Lytle, S. L. (Eds.). (1993). *Inside/Outside: Teacher research and knowledge*. New York, NY: Teachers College Press.

Dawes, L., & Sams, C. (2004). *Talk box: Speaking and listening activities for learning at key stage 1.* Oxon: David Fulton Publishers.

France, A. (2017). *Investigating the use of dialogue in the construction of scientific understanding in the junior primary classroom* (Unpublished Masters Thesis). Monash University, Melbourne.

Holliday, M. (2015). *Connecting research and practice* (Paper 200). New South Wales: Primary English Teachers Association Australia.

Loughran, J. J., Mitchell, I. J., & Mitchell, J. (Eds.). (2002). *Learning from teacher research.* New York, NY: Teachers College Press.

Mason, J. (2002). *Researching your own practice: The discipline of noticing*. Oxon: Routledge.

Mitchell, I., Mitchell, J., & Lumb, D. (2009). *Principles of teaching for effective learning: The voice of the teacher PEEL.* Melbourne, Australia: Monash University Publishing.

Mitchell, I., Keast, S., Panizzon, D., & Mitchell, J. (2016). Using 'big ideas' to enhance teaching and student learning. *Teachers and Teaching,* 1–15. Retrieved from http://dx.doi.org/10.1080/13540602.2016.1218328

Ann France
Grade 2 teacher