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CHAPTER 5: WHY USE ACTION RESEARCH FOR TEACHER PROFESSIONAL LEARNING IN PAPUA NEW GUINEA

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Introduction

In the effort to achieve the Millennium Development Goal of Universal Primary Education, many countries including Papua New Guinea are turning their attention to issues related to teacher quality (Barrett, 2009; Bruns, et al., 2003; UNDP, 2010). Papua New Guinea is one country where, even though school attendance rates are still relatively low (Department of National Planning and Monitoring, 2009), policy makers are turning their attention to issues related to retention including the quality of the teaching and learning experiences for all students.

This paper reports on a study that investigates the possibilities of developing a professional learning model based on Action Research that could lead to sustained improvements in pedagogy in schools in remote areas of Papua New Guinea. We begin by providing a brief definition of action research together with a rationale for using action research in the context of remote schools in PNG. A critique of the issues related to Action Research Methodology follows with a discussion of how these issues were resolved throughout the process. Finally, the paper concludes with some suggestions on how this model can be appropriated in other countries and in other contexts.

What is Action Research?

Action research has been variously described as participatory research, providing a bridge between academic research and day to day practice, and research undertaken by the educational practitioner with the aim of improving practice (Nolen & Putten, 2007). In the study reported in this paper, we introduced Action Research to teachers by providing this definition, drawing on a number of significant works in the field (Kemmis & McTaggart, 2005; McNiff, Lomax, & Whitehead, 1996; Noffke & Somekh, 2005).

Action research is:
- one kind of research;
- research completed by practising professionals;
- represented by a cycle of operation;
- a way to link new knowledge with existing knowledge;
- a process that teachers can use to solve their own school problems without relying on experts;
- a method that teachers can use to research their own professional practice; and
- always associated with reflective practice — or thinking about what you have done and why you have done it in that way.

In the earliest accounts of Action Research, Corey (1954) argued that Action Research engaged the practitioner in identifying an education problem and finding ways of resolving the educational issue through their own inquiry. This was quite different to traditional models of
research where an educational research specialist was engaged to carry out the inquiry process for the practitioner and make recommendations as to what should be improved and how it could be improved. Corey (1954) makes distinctions between these two alternatives, arguing that, whilst using the latter may yield good results which are objective, the limitations can be that the investigator is removed from the problem, from the teachers experiencing the problem, and from the context in which the problem is occurring. He also refers to the great difficulty in implementing recommendations made by others, whereas 'an integral part of action research is our actual practice of the procedures that give a priori promise which will enable the investigator to cope more effectively with their professional problems' (Corey, 1954, p.376).

In more recent years, Action Research processes have been introduced in educational contexts because of their close connections to the characteristics of quality professional learning opportunities. There has been a shift in recent years from professional learning models that implied a deficit in teacher skills and knowledge, to more recent models that see “teachers as active learners shaping their professional growth through reflective participation in professional development programs and practice” (Clarke and Hollingsworth, 2002, p.948). Evidence from the literature on sustainable professional learning supports the use of Action Research as a model that builds individual teachers’ competencies (King & Newman, 2001); is an evidence-based enquiry model (Timperley, et al., 2003; Timperley & Wiseman, 2003); and is based on teachers’ use of critical reflection or reflective practice (Willis, 2002).

**Rationale for Action Research in Papua New Guinea**

In designing the study, *Identifying strategies to sustain professional learning communities for teachers in remote primary schools in Papua New Guinea* (funded by the Australian Development Research Awards), the research team decided that the model of professional learning to be trialed in PNG should be based on Action Research and encompass some of the other principles of effective professional learning. In particular we were interested in investigating strategies that could be implemented in remote parts of PNG that did not have regular communication with the National Department of Education (NDOE).

We decided that an approach to sustained life-long learning required professional learning that was characterised by factors that produced sustainable outcomes such as a “process of improvements in teacher practices and pedagogical content knowledge” (Pritchard and McDiarmid, 2006, p.432). This required a whole school approach that would develop the school’s “capacity to manage and internalise change without external support” (Knight, 2005, p.470).

We also decided that it was necessary in this context to engage teachers as emerging researchers. The project recognises teachers as professionals who can make judgments on their own situations based on their daily classroom practices. These daily experiences are outside the external investigator’s field of experiences and professional practice and, therefore, the classroom practitioner understands these problems better. We also thought it was important that research became embedded within teachers’ professional practice. This approach reflected the work done in NDOE through the School Learning Improvement Plan (SLIP), which recognises teachers as change agents, and acknowledges that any changes to teaching and learning must begin with teachers’ recognition and ownership of their problems.
Using Action Research Methods in Papua New Guinea

Our study then, beginning in 2009, had some ambitious aims for the implementation of Action Research methods into schools in Ambunti-Drekirkir District of East Sepik and Middle Fly District of Western Province. While the project does not conclude until 2012, and our analysis of data is not complete, there are some issues that have already arisen that point to problems in using this process. This does not necessarily mean that our study has not produced real change in schools, and that the process has not been successful. The discussion here points to some of the challenges in using these methods in Papua New Guinea (PNG), but also describes ways that our research team have overcome or addressed these challenges. In particular three issues are addressed here: the involvement of the research team; primary school teachers’ capabilities; and the issue of remoteness and associated lack of infrastructure and communication capacities.

Involvement of the Research Team

As discussed earlier, Action Research is often described in opposition to traditional research carried out by an external investigator. Action Research also draws on principles of social justice and began as an emancipatory method to achieve equitable and democratic practices (Tan, McDonald and Rossi, 2009). There is unavoidable tension then, in planning a study such as ours, between these emancipatory ideals where teachers begin the process of solving their own problems because of some individual or school-based impetus, and the use of researchers who act as external investigators. However, in our study we have attempted to resolve these tensions through particular activities. First, members of the research team from NRI are acting as external colleagues who are collaboratively working with teachers in the selected schools to learn through the process and at the same time deal with the teaching and learning issues that confront teachers daily. Teachers become the ‘chief investigators’ of particular learning and teaching problems they encounter daily with their learners. The problem identified in each school is specific to that particular school and, according to the teachers’ own assessment, is a pressing learning or teaching issue for the majority of the teachers in that school. Second, in order for teachers to have some knowledge of the process of arriving at the problem and working through the process before arriving at a plan of action to solve the problem, the external investigator becomes a mentor and colleague for the teacher. They are not there to recommend to the teacher what they think should be done, but to guide the teachers along as they learn the action research process and gradually embrace it within their professional school operations.

Primary School Teachers’ Capabilities

The ongoing visits by the Research Team seem to contradict arguments for action research as insider researcher oriented. These visits place responsibility on the external research team to provide some guidance so that the teacher researcher as an insider can utilise the action research process. This contradicts arguments for action research that is emancipatory in nature and allows for some autonomy on the part of teachers. It can be argued though that such autonomy can only be guaranteed if teachers have had the initial training and knowledge in action research.

There are different views operating within PNG about the adequacy of teacher preparation programs and this paper is not the appropriate venue for engaging with these arguments. However there is generally, as in other contemporary approaches to teacher education across the
world, a view of a successful teacher as a "competent craftsperson" (Moore, 2004, p.75). This view results in programs that are content specific and are aimed at equipping graduates with discrete sets of skills and content knowledge, and do not include any focus on research training. Action Research and other research methods view teachers as "reflective practitioners" who have the skills "needed to reflect constructively upon continuing experience as a way of improving the quality and effectiveness of one's work" (Moore, 2004, p.100). This disjuncture results in teachers in PNG (and elsewhere) being encouraged to engage with reflective and inquiry-based research processes in their ongoing professional learning without the background or prerequisite knowledge and skills. In this context then there is no guarantee that teachers can initiate and undertake research on their own.

In our study we view the emancipatory aims of action research as a gradual outcome on the part of the teachers as they eventually gain the knowledge and confidence over time as they go through the research cycle. One way of monitoring this gradual capacity building is through the school visits by the Research Team. This places responsibility and commitment on the part of the external researcher to keep to the visit times as teachers in the research sites look forward to these visits. The visits are significant as a check and balance on what is happening throughout the research project in maintaining the research momentum and progress on the research issues that the selected schools are working on. Failure to keep to these visits can kill the interest of the teachers and result in the project being prematurely terminated.

**Isolation and Remoteness**

The current study's design, based on regular visits to the schools to provide support, has been affected by natural and social difficulties. In particular, problems encountered in Ambunti-Drekirkir and/or Middle Fly Districts included: tribal fighting and land disputes; the cholera outbreak in 2010; floods and drought (both districts are accessed by river transport) and communication difficulties, despite the recent introduction of mobile phone coverage in both districts. However, many of the issues associated with these problems have been solved through the National Research Institute (NRI) members' creative and innovative solutions. These solutions included making use of local knowledge and local authorities; engaging with local key contacts including those outside regular channels (for example, the local Member of Parliament and the Elementary School Advisers); and the successful cooperation with the Provincial Education Advisers and relevant Standards Officers. Importantly, these problems have not proved insurmountable because of the enthusiasm of all involved, the schools and teachers' eagerness and receptiveness to the study, and the sense that the projects have produced real change requiring only a small effort.

A more important issue arising from the contexts of the schools is that teachers may become too overwhelmed by their isolation, so that they lack any real motivation to take the initiative to improve students' learning outcome or to develop their own professional practice. In some ways the Teachers' Booklet developed for this study is an attempt to address this issue. In the booklet, teachers are led, step-by-step, through the action research process to identify the problem and then finally share the outcome with colleagues. While our early data indicate that this is deemed a useful resource book for teachers, the initial acceptance and recognition of the need to use action research must be clearly articulated from the beginning. A rationale for using action research that is convincing enough for the teacher in an isolated school to pick up the book and
work with it on their own is required. The draft booklet is still being improved, as teachers use it and there have been comments about refinements to the book which are being taken on board by the research team as they refine this booklet.

Additionally, the isolated contexts in which these groups of teachers work are such that they feel shut out from any information about professional development courses they may wish to undertake in teachers' colleges or universities. This sentiment was echoed by a teacher in one of the participating schools who said that:

I want to go and upgrade my teaching qualification but notice about my application has only reached me lately. Mail here comes in very late. I sent my letter of inquiry last year and have only heard now from the university I wanted to apply for this year. It is now late. (Field note, May 2011).

The physical presence of the NRI research team during the field visits to the schools confirms this teacher's sentiment about the difficulty of accessing information external to the school as there is an absence of direct communication links to the schools. This situation is difficult for teachers because they are left to their own devices. They use whatever resources they have available to provide basic education to their children. However, the whole school approach to the Action Research model used in our study aims to build a professional community of learners in each school. We hope that a supportive network of professionals at the school level is developed that embraces continuous professional development. Slowly, this is being created as teachers become familiar with the different steps in the action research process. At the moment there is evidence that the schools have developed their own time allocations to work on the action research project and each teacher is assigned a particular task during each step. However, this team learning must be fully embraced within the school program so that continuity is maintained well after this project is over. There is need for a post-project follow-up well after the project is over to find out if this is being maintained or not. Such information from this follow-up will be crucial in assessing the sustainability and viability of such an initiative in other contexts.

**Suggestions for Appropriations in Other Contexts**

One of the research questions for the current study is: What models and policy directions are potentially worthwhile in other developing nations to build and sustain professional learning communities for teachers in remote schools? This question relates to the investigation of the viability of our model for professional learning in other contexts, not only in PNG, but in other countries who are also aiming to improve the quality of their teaching and learning outcomes within restrained contexts. This investigation must however begin with an exploration of the possibility of extending the study within PNG itself, given that the current project involves only a few schools in two districts in two provinces. In one of the two provinces, there is already, at the provincial and district level, a growing interest in Action Research being embraced at the school level in all districts.

The progress so far of the implementation in these two districts is encouraging with one area yet to complete the cycle while schools in the Middle Fly district have been involved in sharing the process with other schools and teachers in their area. The success relies heavily on the research visits by the external researchers who are important in monitoring and guiding the learning
process of the current teachers involved in the project. Without these visits, teachers are left to their own devices to seek and develop resources where the learning and teaching needs arise. Without any background knowledge on action research, they cannot carry out research. However the Teachers’ Booklet could be used as a resource that can enable teachers to carry out their own school-based inquiry. There is still need for refinement to the booklet and the team is working on this. The booklet is not a bible to be strictly followed but it sets out the basic steps on what teachers can do about any learning or teaching issues.

Our initial findings support our claim that models of professional learning that are based on teacher researchers as insiders can be used in contexts such as remote areas of PNG. However we are aware of accounts that support using Action Research in low income countries including a series of studies completed in the 1980s and 1990s in PNG (for example, Burke, 1996; Guy, 1994). Yet there is little evidence of sustainability of changes to teacher quality as a result of these studies. Maxwell (2009, p.2) has considered the use of Action Research within “the community/school-based and the transformative models” of reform described by Cummings and Williams (2005) to argue that this approach can be used to improve “individual human capacity building” (Maxwell, 2009, p.11) at the local level.

Conclusion

It could be argued that this idea of improvement in individual teachers can lead to an overall improvement of teacher quality without relying on the large scale ‘one size fits all’ approaches that characterise many government initiatives. Our study seems to indicate that taking a ‘bottom-up’ approach to professional learning where teachers and schools are introduced to approaches that build individual teachers’ competencies using evidence-based enquiry model that support teachers’ use of critical reflection or reflective practice may be one way to improve student outcomes.

References


