Teachers as Researchers: A 'Fair Dinkum' Learning Legacy

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Introduction

As we encounter a policy landscape where increasingly the education lexicon includes keywords such as data, evidence, quality, standards, it is interesting to revisit Garth Boomer's contribution regarding teachers as researchers. As an early-career classroom teacher in the mid-1970s, I was inspired by Boomer's provocation to engage with research as a practitioner seeking evidence of learning (or not learning). Since that time, convinced of the power of teacher research in enhancing both student and teacher learning, I have devoted a good deal of my academic life to finding ways of supporting teachers to engage in research - from finding funds to facilitate teacher-researcher networks, through designing research projects with teacherresearchers as key collaborators, to embedding practitioner inquiry in university courses wherever possible pre- and in-service.

In Fair Dinkum Teaching and Learning, Boomer (1985) clearly named at least two key problems which I believe still face the educational community. Firstly, drawing on the sociologist Basil Bernstein, he explained that schools typically contribute to the reproduction of educational success and failure, whereby some students come 'to believe that they are capable of seeking, possessing, and banking on knowledge' (Boomer, 1985, p. 122) and 'the other group, those who fail, tend to believe that knowledge is "elsewhere", not to be possessed, to be deferred to, rebelled against, or distrusted'. In this way, Boomer (1985, p. 122) argued 'knowledge capitalism is reinforced from generation to generation'. Current results of national and international literacy tests suggest that social background is still a key factor in young people's educational trajectories in Australia, with the children of the poor statistically likely to perform in the lower levels.

Secondly, he named the divide between what he called 'big R' research, which he saw as 'a postgraduate luxury' and what actually goes on in schools, which he argued are not thinking and learning institutions. In other words, he found both schools and universities wanting. He wanted teachers 'to seek out knowledge

and test it in action; that is, to do *research'* (Boomer, 1985, p. 123). Following Boomer's provocation, on the one hand I have long raged against the anti-intellectualism I sometimes over-hear amongst teacher-participants at conferences and workshops, and on the other hand the blaming of teachers which is so rampant in the academy. The refusal to learn from and with each other – university and school-based educators – continues to hold us back as a profession.

Here I revisit what I have learned from my collaborative work with teacher-researchers, with Boomer's key messages in mind. In particular, I draw on insights from his paper, already cited above, entitled, 'Addressing the problem of elsewhereness: A case for action research in schools', where he argues that schools produce citizens with distinctly different consciousness with respect to knowledge - those who believe they can find it and possess it and those who believe it is elsewhere and not for them. I begin by briefly outlining the emergence of 'teacher research' internationally, and demonstrate that this was a discourse from which Boomer both drew and contributed. By referring to three current research projects, involving action research, I consider what's involved in being a teacher-researcher now in the contemporary policy context and discuss the extent to which these studies have provided opportunities to negotiate the kinds of research relationships and teacher learning that Boomer envisaged. My intention is not to discuss the teachers' action research nor their data here, but rather, to reflect what I have learned and continue to learn from working with teacherresearchers in these different contexts, that might have relevance for literacy education and research.

Emergence of teacher research: Key proponents and principles

There is not space here to adequately address the history of teacher research, but it is important to note that it has had specific, yet somewhat over-lapping, histories of emergence in different places, and to point to some of its key proponents (see Somekh & Noffke, 2009). Along the way it has been known as action

research, practitioner inquiry, participatory research or teacher inquiry, to name but a few of the variations. Action research, for example, grew from Kurt Lewin's work in the 1930s and 40s in designing participatory approaches to research that ordinary people could use to address everyday problems they experienced in communities or institutions (Adelman, 1993). In the United Kingdom there is a long and continuing tradition of collaborative action research in education, often supported through the universities (Elliott, 1991; Somekh, 2005). Action research in Australia was informed by the pioneering work of Carr and Kemmis (1985) and became widespread with the circulation of The Action Research Planner (Kemmis & McTaggart, 1988), which was used in many post-graduate courses and professional development programs. In the US, practitioner inquiry or teacher-researcher communities (Cochran-Smith & Lytle, 1993, 2007) mushroomed particularly in the 1980s, especially in connection with writing, and other literacy, related projects.

Boomer would have been familiar with all of this work. As an educational leader and bureaucrat, he remained throughout his life an avid scholar; he read widely (and interrogated) educational theory and research. In the 80s, he argued that action research is 'deliberate, group or personally owned and conducted, solution-oriented investigation' (Boomer, 1985, p. 124). By his logic, 'research is deliberate learning'. Hence, not surprisingly and consistent with the key principle of action research to democratise inquiry, he saw action research as equally appropriate for students as for teachers.

Since schools and universities are institutions for the promotion of deliberate learning, all teaching ... should be directed towards the support of deliberate, personally owned and conducted, solution-oriented investigation. All teachers should be experts in 'action research' so that they can show students how to be 'action researchers'. (Boomer, 1985, p. 125)

He went on to explain how by this logic it was necessary to negotiate the curriculum, so that learner and teacher intents and purposes for learning could drive the inquiries. However, in this same chapter he recognised the disappointing typical realties of schooling and contended that:

Between the preschool child and the adult researcher, there is schooling where teachers traditionally tend to pose the problems and set the tests. Schooling is therefore likely to result in some atrophying or retardation of the learner's brain power, because most of the school

answers are already known and known to be already known. (Boomer, 1985, p. 127)

Boomer's critical insight and his preparedness to name and confront educational shortcomings as a leading educational bureaucrat was rare then, and some may argue even rarer today. After an extended period of time working as an educational bureaucrat, Boomer was all too aware of the tendencies of schools and systems to sustain inertia. He aspired to a grassroots theory of change, where teachers were central agents in the process.

I would like to feel that teacher cooperatives working to transform practice could link arms across the nation as a stalwart band of action-researchers and eventually prevail in changing the face of teaching. (Boomer, 1999, p. 114)

His capacity to imagine a different kind of teacher workforce was breathtaking. Key principles historically associated with action research - its focus on experienced problems, classroom and school-based inquiry processes, teacher action and data-informed change to practice and policy - require both a highly educated and ethical practitioner. Action research is not a neutral or instrumental endeavour. Indeed action research always involves critical analysis of the ways in which current practices impact on different participants. It is always concerned with questions of justice. It always involves a systematic investigation rather than working from assumptions or taking for granted how things are. In whose interests and with what effects are current ways of working? What changes can be made to improve equitable outcomes? Teacherresearchers are prepared to explore the effects of their practices on different learners. They are prepared to explore blind spots, unintended consequences, and different ways of seeing and interpreting what's going on. They have a high tolerance for complexity and uncertainty. They are prepared to go public with their learning. This work is tough and, as I will discuss later, teacher-researchers need inquiry communities with whom they can explore and have risky dialogues among trusted colleagues.

Learning from teacher-researchers now

Ever since I entered the academy, I have continued to learn from collaborative research with classroom teachers and school leaders. I have always been interested in the differential effects of the enacted curriculum, classroom discourse, and pedagogical practices on different students. And I have always been interested in documenting the work of teachers who were making a sustained and positive difference to students' learning in schools situated in areas of high poverty and/or cultural diversity. I have written about their work in numerous places and encouraged teachers to publish in their own right (Comber, 2005; Comber, 2007).

Here I consider what being a teacher-researcher right now entails. I draw on a range of current projects to give a sense of the possible dilemmas and the payoffs. Clearly teachers in Australia, and beyond, are grappling with particular policy ensembles, including international testing and league tables, high-stakes national testing, national curriculum, regional priorities and performance targets, marketisation of the school, and the implementation of teacher standards. Teachers in schools located in areas of high poverty are likely to be involved in school review and reform. Teachers located in some rural, regional and remote areas may also have issues with respect to recruitment and retention of teachers. Many early-career teachers are also dealing with the difficulty of finding ongoing employment, rather than relief teaching or short-term contracts. Some teachers may be teaching subjects which they have not studied at university level. While there is always a mix of policy in any era, this particular set may impact on teachers' work conditions in new ways and reduce the time (and 'brain power', to use Boomer's term) available for teachers to engage in research. Notwithstanding these challenges and perhaps sometimes in response to such circumstances, some teachers continue to volunteer to participate in teacher research investigating the teaching of English literacy.

New literacy demands in the middle years: Change-ready innovative teachers

In a recent ARC Linkage, *New Literacy Demands: Learning from Classroom Design Experiments*, undertaken in collaboration with the Department of Education and Child Development and the Australian Education Union, in South Australia, we¹ worked with teacher-researchers in the middle years of primary and secondary schooling (Years 4–9) to investigate how they could support their students with the particular and changing literacy demands of this stage of schooling – incorporating subject-specific language and discourses, new communication and information technologies, and extended learning projects across the curriculum and over time. This project aimed to recruit 'change-ready'

teachers who were prepared to experiment with innovative pedagogies and new technologies in ways that were designed around theory and teacher knowledge of their students and the curriculum. In the first year, we worked with primary school teacher-researchers investigating the literacies of science, youth cultures and ICTs, and place-conscious pedagogies. Several teachers had already developed 'inquiry dispositions' through multiple engagements in research across their careers (Cochran-Smith & Lytle, 2009). The university researchers supported all teachers to conduct classroom design experiments (Cobb et al., 2003) to ascertain how particular theoretically-informed changes they had decided to make to their curriculum and pedagogy impacted on student learning. In the second year, also using classroom design experiments, we worked with high school teachers of Science, Mathematics, English, History, ESL, and Drama to explore how various forms of explicit teaching of subject-specific literate practices made a difference to student learning and their capacities to demonstrate that learning.

These 'design experiments' are not unlike action research in the sense that teachers decide an area of student learning which they want to improve and make changes to curriculum and pedagogy in order to meet those goals. Design experiments are informed by theories of learning and involve teachers collecting base-line data on students' current understandings and performance before conducting the intervention. Teachers carry out the changed practices and then collect another set of class data in order to check whether students' understandings and performance have improved. There is not space here to discuss the individual projects teachers conducted (but see Morgan, 2013). Here I want to consider the extent to which this project was able to produce the kinds of conditions teachers need to conduct research.

It became very clear to us that teachers and school teams who *volunteer* to participate are central to collaborative research. As the project unfolded, teachers whose leadership teams actively supported their participation in the research were able to engage whole-heartedly and with the assumption that their work might inform colleagues. Teachers, none of whom had conducted classroom research before, needed a lot of support to define their focus/problem/question, design their study, collect relevant data, analyse the data and prepare to present to teacher colleagues, and indeed in some cases write a report of their research. Teachers do not automatically know how to do action research

or indeed design experiments. They need to build research repertoires. It is not yet part of their legacy from teacher pre-service education.

The ideal situation for supporting teachers to undertake such work included in-school support from peers and leadership, departmental educator support, university researcher support, and actively involved and informed student researchers or informants. Support includes the leadership team and departmental educators conveying the message that this is an important part of their work as teachers, and providing time, resources and specific expertise in order to undertake a well-designed serious project - and to see it through to analysis, publication and dissemination. This is not just time to conduct the classroom aspects of the project but also involves long lead-time (for reading, planning, design) and long follow-up (for analysis, interpretive work). One of the ongoing challenges for helping schools become sites of action research is that educational calendars and timetables are not designed for continuity and long-term arrangements, but rather for lessons, weeks, terms, and so on. There is always a sense of fragmentation, especially in high schools where some teachers teach a class for only one semester. Similarly, systems are subject to short-term funding and considerable role and personnel change was exposed by the three-year duration of the research. Yet the support of central policy and curriculum personnel is key at times of large-scale change. Some of the teachers wanted to know that their work was at least consistent with the trends in the Department, and that it might therefore be useful to other educators. In other words, the teachers wanted their research to contribute to learning and practice, and not only in the immediate classroom context. If it was worth doing, it should inform future practice more widely. This was difficult in schools where the leadership team took little interest, and also in the context of wider policy change centrally. Teacher research can be marginalised not only by academia, but also by school and departmental peers, especially in times where it appears that it is only 'big data' that count.

I do not want to suggest that these constraints and limits detracted from what the teacher-researchers achieved. Not at all! All participating teachers were able to design classroom experiments whereby their students' learning demonstrably improved in the areas the teachers were targeting – including understanding of scientific and mathematical language, understanding the rules of film-making, improved confidence

and competence in asking questions, improved use of nominalisation in history writing, improved understanding of search engines and referencing conventions in academic writing, and more. This array of learning goals indicates that they tackled some of the key literacy demands facing learners in the middle years. My comments are intended to draw out implications from this work for facilitating teacher research at the present time. The over-arching research design of this project sought to recruit 'change-ready innovative teachers'. In some cases, this was achieved without difficulty due to existing long-term relationships between the university researchers, key departmental personnel and teacherresearchers. However for various reasons this was not possible to sustain as the project proceeded, changes of staff occurred, and so on. Teachers in some schools were recruited for more pragmatic reasons. Teachers who may have been cajoled into participating were perhaps less enthusiastic. As Boomer points out about learning, there is a problem if one has not been part of the negotiating of the curriculum. The same is true for collaborative research. Make it compulsory (and at the same time supplementary to the core work) and risk losing its value.

Educational leadership and turn around literacy pedagogies: School ethnographies and teacher-researchers

The second project I discuss briefly here is a three-year Australian Research Council Linkage Grant (ARC) in collaboration with the Department of Education and Child Development, SA. We² are exploring emerging forms of 'educational leadership' in schools located in high-poverty contexts and the effects on school culture, pedagogy and student literacy learning. The first phase of the project involved interviews with around twenty primary school principals of schools situated in low SES areas about their work as leaders, their communities, and in particular their approaches to improving literacy learning in their school. The next phase involved ethnographic studies by university researchers of the leadership practices in each of four schools as those practices relate to literacy learning improvement. We have work-shadowed the principals, interviewed the principals and their leadership teams, and also volunteer teachers, and we are now at the point of working with volunteer teacher-researchers to investigate how the school agreements about literacy play out in the everyday life of the classroom and how those practices are making a difference to the learning of different children. We are supporting the teachers to conduct case-studies of students whom they select and whose parents are in agreement. We are also ensuring the children are comfortable with the research.

Again without going into detail about the wider study here, I wish to focus on the teacher-researchers. And in doing this, I will refer only to the school where I am located as an ethnographer. The school is in one of the very poorest areas of northern Adelaide and subject to intergenerational poverty. The principal is experienced and has previously worked in similar schools where he has a reputation for improving the culture, the learning of teachers and students, and relationships with the wider community. We have joined him at a time where he is working to turn around a history of low performance and low morale, as reported in a departmental review of the school before he was appointed. It is comparatively early days and he sees the school as a 'work in progress'. This is important because it means there is overt recognition of the need to improve, which has been followed up with high levels of support for teachers in the form of mentoring and coaching. For instance, the Assistant Principal: Literacy Improvement has regular one-on-one 'literacy chats' with individual teachers, where each teacher gets the opportunity to report on their literacy learning targets for students (set by the teachers themselves on the basis of data/analysis), what's going well, and where they'd like help, advice, modelling, resources and so on. In this context, it was very interesting for me to note that when we called for volunteer teachers to participate in the research, all six were in their first few years of teaching. Only two of these were in ongoing positions. The other four teachers were on short-term contracts due to finish at the end of 2013. The principal is trying to recruit teachers who want to work in this school, who are not daunted by the challenges that go with teaching in low SES communities, who respect the children and their families, and who are keen to learn. As permanent positions become available, he will encourage them to apply. These early career teachers really want to learn.

All six volunteer teacher-researchers were eager to begin their classroom inquiries as soon as I arrived at the school, and perhaps a little deflated that I needed to complete other phases of the project before we could design the classroom projects. During my visits to the school, I spoke with them informally in the staff room, sat in on their literacy chats where possible, and visited their classrooms informally during Terms 1–3. I began

observing more formally in classrooms in Term 4 of 2013. I was impressed by the honesty and openness of these young teachers. They were keen to say where they were struggling and actively sought advice from each other, the assistant principal, a literacy coach who was working part-time in the school, and also from me. The school leadership team also openly acknowledged the achievements they were making; for example, positioning one of the young teachers as an expert/learner in trialling and teaching her peers about the use of class sets of new laptop tablets; another as expert in guided reading; another as expert in conducting running records and so on. Hence the strengths of the teachers were recognised even as they were given permission to not know how to accomplish all of the practices the school literacy agreements required. They were supported over time to learn the practices they

In terms of the kind of school Boomer wished for, where everyone would be undertaking research and everyone would be learning, this school seems well positioned to make such a move in terms of the willingness of these early-career teachers. There was nothing to be complacent about and a sense of urgency about making a difference to the learners. That young teachers on contract were prepared to so openly admit challenges and be ready to investigate the effectiveness (and otherwise) of their teaching spoke volumes for the kind of culture under construction in the school at this time. These teachers reported, too, their strong desire to continue working at the school. This is a school where action research could very meaningfully be woven into the ways it goes about its ongoing reform processes. In some sense, teachers setting learning targets and regularly reporting in the literacy chats means that key parts of the inquiry process are already in place. As the volunteer teacher-researchers undertake their casestudies, it will be important to think about how their learning and those of the students can best be shared.

Ethical leadership: A collaborative investigation of equity-driven evidence-based school reform

The final study to which I refer here is a current ARC Linkage grant being undertaken in partnership with the Queensland Educational Leaders Institute and six Queensland state schools. The research team³ is investigating what constitutes ethical leadership and how schools can generate local and inclusive solutions to the specific challenges they face. In particular, we are exploring how principals and leadership teams

use data as evidence to inform the decisions they make about priorities and practices in order to achieve equity in an era of accountability. Members of the research team are working closely with school leaders to understand and document their practices, and other members of the team are collaborating with volunteer teacher-researchers to undertake collaborative action research on ways in which they are aiming to enhance student learning. The collaborating schools include five high schools located in regional areas of Queensland and one city primary school. Here I draw on some trends emerging in the action research being designed and conducted in two of the high schools.

One long-term challenge faced by high school teachers is how and when to teach the literacy requirements of their subject-areas. With NAPLAN results now figuring in the public domain, there is more pressure than ever for high school educators to take literacy seriously. And they do! Boomer always knew that the assessment tail wags the curriculum dog. The exciting trend in two of the cooperating schools in this study is that teacher-researchers have volunteered from across the subject-areas. In one high school, we have representation from Design and Technology, History, Maths, Science, and English teachers. Teachers are working with classes from Year 7 to Year 11. As the teachers hear each other describe the 'problems' they wish to focus on, their students, their data and their plans for the intervention, they begin to get excited and share ideas about pedagogy more broadly. For example, questions about feedback and modelling are relevant to all, but play out differently in the different subjects. These conversations about learning are incredibly rich. It is clear that the teachers are hungry for this kind of talk. They listen to each other, ask questions, make suggestions, and appear to re-energise each other. The energy comes from making discoveries about students - individuals and groups - which allow teachers to refine their teaching. They go away with plans that have been enriched by their colleagues. The implication for me observing these discussions is the potential power of cross-faculty research-driven conversations in high schools. Boomer's insight about the synergies between research and learning is striking here.

In another high school, teachers want to improve their feedback to students and enhance students' confidence, independence and persistence with assessment tasks and tests. There we are also working with teachers from a range of faculties – from the Social Sciences, English and Maths. Faculty teams of between

2-4 people are working together to design projects. Their conversations have at this stage been between volunteers within the faculty. The teachers have different levels of experience, but all are working with middle-years students. Planning their action research together gave teachers, and in some cases Heads of Department, the opportunity for extended discussions about regional, school and faculty policies and practices. So the teachers' research problems were discussed in the light of the wider context. They were able to talk about expectations for students' learning, and also to begin to think about what they knew and what they didn't know about the middle-years cohorts. The university researchers were able to collaboratively design with the teachers some customised student self-assessments as a form of common baseline data to check out pre-existing assumptions. Once again, designing teacher research triggered critical dialogues where teachers could safely question the way things were and check out each other's perceptions and ways of working. This opened up opportunities for learning from and with each other. In Boomer's ideal school, such conversations about learners and learning would become the norm rather than the exception.

A 'fair dinkum' learning legacy

Even in contexts of high accountability, teacher research, when supported by the school leadership team (and even better the state education department as well), can provide productive spaces for teachers to engage in complex professional learning that enhances their teaching and student learning. I am reassured to be able to say this. It speaks to the power of participatory research to reconfigure schools as learning communities. However I do not want to over-state the case. A career-long frustration from my point of view is that action research projects are typically funded short-term as part of particular projects. It is not built into teachers' work. My hope is that teachers develop researcher dispositions through their engagement in such projects that they take with them into their daily work (Comber, 2006); studying teacher-researchers longitudinally remains a research project I would like to undertake.

In the front pages of Boomer's (1985) Fair dinkum teaching and learning: Reflections on literacy and power, there is a short explanation of the colloquial term 'fair dinkum'. It reads 'Fair dinkum is an Australian term meaning genuine, true, real'. When teachers talk to each other and university colleagues about action

research, there's a sense of 'no pretence' or 'telling it like it is'. Because action research begins with the teacher's assessment of the problem or question they want to explore, there is permission to be 'truthful', to be 'critical', but there's also, as part of the research or inquiry, an opening up to seeing things *differently*. These are key moves in teachers learning from their practice – key moves in doing research.

Yet the relationships between teachers and research, teachers and knowledge production, teachers and researchers remain under-investigated. When I hear comments that teachers are assessment-illiterate or data-illiterate, and I do hear these comments, I wonder how we have managed to produce teachers who feel, or indeed perhaps are, ignorant when it comes to interpreting data. How can this be? Perhaps the problem of 'elsewhereness' is impacting the teachers. Yet, the teacher-researchers with whom I have had (and still have) the privilege to work have taught me a great deal. I hope that our learning relationships are reciprocal. I couldn't do my job well without learning from school-based educational researchers. It wouldn't feel 'fair dinkum'. However, in Australia we are a long way still from building action research into our university preparation for teachers, and it is still not built into their everyday professional work as teachers. There is more work to do so that there is space in schools to enable teachers and students to produce knowledge, and not to assume that knowledge production is done elsewhere. Many schools still struggle to be learning institutions in the ways Boomer imagined.

Given that undertaking action research remains extra to teachers' expanding workloads, rather than built into everyday practice, why would they bother? For me, and many of the teacher-researchers I work with, the answer is about an over-riding concern for social justice (see also Ainscow, Dyson & West, 2012). Despite the ideal that education should give everyone a fair go, it is clear that educational institutions continue to privilege those who are already privileged. The desire to make a difference is common to many educators; yet how to make it happen in the context of disparate living conditions, family and school resources, student learner dispositions, is complex and confronting. In order to sustain innovation and commitment to social justice through education, teachers need inquiry communities, opportunities for serious professional learning (Timperley & Alton-Lee, 2008), where they can experiment with alternative ways of engaging diverse students with complex learning over time and

thereby build durable learner dispositions and educational trajectories – a 'fair dinkum' learning legacy.

So what's to be done? Those of us who work in teacher education and educational research – pre- and in-service – can work to make the time and space in our programs and projects to help teachers assemble research repertoires as part of their professional knowledge and capabilities. Our graduates should know how to read research, what constitutes data, and how to interpret it. They should leave our classrooms feeling like that they have the wherewithal to learn and to negotiate learning communities. We need to keep the conversations open and active with our colleagues in central and regional offices and in schools. We need to collectively re-imagine what 'fair dinkum' learning might be in different school communities.

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Notes

- 1 New literacy demands in the middle years: learning from design experiments was an Australian Research Council (ARC) Linkage Project (No. LP0990692) between the Queensland University of Technology and the University of South Australia, The University of Sydney, The Department of Education and Children's Services (DECS)(SA) and the Australian Education Union (AEU) SA Branch. Chief investigators were Barbara Comber (Queensland University of Technology), Peter Freebody (The University of Sydney) and Helen Nixon (Queensland University of Technology). Partner investigator was Victoria Carrington (University of East Anglia, UK). UniSA Research Fellow was Anne-Marie Morgan (now at the University of New England).
- 2 Educational Leadership and Turnaround Literacy Pedagogies is an Australian Research Council (ARC) Linkage Project (No. LP120100714) between the University of South Australia and the South Australian Department for Education and Child Development (DECD). The Project is being under taken between 2012 2014. The chief investigators are Robert Hattam, Lyn Kerkham and Bill Lucas (University of South Australia), Barbara Comber (Queensland University of Technology) and Deb Hayes (University of Sydney). The views expressed in this paper are those of the author only.
- 3 Ethical Leadership: A collaborative investigation of equitydriven evidence-based school reform is an Australian

Research Council (ARC) Linkage project (no. LP 120200647). This project involves collaborative work between researchers at the Queensland University of Technology (QUT), six Queensland schools and the Queensland Educational Leadership Institute being undertaken between 2013 and 2015. The Chief Investigators are Lisa Ehrich, Barbara Comber, Val Klenowski, Suzanne Carrington and Judy Smeed (QUT) and Mel Ainscow (University of Manchester). Research Associate is Jessica Harris and Research Associate/PhD student is Nerida Spina. The views expressed in this paper are those of the authors only and are not representative of the views of the Australian Research Council or the Queensland Educational Leadership Institute

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