

Transforming Educational Practice Through Action Research: Three Australian Examples

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22.1 IN SEARCH OF “UNWELCOME NEWS”

Curricular change comes about in classrooms when teachers engage in inquiry into the nature of their practice, the origins of their understandings, the meaning-making structures they use to construct their professional knowledge and to reconstruct what they know in the light of new understandings and changed perspectives. (Beattie, 1997, p. 8)

The distinctiveness of Australian educational action research has been closely monitored by its advocates (Groundwater-Smith & Mockler, 2009; Kemmis, McTaggart, & Nixon, 2014; McTaggart, 1997). A unique feature of its development has been the many professional learning articulations that have relied on school- and university-based partnerships funded by federal and state governments or institutions with some other vested interest in education (Groundwater-Smith & Ewing, 2009). It is this characteristic that led some of its leading advocates to question the adequacy of many programs characterized as action research (Kemmis, 2006). While arguing the capability of action research to tell *unwelcome news*, Kemmis et al. (2014) lament that much educational action research no longer possesses the *critical edge* originally envisioned (e.g., Carr & Kemmis, 1986, 2005).

To examine this regret, we first briefly articulate the core features of action research. We particularly focus on those features that distinguish it from other practitioner research approaches. We also establish the parameters for our subsequent critique of some articulations of action research in Australia.

Described by Kemmis as a “practice-changing practice” (2009, p. 467), action research is not only about generating new knowledge and understanding as in action learning (Revans, 1983): it is charged with transforming profes-

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sional practices that can change the conditions in which those practices occur. Many kinds of action research have emerged over the past decades, mostly due to the varied contexts and aspects that are selected for investigation. This variation has resulted in the recognition of a “family” of action research approaches (Kemmis & McTaggart, 2005; Reason & Bradbury, 2008). Hence, while there is no single definition or approach to conducting action research, there is general agreement about its core features. Educational action research most often involves:

- a concern to improve practices for the benefit of individuals and their communities;
- a continuous and ongoing cyclic process of planning, action, and reflection in a particular context (although sometimes these cycles or phases can be blurred);
- an authentic partnership among practitioners, who actively participate in the research process; and
- practitioners with a desire to be engaged in the research process and see the value/practical purpose of the research.

What distinguishes quality educational action research from other approaches to practitioner research is adopting a critical stance: a desire to challenge and transform schooling to make it more “profoundly educational” than its current form (Kemmis, 2006, p. 461). According to Kemmis (2006), schooling can be defined as the institutionalized processes and practices that intend to train individuals for life in current society without questioning the efficacy and morality of such practices. A teacher might modify her practices, for example, to minimize noise emanating from her classroom because her principal equates too much classroom noise with lack of productive learning. In contrast, “education” is viewed as liberation from the constraints of unjust and unchallenged institutionalized practices of schools and is charged with the task of simultaneously developing individuals and communities for a greater social good. For example, profound educational changes are likely to emanate from a teacher’s decision to question the worth and equity of a long-standing practice to *ability stream* students for learning.

Quality educational action research thus not only involves changing individual teacher’s practices and their immediate outcomes for schooling but also has far-reaching consequences for the very social, political, and educational foundations upon which the practices are built (Carr & Kemmis, 1986, 2005). To do this, it is expected that critical action researchers will be willing to reveal unwelcome news about schooling and so question and disrupt the fruitless institutionalized processes and practices of schools that are used to produce generations of teachers and students who unquestioningly conform to the thinking and practices of their predecessors or to government policy agendas. Programs of research intent on improvements to solely trivial matters of schooling are inadequate, perhaps even a waste of research practitioner time, when there are more pressing concerns that have implications for wider edu

cational re-form (Groundwater-Smith & Mockler, 2009; Huang, 2010; Kemmis, 2006).

In our view, curriculum and educational *re-form* occurs when schools and other educational institutions benefit from changes in educational practices, materials, or organizations that result in increased justice and equity and authentic outcomes for students. Such re-form is valuable on a micro level: a small group of teachers' or an individual teacher's change in beliefs and pedagogical approach can improve experiences and student outcomes at a school. From the outset, it also needs to be acknowledged that change of any real consequence is not a linear event, it is a dynamic process, interactive and ongoing and needs to be initiated at the local level as well as from the top levels of educational administration at the same time (Ewing, 2011, 2014). The iterative nature of the action research process is a highly appropriate tool for ongoing re-form. In many instances, however, if such re-form is to have a larger impact, it will involve a sense of loss and may often cause conflict and confusion for some practitioners: the unwelcome news identified by Kemmis.

How then, do we determine if action research is concerned with issues that are profoundly educational *and* involve real *re-form*? To help address this and other concerns, we consider a series of questions proposed by Kemmis (2006, p. 461) in providing several snapshots of action research:

- What sorts of problems have the investigations addressed?
- What aspects or dimensions of practices, understandings, and situations did they problematize?
- In what way did they make these things problematic?
- Did they problematize things subjectively, from the perspective of particular practitioners or professions, or did they problematize them intersubjectively, opening a communicative space for conversation between co-participants in practices and settings?
- Did they address technical problems about improving schooling or critical questions about education? Or were they about both?

These questions provide us with the parameters within which we are able to examine some historical examples of action research in Australia before concentrating on some more recent examples in our current Australian education context.

22.2 LOOKING BACK TO SEE FORWARD: SOME AUSTRALIAN ACTION RESEARCH MILESTONES

Our aim in this section is to provide a brief description of some major education research projects that have played a critical role in the history of educational inquiry in Australia and that have centered on action research methodologies (notably Groundwater-Smith, 1998; Sachs, 1997). We briefly explore the objectives and outcomes of these milestones in the Australian action research landscape before introducing three contemporary action research examples.

The Project for Enhancing Effective Learning (PEEL) was one of the first Australian examples of professional learning initiatives utilizing a collaborative action research approach. It began in Victoria with a partnership of secondary teachers and academics who were concerned that so much student learning was passive and unreflective. Established in 1985 and growing out of the works of Carr and Kemmis (1986), Grundy and Kemmis (1981), and Kemmis and McTaggart (1981), it is still in action today. PEEL projects research classroom approaches that will stimulate and support active, autonomous student learning and those that will build students' metacognitive skills. PEEL teachers meet on a regular basis, in their own time, to share and analyze experiences, ideas, and new practices. Although unfunded, these collaborative processes and structures have enabled the production of books, the journal *PEEL SEEDS*, conferences, professional learning courses, and a large database of teaching practice available as an online subscription. The website (www.peelweb.org) provides more details and a range of news, information, and resources.

Innovative Links was a large-scale government-funded project beginning in 1994 and focusing on the professional practice and curriculum concerns of school communities with the support of a tertiary mentor (Sachs, 1997). Using an action research/teacher concerns model, the tertiary mentor worked in partnership with the teachers from the school community. For example, the partnership that began at Curl Curl North Primary School as an Innovative Links Project in 1995 to address teachers' concerns about the implementation of the new English syllabus lasted 15 years and addressed a range of curriculum questions (Ewing, 2002; Aubusson, Ewing, & Hoban, 2009).

The Australian National Schools Network (ANSN) (<http://www.ansn.edu.au>) is an organization that focuses on school re-form and improvement using action research methodologies. From its inception in 1991, it brought together teachers, schools, university faculties, business members, and teacher unions with government and non-government employers to re-think learning and pedagogy and the way schools are organized. Originally funded by the Commonwealth Government, the ANSN continues and is now entirely funded by its members.

Pedagogy, Education, and Praxis is a cross-institutional, national research collaborative team that was established in 2005. It led to a new *Action Research and Practice Theory Program* of research spanning 2011–2015 (Kemmis & Smith, 2008). The program aims to establish cross-national action research teams that explore particular issues in action research that fall under one of three themes: creating communicative spaces, partnerships and recognition, or responding critically to changing historical conditions (e.g., Kemmis & Mutton, 2012). Many of its Australian-based projects rely on funding from government research sources.

Each of these projects played (or continue to play) a critical role not only in exemplifying the nature of educational action research but also in shaping educational inquiry in Australia. While the issues addressed in each project varied, they all based their aims on the underlying principle that to transform

practice so as to improve the quality of outcomes, the unwelcome or uncomfortable truths must become the basis for re-conceptualizing future practices (Mockler & Groundwater-Smith, 2015).

22.3 CONTEMPORARY AUSTRALIAN EDUCATIONAL ACTION RESEARCH IN ACTION

In this section, we provide a succinct examination of three contemporary action research initiatives based on early childhood and primary school contexts in Australia. Each example was selected because one of the authors had, or still have, a close connection with the project. We also consider the projects represent the nature and scope of different action research initiatives that typically occur in Australian education contexts: in preservice teacher education programs; unfunded school-level teacher-driven projects; small-grant projects funded by a professional organization; and larger government-funded research projects. Our aim here is to not merely re-iterate descriptions of research findings reported in other public reports but to examine their objectives and outcomes in relation to the reflective questions presented in the previous section and to evaluate the claim that much action research has lost its critical edge and, hence, its ability to transform practice (Kemmis, 2006). Prior to addressing these questions, we provide some background information for each action research project to allow the context to be understood. We also highlight some of each project's findings, differentiating between those that deal with purely technical schooling issues and those concerned with real educational re-form.

22.3.1 *Preservice Early Childhood Teacher Action Research Project*

Background During the final semester of a Master of Teaching in Early Childhood (birth to five), the University of Sydney preservice teachers undertake an action research project. They must identify an issue that, when studied and acted upon, will be beneficial to their own professional practice and may also benefit the context in which they are working. Findings of all action research projects are then presented at a post-internship conference. The project examined here was conducted by Ling Wu (Wu, 2014), with 49 three-five-year-old preschoolers from various cultural, linguistic, and socioeconomic backgrounds.

What Sort of Problem Did the Investigation Address? During her internship, Ling became concerned that some of the preschoolers did not appear to be engaging in dramatic play very often. She also noted that some did not use the cubby house at all. Ling's review of relevant literature had convinced her of the importance of dramatic play in developing children's sense of identity and engagement in learning and communication skills. She designed her project to investigate whether changing the physical spaces for play by introducing

different themes might encourage more dramatic play. The site chosen for her intervention was the preschool's cubby house, and the intervention involved changing the physical setups over two cycles: from an unstructured context to a post office setup and then to a library. With the agreement and participation of the Director and the team teachers, the early career researcher, Ling, was both the facilitator of the project and the main observer.

What Aspects or Dimensions of Practices, Understandings, and Situations Did Ling Problematize? Often, preschool teachers and caregivers and parents assume it is best to leave children to their own devices when playing. In other contexts, young children are given little time to play. Ling's research was exploring whether at times there needed to be more scaffolding of play situations. Her research aimed to gauge both participation in cubby house play and document the kind of play behaviors that occurred. Observations recorded how and when children changed the environment, how they identified and used the materials provided, and whether they engaged in dramatic play.

Research questions included:

- How frequently were children participating in non-dramatic and dramatic plays both inside and in the cubby house?
- What kind of play behavior did the children engage in?
- Was there any relationship between physical setups and children's engagement in dramatic play?

In What Way Did Ling Make These Issues Problematic? Initially, Ling gathered baseline data to gain an understanding of the pattern of children's participation, emerging learning, and interest during cubby house play from 10 a.m. to 12 noon each morning. Two physical setups, a post office followed by a library, were then planned and introduced sequentially based on the children's interest. The second theme was specifically chosen in response to the children's ideas, particularly those children who had previously shown little or no interest in dramatic play. Props that were largely symbolic were added gradually in response to the children's questions and emerging interest in these themes.

Did Ling Problematize Things Subjectively, or Did She Problematize Them Intersubjectively, Opening a Communicative Space Between Co-participants? Ling opened up intersubjective communicative spaces by specifically listening to the children's voices and responding by consciously creating a new physical setup that met their expressed interests.

Did Ling Address Technical Problems About Improving Schooling or Critical Questions About Education? Or Were They About Both? This research specifically addressed the importance of providing places and spaces that encouraged increased engagement in dramatic play. The teacher-researcher involved the children in the process by listening carefully to their talk to gauge their inter-

ests and responding in the next iteration of the research process thus honoring the children's voices.

Results and Unwelcome News There was an overall increase in cubby house participation and duration over the ten weeks of the study. A larger number of children in the group were engaged in this activity, including some who had not participated at all during the week that the baseline data were collected. The study also found a rising trend in overall play (from 20.3% in the baseline week compared with 79.7%) in the final week of data collection, and the percentage of dramatic play doubled. Interestingly, as prop provision increased so did the thematic dramatic play. *Athematic* dramatic play was mostly initiated by the children. They spontaneously created their own themes and expanded their own play. During the second cycle, there was also a marked increase in collaborative dramatic play. The research underlined the importance of listening to every child's voice and emerging interests. The increasing child-initiated themed and athematic play also highlighted the children's imagination and creativity.

The findings impacted powerfully on the preschool teachers in the center as well as the parents. They began to recognize the importance of changing and structuring physical setups both inside and outside in the cubby house. The early career teacher found the research process critical in underlining the need to listen to the children's voices as well as the need to design and vary physical play contexts.

22.3.2 *Action Research Funded by a Professional Association*

Background Over 15 years (1995–2010), Curl Curl North Public School, a rapidly growing primary school situated on Sydney's northern beaches participated in a series of action research and action learning projects designed to engage children more productively in deep literacy processes through the use of educational drama. This example focuses on one project funded by a research grant from the Australian Literacy Educators Association in 2009 (Warhurst et al., 2010) and led by one of the school's Assistant Principals, Janelle Warhurst.

What Sort of Problem Did the Investigation Address? The action research project aimed to address students' comprehension issues. Teachers were keen to explore their teaching of comprehension and find strategies that would *improve students' critical literacy outcomes through teaching imaginatively*. The seven teachers involved worked on each grade across the primary school (Kindergarten to Year Six) and determined to use contemporary children's literature with a repertoire of pedagogical practices (Louden et al., 2005) that embedded a range of arts processes and experiences and aligned with the New South Wales Department of Education and Training (2003) model of pedagogy.

What Aspects or Dimensions of Practices Understandings, and Situations Did They Problematize? Designed to challenge some traditional beliefs about the teaching of Literacy and English, the intervention aimed to enhance the participating teachers' knowledge and practice about student engagement and engagement-supportive teaching practices. The research questions included:

- How do we help students to respond meaningfully to what they read?
- Why is it important that we as teachers of primary children listen to and process the responses of our students to what they are reading?
- How do teachers know which books are authentic and worthwhile texts for close study in the classroom?
- How can we use quality arts processes to more effectively encourage students' deep understanding?

Teachers believed much traditional literacy teaching was stifling children's creativity and acknowledged Gleeson's (2007, p. 4) assertion that reading should "open the mind, to enlarge the experience, to broaden the horizon of the reader." They wanted to find ways to encourage their students to take time for exploration, experimentation, and play and viewed arts processes and experiences as tools for literacy learning.

In What Way Did They Make These Things Problematic? Several teachers supported by an academic partner analyzed student engagement and achievement data collected from surveys, standardized tests, and teacher-designed activities. The information was used to stimulate discussion about the school context and existing literacy practices and policies. In each of the case-study classrooms, a small group of students was profiled at various stages over the year-long duration of the project. This led to discussion about ineffective teaching of comprehension. Teachers felt traditional comprehension questions and activities often encouraged only surface acceptance of meaning and did not require students to explore an author's assumptions and the perspectives presented. Teachers wanted their students to have the confidence to be able to view texts from a variety of different viewpoints and to be able to interpret various layers of meaning. This change in teacher understanding led to a change in their literacy pedagogy.

Did they problematize things subjectively, or did they problematize them inter-subjectively, opening a communicative space between co-participants? As stated by a participating teacher, "I believe we set out to challenge ourselves, try something new and think about our practice. I believe we also set out to motivate, inspire and support each other." Teachers used questions adapted from *Booktalk* (Chambers, 1991, pp. 170–173) to provide a scaffold for deeper student responses. Workshops involved group discussions, professional learning activities, and collaborative planning. They thus opened communicative

space for professional dialogue as well as more communicative opportunities with students. In time, some parents also engaged in the conversation because they had noticed changes in their children's approach to literacy learning.

The changes in learning outcomes for students in the classes of the teachers involved in this project included increased motivation and engagement, richer vocabulary, heightened use of metaphors in writing, and awareness of the relationship between imagery and meaning. Participant teachers asserted that their students were more confident and engaged in their approach to learning and more willingness and capacity to listen to and value the contribution of others. Substantive communication was evident in all classrooms as well as deeper understanding of narrative including characters, themes, and structure. Teachers of classes K-6 mentioned the development of creativity and imagination throughout the project. Improvement of descriptive, narrative, and response writing in classes was documented and substantiated. Teachers compared their professional learning process as a group to theater practice (Miller & Saxton, 2004, p. 3). There have been elements of community, empathy, and shared meaning.

Did They Address Technical Problems About Improving Schooling or Critical Questions About Education? Or Were They About Both? The project addressed critical questions about education: an expanded understanding of literacy pedagogy. Teachers believed they had witnessed improved student engagement, increased motivation and creativity in learning through the project, and that these findings demonstrated that creative arts activities could take literacy beyond talking, listening, reading, and writing and into critical literacy including observation, analysis, interpretation, and "making sense of their (students') world" (Lee & Fradd, 1998, as cited in Miller & Saxton, 2004, p. 2). One teacher wrote:

I have gone from using simple comprehension worksheets with disconnected texts of varying quality, to using carefully selected, quality texts and stimulating understanding through drama, art, writing, basic movie making, questioning and a multitude of other strategies.

Results and Unwelcome News The intervention disrupted the established beliefs and literacy practices of individual teachers and led to interest from other staff members. Sharing of the activities and student outcomes resulted in changes to some school-level practices. The teacher team believed it was imperative that they helped others understand this expanded understanding of literacy, that it must encompass students' cultural comprehension and self-expression and foster innovation and creativity. The project teachers presented their findings at a national conference, and their work was published in a journal for primary teachers.

22.3.3 *Large-Scale Government-Funded Action Research Project*

Background St Clarence Primary School took part in a large Australian Research Council-funded project (2007–2010) (e.g., Bobis, Way, Anderson, & Martin, 2016) designed to monitor the mathematics achievement and engagement of 4,383 Year Five to Eight students in an Australian capital city school district. Grade level mean scores showed that Year Five and Six students from St. Clarence obtained above average mathematics achievement scores, but scored lower than average in terms of engagement. Students were considered *at risk* of becoming disengaged from mathematics. The school principal and upper primary teachers chose to work with mathematics educators as part of an action research process designed to improve student engagement in mathematics.

What Sort of Problem Did the Investigation Address? The teachers noted that many of their Year Five and Six students, including those considered to be their most capable mathematicians, demonstrated little interest in the subject and often actively avoided doing mathematics.

What Aspects or Dimensions of Practices, Understandings and Situations Did They Problematize? The small team of teachers and their principal were grouped with mathematics educators to explore and question beliefs and knowledge about student engagement with a collective goal of developing engagement-supportive teaching practices. Research questions included:

- What are the causes of disengagement in mathematics of Year Five and Six students?
- To what extent and in what ways can we change our pedagogy to positively impact on student engagement in mathematics?

In What Way Did They Make These Things Problematic? Six teachers worked with three mathematics educators to analyze student engagement and achievement data collected from surveys, national achievement tests, and other teacher-designed activities. The information was used to stimulate discussion about the school context, existing practices and policies such as the use of streaming students for mathematics instruction, and to highlight areas of student need.

Did They Problematize Things Subjectively or Did They Problematize Them Intersubjectively, Opening a Communicative Space Between Co-participants? To initiate dialogue and collaboration, workshops facilitated by mathematics educators involved group discussions, collaborative activities, and argumentation. For example, to challenge teachers' beliefs regarding achievement and engagement in mathematics, teachers worked collaboratively to arrange a set of cards labeled with various student characteristics (e.g., boy/girl; slow/fast worker, etc.) according to whether they described a student who was typically "good" or "bad" at mathematics and whether they would be engaged or not engaged

in mathematics. Teachers justified the placement of labels and could challenge decisions made by other teachers. The discourse that ensued caused teachers to individually and collectively reflect on their beliefs and practices surrounding student achievement and engagement in mathematics. During one such session, a year-five teacher reflected on her own and the school's practices of streaming students: "Maybe I don't challenge them enough to allow them to show me what they can do. Is this an implication of us streaming? Are we creating a top and bottom by arranging the children in two different classes?"

Commercially available classroom video was used to further elicit and challenge teacher thinking about engaging pedagogy. The mathematics educators then facilitated discussions requiring teachers to give feedback on their own practices for engaging students in mathematics and to identify personal goals for exploration in the classroom and improvement of their teaching practices.

Did They Address Technical Problems About Improving Schooling or Critical Questions About Education? Or Were They About Both? In order to address the problems related to student engagement, teachers selected, trialed, and evaluated the impact of a range of new teaching tools and strategies. Some of these changes solely addressed issues of "schooling," such as student attentiveness during mathematics lessons. For instance, to increase student involvement in lessons, teachers introduced mini-whiteboards in an attempt to encourage *all* students to think and record their responses to class-level questions. While the desired technical outcome of increasing student participation in answering questions was achieved, the teachers observed that their level of questioning rarely challenged students' thinking beyond what had previously been the case. Other changes to practice required a whole new educational mind-set about what constituted "effective" mathematics education. Teachers who trialed team-teaching and peer-teaching techniques became critical of streaming practices in the school and reflected on their own levels of confidence in mathematics content and pedagogy to enact some of the instructional goals they had jointly agreed upon. A teacher who incorporated a series of reflective prompts to encourage student autonomy during problem solving re-conceptualized her approach to teaching mathematics from one dominated by work sheets and solitary quiet work to one involving argumentation, communication, higher-order thinking, and collaborative problem solving.

Results and Unwelcome News The intervention disrupted the established beliefs and practices of individual teachers and some school-level practices. The long-standing school practice of ability streaming students for mathematics instruction was now considered partly responsible for widening the gap between high- and low-achieving students. Teachers found that students placed in lower-performing classes were not provided with the challenges needed to develop their mathematical thinking: expectations for such students had also been kept low. As a result, streaming of students was stopped, and teachers experimented with other practices to cater to children's strengths and

needs, including teachers moving students to different rooms to allow team-teaching of mathematics across and between grades as a second cycle of their action research work. Further actions included: Less mathematically confident teachers partnered with teachers possessing a greater degree of mathematical expertise; Teachers visited classrooms of a neighboring school with a reputation for implementing practices that were supportive of student engagement in mathematics; Teachers trialed, evaluated, and adapted new practices with the advice of teachers from the neighboring school and a system-level mathematics consultant who provided classroom support. Hence, the communicative spaces were broadened to include teacher voices from other local school communities and the wider education system.

22.4 REAL RE-FORM OR ISSUES OF SCHOOLING? REFLECTION ON THE THREE CASES

Given our responses to each of the reflective questions posed, this section briefly considers the extent to which the above examples of classroom-based action research achieved or have the potential to achieve, real educational re-form. In so doing, we highlight commonalities in the three examples and explore interesting nuances among them. Of particular interest to us, however, is whether a seemingly trivial schooling issue can give rise to a more profound educational one.

As is characteristic of action research, each project started with a desire to improve “what is happening *here*” (McNiff & Whitehead, 2011). Ling Wu, a relative newcomer to the preschool, noticed the infrequent occurrence of certain types of play—an aspect considered critical to young children’s overall development. While teachers at Curl Curl North aimed to improve student outcomes in terms of their literacy skills, those at St. Clarence identified student engagement in mathematics as a concern. In each case, school authorities could have quickly and easily instituted changes to teacher practices and school routines to address the perceived issues, perhaps drawing upon familiar practices used in a previous education context or one espoused in curriculum documents. Instead, steps toward resolution were slowed as current circumstances were problematized through action research processes involving consultations with students and parents, problematic discourse among teachers and, in the case of Curl Curl North and St. Clarence, with academic partners from universities and participants from the wider educational community.

Due to the diverse reasons for their very conceptions, each of the projects had a unique time frame in which they were conducted. However, the duration of an action research project is, by itself, no indicator of its ability to reveal profound educational issues or to make a real difference that will benefit students (Johnson, 2012). Dictated by the length of her internship, Ling Wu’s research was conducted over a period of just six weeks. Despite this, the time frame was sufficient for structural changes to positively impact the frequency as well as

the nature of preschool children's play. So notable was the transformation in the play of the children that it impacted the pedagogical beliefs and practices of other teachers in the preschool—a consequence beyond that initially conceived by Ling Wu. Operating in a similar time frame, the action research project at St. Clarence unveiled a complex set of issues relating to individual teachers' beliefs and pedagogy and to whole school practices surrounding mathematics instruction. Unlike Ling Wu's situation, the academic partners and government funding supporting the St. Clarence project provided concentrations of time, expertise, and physical resources that enabled the participants to delve into issues more deeply and quickly than would otherwise be possible.

According to Ado (2013), it is an educator's involvement in the cyclic action research process that ultimately results in their systematic examination and reflection upon their own practices. This time-consuming process is justified on the premise that the resultant changes to teachers' practices will benefit their students (Hine, 2013). In each of the cases presented, the iterative process of action research began by addressing seemingly localized issues with the intention of benefiting students. Such a process led the way to more significant issues being revealed—the often unwelcome news of education. For instance, investigations into poor student engagement in mathematics at St. Clarence highlighted the inequity and unproductiveness of streaming students for instruction based on their prior achievement. It is often not until we start to scratch the surface of seemingly trivial issues of schooling that more profound educational issues are revealed. Only then can these issues begin to be addressed. Such is the power of action research to truly *re-form* practices.

22.5 COMPELLING ISSUES CONFRONTING THE PAST, PRESENT, AND FUTURE OF EDUCATIONAL ACTION RESEARCH

While the previous examples and discussion may give the impression that these projects worked well and required little effort on the part of participants, in reality, there are many challenges for action researchers with progress often messy and uneven. Drawing upon the presented examples and other relevant literature, we now highlight a number of issues that challenge the future of educational action research in Australia.

22.5.1 *An Increasing Compliance Mentality*

There is a need for practitioner and researcher resilience given that Australian education is one of a number of western education systems characterized by increasing politicization and over-emphasis on technical accountability and control. Groundwater-Smith and Mockler (2009) suggest that the rhetoric of inquiry into practice may be used by governments, systems, and managers as a tool for ensuring compliance instead of as a way of transforming practice through renewal of professional learning. While non-compliance of seemingly

technical issues of schooling can result in penalties, action research can provide us with alternatives—although they may not always be the most convenient

22.5.2 *Time Limitations*

Related to the first issue, is the time-consuming nature of action research in an environment with increasing pressures of accountability and ever-expanding responsibilities of teachers. Without external support, the process of action research can be difficult. At St. Clarence and Curl Curl North, external funding provided teachers with time needed to meet, reflect, and communicate with each other and with academics in the respective fields of mathematics and literacy.

22.5.3 *Issues of Capacity*

Participant researchers need the capacity to conduct action research. This includes the ability to ask difficult questions about professional practice, tolerate ambiguities in findings, and to re-frame the project after careful reflection. Funded projects are often supported by academic partners who have the knowledge and skills needed to conduct research, but many unfunded school-initiated projects can falter when participants lack the necessary research skills. As part of her initial teacher education, Ling Wu was trained in the action research process. More importantly, she was supported in her research endeavors by encouraging colleagues and a university mentor.

22.5.4 *Cyclical Nature of Action Research*

The dynamic and iterative nature of action research is in itself a challenge. The initial research aims and questions may change as the practice of action research changes the context with each iteration. This was the case at St. Clarence, where issues of student engagement in mathematics changed to issues surrounding school practices about streaming students according to prior achievement. Hence, the issue at the start of a project may evolve as new understandings are revealed and changes implemented—the messy nature of this evolution can be an overwhelming challenge for many would-be action researchers. Given the complexity of schools and increasing expectations and priorities they question about when to stop the iterative process of an action research cycle is also a challenge. As Groundwater-Smith and Irwin (2011) remind us, action research is not for the fainthearted.

22.5.5 *Sustaining Innovations*

Unproductiveness can “creep” back (Kemmis et al., 2014). What is initially innovative can become obsolete or stale as circumstances change. There is a need for continual disruption of the status quo, the taken-for-granted. As a

dynamic, ever-evolving process, action research can help prevent unproductive or unjust practices creeping back.

22.6 CONCLUSION

As demonstrated in our analysis of three examples, an action research methodology can empower practitioner researchers to facilitate changes that are educationally significant in their personal contexts and contribute to wider educational re-form. We have also argued that, through the process of action research, seemingly technical issues of schooling can reveal more critical issues—unwelcome news—and enable more penetrating re-form.

We believe it is essential that educational practices be regularly disrupted; it is an important part of being a reflective practitioner and activist professional (Sachs, 1997). To this end, we need “disrupters”—those who will remind us to critically examine the taken for granted aspects of schooling to avoid complacency or the ongoing implementation of those practices and policies that are unjust. The practices that are disrupted, examined, and re-formed today will need to be regularly scrutinized in the future as contexts change and we learn more about how students learn.

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