

Action Research: Promise and Potential for Improving Teacher Professional Practice and the Learning Organisation

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Abstract

Today's teachers, though pressed to perform better, are, paradoxically, given limited opportunities for professional upgrading. This paper reports on a study of a sample of teachers who completed the University of the South Pacific's primary degree program in the Bachelor of Education (In-service). Through a survey questionnaire the teachers were asked about their perceptions of an action research course that formed part of this upgrading program. The analysis indicates that they were satisfied with the coverage of the course and found the course useful in their professional work. On this basis, this study proposes an action research strategy teachers could employ to improve their practice, thus delivering higher quality educational service to their clients. Empirical evidence from the available literature supports this position; application of the rubrics of action research can make a difference in improving teachers' professional practice. The study points to the need for the inclusion of an action research based course in all teacher education programs and suggests a place for inquiry into the impact of other courses in such programmes on the teachers' world of work.

Keywords: action research, professional practice, teacher education program, reflective practice

Introduction

Demands for continuous improvement of teachers have become a dominant discourse in education the world over. School organisations and teachers are consistently being pressured to improve their performance in order to achieve better results. In fact, "[there is] no time allowed to celebrate what we have already achieved, to stay put where we are already. No past-accomplishment is good enough it seems" (Grundy, 1997a: 1). This demand simply calls upon teachers and other stakeholders to set mechanisms in place for improving children's education. Teachers have usually relied on externally-derived initiatives, such as in-service awards, seminars, workshops and refresher courses, in order to improve themselves professionally. However, in this contemporary world, teachers would do better when initiatives come from within themselves. They should consider trying, individually and collaboratively, to find ways to improve various aspects of the organisational life of schools, such as the teaching-learning processes, curriculum and assessment. Teachers need to search continuously for appropriate interventions that would help them improve their professional practice and, in turn, both aid the improvement and development of the school organisation in which they work and maximise children's learning outcomes. Studies by Schon (1983), and Vialle, Hall and Booth (1997) illustrate that research methods courses, such as an action research methods course for teachers, can contribute to their professional development and in turn make a difference by consistently creating improvements in the quality and management of school organisations. Seen in light of the potential usefulness of an action research methods course, it seemed productive to explore teachers' views on such a course that the in-service teachers had completed as part of the requirements for the Bachelor of Education (Primary) degree program at the University of the South Pacific.

Background

Professional Isolation

The teachers in most of the Pacific Island States, for example, Fiji, Tuvalu, Kiribati and the other nine countries served by the University of the South Pacific, suffer from isolation from their professional colleagues within and outside the country. In Fiji's case, the more than 300 islands are scattered and the remotest island is more than 500 km from the capital city, Suva. Kiribati, which extends E-W for some 5,000 km, has a total land mass in its 33 coral atolls of 726 sq km in about 3.5 million sq km of ocean.

All small island states of the Pacific are characterized by this sort of smallness of land, vastness of ocean and dispersal of population. Because of the distances involved, teachers located in the ‘outer’ islands of these small island states are isolated even from their in-country professional colleagues, and have limited opportunities for collaboration (Farrugia, 1993). Professional interaction and collaboration are essential activities for enhancing and improving teaching. In many other educational contexts such activities are common and have a positive effect on children’s learning outcomes. Further, the Pacific nations have limited financial resources and consequently many depend on overseas aid agencies for funding assistance to make improvements in education as training of untrained teachers (Sanga, 2005). The largest share of the tight education budgets in these nations is consumed in the payment of teachers’ salaries (Baba, Cokanasiga & Caballes, 1992). In the case of Fiji, almost 80 per cent of the educational budget is allocated for the salaries of teachers; funds for in-service development simply cannot be found within the local budget (Tuimavana, 2010). The paucity of opportunities for professional development can significantly disadvantage teachers in Pacific nations, in comparison with those in industrialised countries..

Despite geographic isolation and limited funding opportunities, teachers in the Pacific Island states can still continue to organise professional activities in their schools to maximise children’s learning outcomes. To do this the notion of the school as a learning organisation where all its members consider themselves as a community of inquiry is vital (Bhindi, 1996; Velayutham, 1996). The concept of a school as a learning organisation enables teachers to reflect collectively and continually on their professional work and develop their capacity to improve, adapt and create initiatives for the further development of the school organisation (Bhindi, 1996; O’ Neil, 1995; Senge, 1990; Velayutham, 1996). In this process schools can become vibrant places for the promotion of the concept of professional learning communities where all members continue to find ways to improve the organisation. Building the capacity of the members, especially teachers, in an appropriate way will contribute towards ongoing organisational learning (Senge, 1990).

These ideas are similar to the notion of reflective thinking (or the reflective practitioner) that originated as far back as the 1930s from the work of John Dewey. Dewey (1933: 9) referred to it as “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the conclusion to which it tends” . The application of suitable ideas can help resolve a range of personal and professional issues and challenges (Norton, 1997). In this regard the need for ongoing reflection both individually and collectively on various aspects of the school organisation is warranted for the purpose of improving its overall effectiveness. Proponents consider that future progress and developments in education will depend on reflective learning and in turn, appropriate action (Ebbutt, 1985; Evers, 1990; Hutchinson, 1993; Hargreaves, 1994). Hence, preparation of teachers for learning by suitable inquiry can enhance educational improvement and development.

Action Research

One of the strategies by which teachers can undertake school improvement activities in their own contexts with the intention of making themselves as well as their respective schools perform better is through action research (Kember, 2000; Mills, 2003). In the Australian educational context, for example, schools have achieved successful learning outcomes through action research (Grundy, 1997b). Action research may sound a bit frightening to teachers but in our everyday lives we all have been using the principles of action research to better our lives. Action research is an effective means of developing reflective and critical skills and in turn can make a positive contribution towards school improvements and change (Booth & Ainscow, 2002; Meyer, Park, Grenot-Sheyer, Schwartz & Harry, 1998). Definitions of action research abound in the literature. Best and Kahn (1986) describe it as examining a practice so that changes can be made by the teachers themselves to improve the outcome of that practice. Cohen and Manion (1994: 192) describe it as:

. . . essentially an on-the-spot procedure designed to deal with a concrete problem located in an immediate situation. This means that ideally, the step-by-step process is constantly monitored over varying periods of time and by a variety of mechanisms (questionnaires, diaries, interviews, and case studies, for example) so that the ensuing feedback may be translated into modifications, adjustments, directional changes, redefinitions, as necessary, so as to bring about lasting benefit to the ongoing process itself rather than the future occasion.

Maxwell (2004: 2) describes action research as a strategy of “improving and assisting practitioners (such as teachers, pupils and educational administrators) to improve the rationality and justice of their practice”.

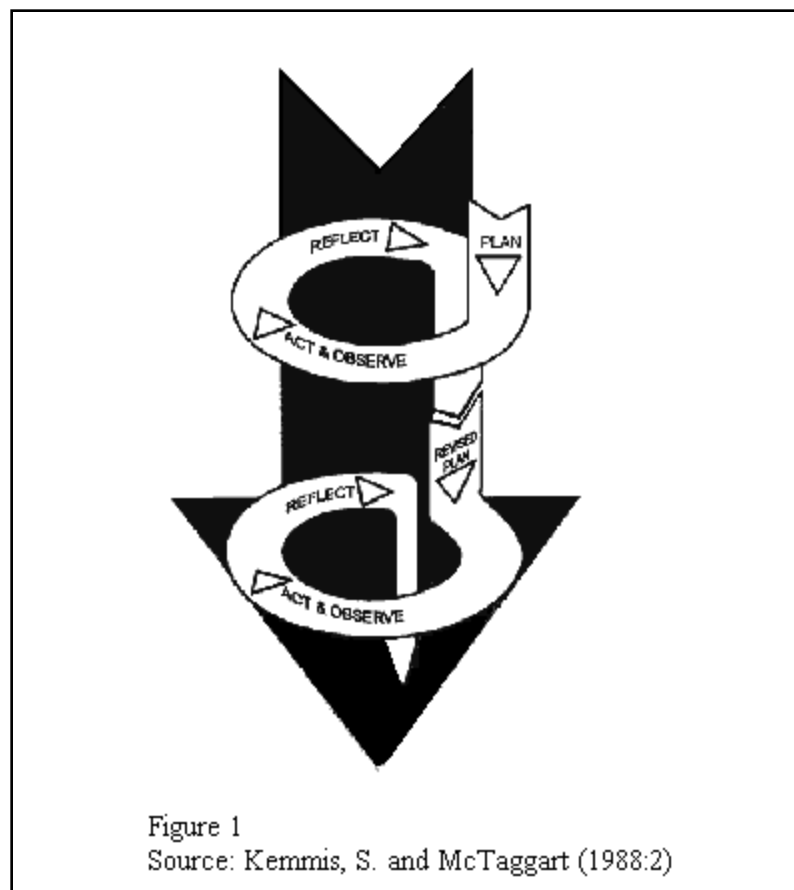
Kemmis (1983, cited in Hopkins, 2002: 43) considers that action research is a form of reflective enquiry undertaken to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations in which practices are carried out. In all these descriptions of action research, the common thread is that it is practitioner-based with the aim of improving certain aspects of concern to them in their immediate work context.

Relevance of Action Research

In light of the views expressed, it is considered appropriate that educational practitioners, both teachers and school administrators, become familiar with the rubrics of action research so that they can apply the strategy to help improve different aspects of the school organisation, such as curriculum and teaching-learning processes. Teachers themselves, provided they devote time and energy, can improve their professional practice, and in turn enhance school development by reflecting on their own practices, such as teaching practices. For this purpose, action research strategy is considered useful for practitioners as it is practitioner based and also considers reflective practice as an essential way of reviewing and evaluating professional practices in order to improve school work.

Phases in Action Research

The action research process and strategy includes four stages: planning, acting, observing and reflecting (Kemmis & McTaggart, 1982; 1988). Planning involves identifying an area of concern that needs to be addressed. Also, at the planning stage the teacher needs to map out possible interventions that could be used to bring about improvements related to the area of concern. The next stage, acting, involves implementing one of the interventions. This then leads to the third stage, where the intervention is monitored. Whilst the intervention is under implementation it is essential to collect relevant information about its effects, hence the third stage of the cycle. The last stage involves reflection based on the information collected to determine the success or failure of the intervention. In case the intervention does not improve the area of concern then another intervention may be needed and the cycle restarts. In simple terms it can be summarised as shown in figure 1.



Traditional research approaches such as an interpretivist research paradigm are generally not adequate in helping teachers address concerns related to their practice in school (Kemmis & McTaggart, 1982; 1988). In this regard action research is a good way to engage teachers in undertaking research in their work context for the purpose of improving the overall operations of the school. Action research encourages teachers to think systematically and critically with a view to improving different aspects of schoolwork such as teaching–learning, which is one of their key responsibilities.

Professional Judgment

As mentioned earlier, action research constitutes a number of phases relevant to using problem-solving as a means of improving an area of concern to the teacher. In reality, we all use similar methods to solve daily problems, without actually knowing that we are in fact using the principles of action research. However, the difference in the case of action research is that teachers have to use a systematic approach to identifying a problem, planning to solve the problem, implementing the plan, gathering information, and through critical reflection aiming to improve the chosen area of concern. On the basis of their research evidence, teachers can then make informed professional judgments pertaining to different areas of school work. Not only this, but it also gives teachers better control of their own professional lives rather than relying on their employers or their immediate superiors to direct them to work towards improving an area of concern in the school organisation. In this way teachers would contribute to the overall development of the school. This is another way to enhance professionalism within the teaching profession.

Without competent teachers such as those with research skills it is difficult to bring about any significant improvement in school life. Teachers are the key ingredients in any effort to improve the quality of education at any level. As rightly stated by Stenhouse (cited in Hopkins, 2001: x) “It is teachers who, in the end, will change the world of the school by understanding it” and in turn enhance teachers’ capacity for managing changes and their professional identity as teachers. Likewise, Fullan (1988) pointed out that success of any planned change will depend on teachers’ professional preparation as well as their capacity to understand the meaning of change. Research, and in particular action research, would enable them to have a better understanding of the world of the school and in turn fulfil the aspirations of the children they teach as well as the parents and other stakeholders. In this regard action research is useful as “[a] felt need, on the part of the practitioners to initiate change, to innovate, is a necessary condition of action research” (Elliot, 1991: 53). Thus teachers would then be more responsive to the changing world and in turn, the vision of providing quality education to the nation’s children.

In the Pacific nations, teachers are expected to give priority to implementing the curriculum. They are not really encouraged to re-look at the ideas about teaching and learning theories acquired from their training courses. In this regard, the use of an action research approach would greatly help them in critical assessment of issues related to classroom practices, for example, action research in the area of teaching practices may help them to settle on a suitable pedagogy, that is, the one that improves the quality of educational life in their classrooms and schools. Thus, there is scope for action research to be integrated with teaching (Crocombe, 2001). Here, the importance of making informed decisions based on evidence gathered from the classroom and school context is emphasized. Evaluation of teaching strategies, for example using action research design, will help teachers to plan more effectively for change in teaching strategies or for that matter any other educational change. The use of action research principles in daily professional practice could assist to improve the teaching profession and in turn the educational experiences of the children not only in the Pacific Island nations but also beyond.

Inclusion of Action Research in the Teacher Education Curriculum

As noted earlier, teachers’ use of action research in their day-to-day work is likely to improve their work practices in the classroom and in turn, improve learners in school-work. For this to happen, teachers need to know the detail of things associated with action research. However, a number of empirical studies show that teachers are wary of research (Green & Kvidahl, 1990; Cochran-Smith & Lytle, 1990). This may be because of inadequate training in research (Green & Kvidahl, 1990). Therefore, adequate training and exposure to various aspects of research would enable teachers to appreciate and in turn undertake research in their daily professional work. Teachers on pre-service and in-service training should be exposed to an action research course, which would encourage professional learning among teachers and promote teacher quality (Vialle, Hall & Booth, 1997). Overall, the need for reflection on and inquiry into practitioners’ own work context is gaining momentum (Beattie, 1997; Vialle, Hall & Booth, 1997; Zeichner, 1983).

In recognition of the value of action research, the University of Wollongong in New South Wales, Australia, introduced a course in research methods including an action research based component, which is compulsory for all pre-service teacher education programmes (Vialle, Hall & Booth, 1997). Similarly, the Graduate Diploma of Teaching and Learning (Secondary) programme that became available in 1999 for untrained teachers at the Tonga Institute of Education has incorporated an action research assignment as part of the practicum component. The programme, developed with funding assistance from the NZODA (French, 2005), was modelled along the lines of the secondary GDTL offered by the Christchurch College of Education. As French (2005) reported, the inclusion of the action research project afforded student teachers the opportunity to deal with everyday problems and practices in order to improve the overall performance of the school.

As far as the action research assignment is concerned, “designers had to recognise that many of the graduate teachers were undertaking their first research task, so the scope of the task needed to be kept manageable. The documentation outlining the assignment contained a definition of action research, a brief description of the process . . . some examples in a Tongan context of different types of possible problems, and a detailed criteria sheet for self- and tutor-assessment to ensure that all the necessary steps would be covered” (French, 2005: 286). The results of the project indicate that the action research process had made a significant impact on the students’ understanding, knowledge and skills as classroom practitioners. For example,

I learn a lot from this research project. I know that this action research has helped me, not only with my personal development, but also my professional development. I identified some shortcomings in my teaching, and learnt to improve those areas that needed attention. I recommend this research to anyone in the teaching field. It worked for me and I am sure it will work for others. (French, 2005: 288–289)

The literature that has been cited thus far provides relevant information pertaining to practitioners’ capacity to continue to learn and at the same time use that learning to bring about improvements in the organisational life of schools. As mentioned earlier, in action research, the teacher identifies and considers an area of concern, formulates a response, implements it, and collects and reflects upon the information on the outcome. In case the problem persists or is not satisfactorily resolved, the cycle may be repeated. The principles of action research can be used by people from other professions to focus on any aspect of their own professional work, as it is based on the work context and requires practitioners to engage in critical reflective thinking, and to seek to improve an area of concern. Practitioners carry out the research in their own contexts, thus the enquiry is locally generated with the aim of resolving a specific problem or an issue of direct concern to the practitioner. Action research has great potential and promise for our educators in the region. The picture that emerges is that application of the rubrics of action research in professional work could lead to improvement and development of our educational organisations. For these reasons, it is vital to explore and determine whether the course on action research has brought any benefits to the teachers and through them, to the schools in which they work.

Purpose of the Study

The aim of the present study was to explore the usefulness of the course on action research both to the in-service teachers and to their professional work in schools. Specifically, the study was designed to obtain feedback from the in-service teachers who did the course, to determine whether they found the course helpful in their professional work in schools. The study was guided by the following questions:

- (i) What is your level of satisfaction with the course in action research?
- (ii) How beneficial has the course been in your professional work?

Rationale of the Study

It is important to note that despite the references to the voluminous body of studies elsewhere, there is currently a marked lack of empirical studies on the impact of teacher education courses on teachers’ world of work in the small island states of the Pacific, including Fiji. Even though some providers of teacher education, such as the University of the South Pacific, have devised course evaluation forms, the questions posed therein are limited to the delivery of the course in the session just ended, and not directed to the broader issues concerning the design and content of the course. Lingam (2004), one study cited in the local context, focused on the overall pre-service programme for the preparation of teachers for work in Fiji primary schools. Otherwise, local research literature available is meagre and the present study could make a valuable contribution to the accumulation of knowledge in the area of teacher education.

The present study could also provide insights about the overall usefulness of teacher education courses in preparing teachers for the world of work. The answers obtained to the research questions posed would help remind different stakeholders about their role in providing quality teacher education programmes to uplift the standard of education. For teacher educators responsible for the in-service education of primary teachers, the findings would help inform their professional practice, with respect to equipping future teachers with suitable knowledge and skills to cope with various challenges in teaching and learning and the myriad demands of responsibilities expected of them.

In addition, these findings should inform teacher education providers on issues relating to the teaching of an action research methods course and the desirability of strengthening teacher education programmes by such means. This is because, as suggested in the literature, reflective practice, by being self-critical, is the hallmark of teacher quality and professionalism. The study could well act as a catalyst for further research on varying issues relating to teacher education programmes, not only in the South Pacific context but also beyond.

A description of the Action Research Methods course

At the University of the South Pacific one of the courses in the Bachelor of Education (In-service) primary programme, namely, *ED317 Special Topic in Primary Curriculum*, requires students to undertake a small-scale action research project. The course aims to equip these students, who are in-service primary teachers in the region, with action research knowledge and skills needed to bring about positive changes in their classrooms and schools. In this course students are required to focus on a problem from their own respective teaching and learning environment and use the action research cycle to bring about positive change. To prepare students adequately for this project, suitable material from the literature and activities relating to various components of the action research are included in the course book. In the first half of the semester the students are engaged in going through the materials in the course book to acquire the necessary knowledge and skills. The material is organized into seven units, each contributing valuable ideas as well as development of specific skills required for action research. These are highlighted below:

What is research?

This unit introduces students to the course. The key concept of research is discussed. Also, important differences between the two broad traditions of research are explained. The unit also discusses some traditional methods which are commonly used to research educational issues and problems. The unit provides sufficient background on research in a broad way.

Action research

In this unit the students learn about one of the most appropriate research methodologies that can be usefully applied at the school level, that is, action research. The unit provides some background literature about action research as well as relevant examples where action research was employed.

What can I research?

This unit provides essential tips on how to identify an issue or concern in either the classroom, the school or the community as potential areas of action research projects. The unit also provides details on how to gather background information about the chosen topic as well as how to formulate suitable research questions.

How will I find the answers?

This unit discusses a range of data collecting methods – it is important that the best and most efficient ways of collecting data are utilized – and then discusses ways of analysing the data collected.

Thinking ahead

The need to carry out planning and implementation of an action research project is the focus of this unit. A 'real life' project is used to demonstrate the value of planning. The unit emphasises some important tasks in action research planning, including the process of developing a plan for action research.

Sharing your research

The unit focuses on one of the key components of action research, that is, the reflection process. Reflecting on the information gathered helps the researcher to determine whether the action or the intervention made any difference in addressing the issue. Also, the unit provides some ways of formatting the research report for the audience intended.

The final draft

This unit re-visits some of the important issues related to action research discussed in the earlier units. Also, the need to write and submit a final report on the action research project for assessment is discussed. Because of assessment requirements, the final report is the result of completing one cycle of action research and serves as a basis for further cycles of action research around common issues teachers face in their day-to-day work.

Apart from the material in the course book, satellite and face-to-face tutorials are available to give a better understanding of the ideas associated with the principles of action research. The students are then required to prepare and submit their proposed action research project. Guidelines on the aspects to be included in the proposed project are provided in the *ED 317 Introduction and Assignment Book*. The proposed projects are assessed and returned to the students before they undertake the action research proper. The feedback helps them to improve their plan before actually implementing the action research cycle in the second half of the semester. Towards the end of the semester they prepare their action research report based on the guidelines provided in the course materials. The final reports are assessed and returned to the students. Because of the nature of the course, coursework is the sole basis for the final assessment.

Method

To address the research questions posed, a questionnaire survey was used as a primary data gathering method. The teachers were scattered all over Fiji and the use of a questionnaire was considered to be the best means of data gathering (Gay, 1992). The items in the survey questionnaire were organised around the topics covered in the course: *What is research? Action research, What can I research? How will I find the answers? Thinking ahead, and Sharing your research.*

A four-point scale ranging from (1) not covered at all, (2) introductory coverage only, (3) detailed examination, to (4) heavy emphasis was included. The participants were asked to respond by indicating the extent to which the course has prepared them on each one of the topics. The four-point scale adopted was considered relevant in the present study as studies conducted elsewhere have successfully employed a four-point scale with similar descriptors (Vialle, Hall & Booth, 1997). Added to that, the in-service teachers were asked to comment on the basis of the rating they gave for each topic. The second question concerned the perceived benefits of the course to teachers in their professional work. A representative sample of teachers was chosen for the study. The response rate attained for the survey was 32 (66 %) of the total sample population of 50.

The data obtained from the use of the Likert-type scale were analysed using simple descriptive statistics and the qualitative data were analysed and presented on the basis of the themes relating to the topics of the course.

Results

As mentioned earlier, the purpose of the study was twofold. As such, the feedback obtained from the in-service teachers is analysed and presented under the two key research questions the study sought to answer.

What is your level of satisfaction with the course ED317 Special Topic in Primary Curriculum?

On the basis of the analysis of the quantitative responses, the level of satisfaction for each topic in the course is shown in table 1. The high mean scores indicate the view that in-service teachers were more satisfied and the low mean scores reflect a view that they were less satisfied with the course.

Overall, the ratings for all the topics are above the mean of 3.0 (Table 1). As can be seen, the highest level of satisfaction shown was in the topic *Action research*. On the basis of the ratings, the data clearly indicate that the in-service teachers were satisfied with the information provided in each one of the topics covered in the course.

Table 1: Level of satisfaction for each topic in the course.(N = 32)

Topic	Mean	Standard Deviation (SD)
What is research?	3.5	0.75
Action research	3.6	0.69
What can I research?	3.0	0.77
How will I find the answers?	3.3	0.78
Thinking ahead	3.1	0.66
Sharing our research	3.3	0.74

In the section that follows, the results of the analyses of the qualitative data are presented according to each one of the topics included in the course. Feedback on the first topic, *What is research?*, showed that most of the teachers (91%) felt that the course has provided a detailed examination of the topic. Some of the typical comments were:

I have a good idea as to what research is all about . . . thought that it was something only for academics to do . . . now not at all frightened of the word research.

I got a wealth of ideas about research after reading this topic.

The reading provided background information about research and this helped me a lot in my understanding of research.

Some of the teachers spelled out that they now realise that there are two main research paradigms. A small number of teachers (9%) indicated that the language used in some of the readings was difficult to understand and as such, they had difficulties grasping certain key concepts associated with research.

In relation to the topic *Action research*, most of the respondents thought that the emphasis given was tremendous. Since the course was based on action research, the topic deserved a heavy emphasis in the course book. Most of the teachers (89%) perceived that they gained a wealth of information about action research. This demonstrated adequate coverage of the components of action research. For example:

Helped me to understand about action research and how to do research in a simple way.

The method of conducting action research was quite useful as I found it easy to understand and apply to remedy problems.

I now know more about what action research involves. I learnt the phases and their appropriateness.

The analysis of the data on *What can I research?* indicated that the teachers were conversant with identifying areas for research. Most of the teachers (95%) rated the material as providing a detailed examination of how to identify action research projects in the school setting. For instance:

I got to identify problems which take place in my classroom.

It helped me in finding out what I can research in my school and classroom.

Helped me to understand what areas I can explore to conduct my research.

With regard to *How will I find the answers?* responses showed that the teachers felt the course materials provide detailed examination of how to search for answers to address the research questions posed. For example:

I learnt a lot of new ways and interesting ways of collecting data.

I have come to know how to collect data to find solutions to classroom problems.

I learnt the different methods to gather data to help find answers to problems.

On the *Thinking ahead* most of the teachers (80%) thought they were provided with detailed information on aspects to consider when carrying out planning proper for the action research. The following comments demonstrate this:

I learnt about planning well for action research.

In this unit I learnt how to do a proper reflection which is an important phase in action research.

The analysis of the data on *Sharing our research* indicated that most teachers felt that the information included in the course book had a sufficient emphasis on writing research reports. For example, some of the comments were:

I got to learn the actual way of presenting my research report.

Sharing of ideas is a good value and this unit has helped me to write a research report.

Sharing ideas through research reports helps in developing individuals more.

How beneficial has the course been in your professional work?

Overall, the results (70%) showed that most of these teachers found the course beneficial in terms of their professional work at school. This also indicates that the in-service teachers may have acquired relevant information about the use of action research to solve a problem. Feedback from the students indicated that they learned much about action research and its application, as the following comments demonstrate:

This course has empowered me to carry out action research.

The course was a great help as it provided the strategies to improve my work place.

It developed my skills in conducting action research.

It helped me to investigate issues of interest to me in the school.

The course gave an opportunity to research on areas closely related to my work.

Apart from school work, the action research methods course has helped me to better understand research methods course at the postgraduate level.

Studying the action research course helped me to be involved in an in-depth understanding of how I could improve my practice as an educator through a process that includes indentifying a problem, doing something to resolve it, seeing how successful my efforts were, and if I am not satisfied, I try again.

Discussion

The results in the preceding section show that the in-service teachers were satisfied with the course in action research. Not only is this evident in the ratings (Table 1) but also from their comments as illustrated in the typical quotations. This study lends support to the findings of the study conducted in other contexts (French, 2005; Grundy, 1997b; Vialle, Hall & Booth, 1997). With regard to the benefits of the course, the in-service teachers indicated that the course was of great benefit to them. This is consistent with the findings of the study by French (2005) in Tonga. Since the course was beneficial to them it can be said that these teachers on their own through reflective learning may be contributing towards improving various aspects of the organisational life of the school in which they are working (Evers, 1990; Hutchinson, 1993; Hargreaves, 1994).

Like the research course implemented in the Australian context, this research course could be helping the in-service teachers to improve their performance through reflective practice and in turn, contribute towards success in children's learning outcomes (Grundy, 1997b). The course has provided the in-service teachers a good foundation on which subsequent learning through reflective thinking has the potential to uplift teachers' performances and in turn the quality of educational provision (Beattie, 1997; O' Neil, 1995; Schon, 1983; Velayutham, 1996). Since the in-service teachers showed a high level of satisfaction with the course, we may infer that they were keen to know about research and as such were not really wary of research, as was evident in other empirical studies (Green & Kvidahl, 1990; Cochran-Smith & Lytle, 1990). Such an exposure to an appropriate research methodology provides better opportunities to the teachers to construct their professional knowledge in all areas of school work (Beattie, 1997). In so doing, improvements and developments in educational organisations are sustained (Bhindi, 1996; O' Neil, 1995; Senge, 1990; Velayutham, 1996). Thus, not knowing about action research and its application can lessen the chances that teachers will be able to make a positive impact in their professional work and could compel them to remain zombie and unproductive in the profession.

On the whole, the responses gathered from the in-service teachers indicated a strong appreciation of the course in action research and more training on research will better equip teachers for the nitty-gritties of research and in return, give education systems, especially in the small islands of the Pacific and even beyond, optimal benefit.

Conclusion and Implications

Even though this was a small-scale study, the findings illustrate that like the students of the GDTL (Secondary) programme at the Tonga Institute of Education, the in-service teachers of the *ED317 Special Topic in Primary Curriculum* have also indicated great satisfaction with the course in action research. Given that the in-service teachers showed great satisfaction with the course, the methodology involved in action research may have contributed positively in terms of improving their professional practice at school. Also, it can be deduced from the findings that the in-service teachers have the ability to make effective use of action research methodology to facilitate positive changes in their work environment. This is a step in the right direction as the knowledge and skills of action research can greatly assist teachers to handle any issue confronting them in their daily professional practice and in turn improve their performance at work. Otherwise, teachers will remain inert and in turn the organisation will not grow and develop.

A course in research can provide a solid foundation for the professional development of teachers. Encouraging teachers to reflect critically on their daily professional practices in order to help them to continue to improve their performance is a step in the right direction. In this way children will ultimately benefit from the services of these reflective practitioners. As suggested in the literature, teachers' critical reflection on their work will assist them to grow professionally (OECD, 1994). Hence, exposure to action research inquiry will enhance the ability of the teachers to bring about positive changes in their work settings; in this way, schools build a culture of continuous improvement. In the long run an action research course has the potential to give teachers better preparation in becoming reflective practitioners and in turn help them to find ways and means to deal effectively with the day-to-day challenges in the classroom and school context. Above all, the adoption of the principles of action research has promise and potential to enable educational organisations to become truly learning organisations.

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