

THE NATURE AND QUALITY OF TEACHER RESEARCH

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Introduction

"... it is difficult to see how teaching can be improved or how curricular proposals can be evaluated without self monitoring on the part of teachers. A research tradition which is accessible to teachers and which feeds teaching must be created if education is to be significantly improved".
(Stenhouse, 1975, p.165)

It is more than twenty years since Stenhouse provided this call to focus on the teacher as the key to improvement. The result has been some rhetoric and intentions which acknowledge the teacher role in change and improvement, but a reluctance to shape implementation and professional development practices and policies which include teacher knowledge and experiences as the basis for action. Smyth (1995, p.1) highlights recent trends in education policies around the world which appear to increasingly marginalise the teacher role in education and school improvement. These trends seem to ignore the considerable literature documenting the achievements of teachers when conditions are provided for them to take initiatives and provide leadership in education. Bell and Gilbert (1996, p.16) highlight the connections between the professional development of teachers and their social and personal development as they analyse and interpret successful

interventions with teachers. Their analysis shows that if we are to gain maximum value from the teacher resource we have to recognise and encourage the development of teacher knowledge and ideas.

The papers in this symposium show clearly the nature and quality of teacher understanding in important areas of teaching and learning. This paper attempts to analyse the features of this teacher knowledge and the way it is developed and communicated. It also proposes some ideas about what might count as quality in teacher research.

The status of teacher knowledge

Russell and Munby (1994) argue the value of teacher knowledge and the phrase "authority of experience" captures their attempt to encourage teachers to place more faith in their own experience and knowledge to

meet the demands of teaching rather than relying on external solutions.

Teacher knowledge is commonly dismissed as anecdotal and of little value compared with more traditional forms of research knowledge.

Consider the following criticism of a piece of classroom research completed by a teacher:

"The researcher (teacher) speculates then responds from her own experience rather than the literature, which is not very persuasive". The comment clearly rates teacher experience as less valuable knowledge than what may exist in the literature. Perhaps more significantly the comment queries the possibility that teachers should speculate and respond from their own experience. There is an assumption that teachers are users of knowledge and cannot be effective generators of knowledge as they reflect on their teaching role.

I am assuming that the research described in this paper is initiated, conducted and documented by teachers although generally in conditions which have the support of colleagues. I will argue that this form of teacher knowledge has much to offer but should be considered as having some differences from traditional forms of knowledge. It is derived from teacher experiences and by its nature is difficult to communicate more widely. It also needs to be judged for its quality using criteria which still address the fundamental ideas of reliability and validity but in ways which are more appropriate for the nature and origins of teacher knowledge.

The nature and origins of teacher knowledge

After working with many teachers over long periods of time, I offer the following characteristics for the way teachers generate and communicate the knowledge they develop about teaching and learning. The three papers presented by teachers for this symposium can also be seen to exemplify the features of teacher research outlined below.

Teachers give a range of reasons when asked why they devote time and energy to generating knowledge and understandings about their own teaching and then finding ways of communicating with others. For a number of teachers it has developed as part of a teaching role which now includes study of specific aspects of their teaching and requires making time to communicate their findings more widely (Northfield and

Mitchell, 1995). The demands of teaching mean that teachers need to see the value of engaging in research and teachers report at least five important positive outcomes when they invest time in studying teaching and learning with colleagues. Firstly, teacher research can have an affirming function. Teachers can gain and give support to each other. Good ideas can be recognised and there can be a "celebration" of what teachers can achieve and some satisfaction in knowing that other teachers have similar interests and concerns. Secondly, by sharing of their experiences and insights teachers can rethink their existing ideas and "explode some myths" associated with teaching and learning. The importance of reframing ideas will be developed later, but it is often important for teachers to see a situation in a different way and have new possibilities for dealing with their classroom demands. Thirdly, the new knowledge and understanding provides stimulation for teachers. Whether it be the way in which students discuss creative writing when using computers, or the response to the introduction of a different teaching strategy, there is a feeling of satisfaction when a teacher gains a new insight from their own classrooms. There are times when teachers may wish to persuade others in the school community about the significance of an innovation. In this fourth type of outcome teachers may feel it is necessary to describe unacknowledged effects of an initiative or the possible impact of failure to introduce or maintain an approach. Finally a number of teachers report the value of having an audience for their efforts and having an interested group and a deadline which keeps the matters on their agenda. New understandings emerge as a result of writing or preparing accounts for colleagues.

As well as having unique purposes for engaging in teacher research we need to consider the way in which the research process proceeds for teachers. Teachers tend to identify large and long term concerns related to teaching and learning as the focus for their attention. Most commonly tensions, dilemmas and difficulties stimulate a need for closer attention. In talking with, and reading the work of these teachers, one is reminded that they are effective teachers who study an aspect of their teaching with a high level of confidence in themselves as teachers. The uniqueness and complexity of their classrooms is always prominent in teacher thinking and leads to feelings that traditional research, knowledge and educational theories have limited application in their specific situation. Teachers therefore often feel uncomfortable about external ideas and curriculum documents because they never seem to acknowledge their school concerns and classroom settings. Examples of areas of concern include the desire to have students more actively involved in learning or accept greater responsibility for learning outcomes (eg: Baird and Mitchell, 1986). In the symposium Judie Mitchell's concern for the teaching of grammar is an example of the broad long term concerns teachers express and then wish to study further. While understanding the aspirations for teachers to address such broad

and important concerns for their students, their ability to understand and achieve progress is unlikely unless some important conditions are met. If teachers accept that they are users of knowledge and ideas their response will be to look for outside their experiences and more effective curriculum approaches and teaching strategies. This dependence on external solutions has been identified by Russell (1993) as one of the barriers to teacher development and their confidence and ability to generate educational knowledge. A series of conditions appear to be important for teachers to begin to generate and communicate knowledge and understandings from their own professional experience. Bell and Gilbert (1996) propose that teacher development is closely associated with aspects of both personal and social development. In the area of personal development teachers have to accept that many "taken for granted" aspects of their teaching can and should be questioned and made problematic. Many procedures and practices are accepted as part of teaching and learning and if teachers are to be generators of new knowledge they will need to challenge the constraints that are perceived to limit possibilities. At a social level teachers have to see the value of working together and sharing ideas if they are to learn about teaching more effectively. Providing conditions for the personal and social development outlined above requires time and support for teachers as well as respect for teacher knowledge and understanding. Teachers are unlikely to develop a respect for their own experience and knowledge unless they can find wider support, and acknowledgment for, the value of their experience and understanding.

In summary, teachers need to see examples of teacher research and assess its value for them as teachers and feel that it is also valued by others in the education community. Russell (1993) reminds us that teachers retain stereotyped views of the process of educational research and the forms of knowledge that are most highly valued and need to see the ways teachers can also generate knowledge of value. Developing and maintaining conditions to encourage teacher research have not been easy. Teacher participants have to find time within the daily demands of the teaching role. Baird and Northfield (1992) review the experience of working with teachers and the time, support and trust which needs to develop among participants. Even when these conditions are met the process of teacher research will not occur until communication about the area of interest can begin. The complexity of the classroom and the concern for broad areas of teaching and learning makes it difficult to communicate the "problem" area. Teachers are

reluctant to define the area more precisely and focus on a sub-set of factors for closer study, as would be a common approach in a traditional research study. For teachers, reducing the complexity no longer makes it their problem which they seek to understand and respond to in their classroom. Our work with teachers has highlighted the importance of the anecdote or vignette in introducing the area of interest. The suggestion that anecdotes are subjective and isolated

incidents may be too dismissive of their value in communicating teachers' areas of concern. Probing of anecdotes can reveal that they are exemplifying broad areas of concern within in a single incident. The teacher is using an example to represent a more complex situation in the hope that others familiar with the classroom situation will connect the anecdote with their own experiences. It is as if we can now see what the problem is and how it might be interpreted and addressed. The process of teacher research contains anecdotes* which often deserve to be considered carefully and not dismissed. Teachers are not wishing to simplify their area of concern but searching for a way of communicating their issue to others in an effective way. The development of teacher research is very difficult to separate from the daily teaching role. Each new insight is likely to have immediate implications for the next teaching session so that findings and teaching become interwoven. Teachers are anxious to take some action with their class as they see new possibilities. They have to respond to the consequences of their findings even if these are sometimes initially disappointing. Perhaps the students did not see the purpose of an activity or the links between different activities. Perhaps students do not like thinking for themselves, so that the whole purpose for a teachers approach is being questioned. Progress is therefore incremental as each insight leads to a classroom response and the specific area of concern is altered as the daily teaching routine continues.

* :Baird and Mitchell (1993) contains accounts of nine teachers with their anecdotes which include one by Ian Mitchell, pp.37 and 38 and Damiens story, pp.22 and 23.

The teachers' purposes for studying their teaching is to teach more effectively in their own classroom settings. Wider communication of their findings is difficult to achieve and requires time which is not always available to teachers. Where teachers are encouraged to describe their new understandings the response from other teachers and others interested in teaching has been very positive. The teacher accounts of their work, often in the form of case studies of teaching and learning issues, has increased our understanding of classroom teaching and learning in ways that could have only been achieved from the teacher perspective.

Teacher knowledge and the processes by which it is generated and communicated can now be regarded as a valuable form of educational knowledge with important differences from the development and dissemination of more traditional forms of knowledge. The remainder of this paper will introduce the question "How should we judge the quality in teacher research efforts?" I would argue that, as teacher knowledge is more widely disseminated, it is important to consider the characteristics of good teacher research so that we can establish the conditions for, and encourage, worthwhile teacher study.

Towards criteria for achieving quality in teacher research

Teacher research is essentially a self-study of classroom contexts with its potential strengths being the detailed experiences in very complex

settings over long periods of time by a participant in the situation being studied. The uniqueness of each context, the personal involvement or bias, and the complex mix of variables also have the potential to limit the value of such study and certainly mean that the concepts of reliability, generalisability and validity need to be

reviewed. If research is the generation of new knowledge and understandings then teachers have demonstrated their ability to make a research contribution. The way in which we judge the value of teacher efforts should take into account the purposes for teacher research and the audience for their work.

The concept of generalisability

Teachers are very aware of the specific context from which their findings emerge - their own classrooms. They are therefore tentative about their findings and often very reluctant to communicate them more widely. "It is only my view, from my experience" is a common response when one suggests to teachers that others may be interested. Generalisability is not a claim teachers would wish to make from their findings and when they do write accounts they are inviting the reader to link the account with their own experiences. In this sense the term "naturalistic generalisation" (Stake and Trumbull, 1982) is a more appropriate way of the concept of generalisation in teacher research. However this view of generalisation may overlook the collaborative process that has preceded the publication of many teacher accounts. In many cases, ideas and first drafts are developed among networks of teachers where the generalisation criterion has been the basis for deciding to continue to prepare a final product. Does the situation being portrayed extend to other classrooms? Is the generalisation being explored? In this way perhaps a more conventional test of generalisability has been followed in the research process as teachers test their developing ideas with others.

Reliability and validity

The concerns about subjectivity and bias are inevitable when considering teacher research. In the end it is the colleague or the reader who will wish to see the student voice (and work) and teacher voice and make links to their own situations. The reader who comments "You could have been describing my class" is clearly accepting an account as reliable and valid for their purposes.

Including some of the complexity of the context and some triangulation of data around an issue contributes to greater reader confidence, as does linking to other teacher accounts and the educational literature. Again the process of research involving colleagues and teacher networks provides some checks on reliability. There may also be a need to further probe the meaning of student responses and other data sources. In the case of teacher research the term "authentic" can often be equated with a form of validity. If it is authentic, the reader is judging that the account is likely to have occurred in a classroom (and perhaps in their classroom) and does represent the area of interest in a useful way. Any record of teacher research must include sufficient

detail of the classroom context to allow the reader to feel part of the classroom situation.

The importance of collaboration

Collaboration in the research process has been regarded as crucial if the above criteria of generalisability, reliability and validity are to be addressed in a satisfactory way. Collaboration between teachers is part of the rhetoric of good teaching, yet the way in which teachers can work together needs careful study. In what ways are teachers willing and able to collaborate for mutual benefit? Useful collaboration cannot be mandated (Fullan and Hargreaves, 1991). It takes time to build the levels of trust between teachers so that frank and useful interactions can occur. Teachers set limits on the degree to which they wish to collaborate and the details of their professional practice they wish to share. Valuable collaboration among a group of teachers can be seen by others as the formation of a clique with an agenda beyond learning about their teaching.

While arguing that the nature of teacher collaboration deserves close study it is clear that successful teacher research is associated with opportunities to work together in some way. The purposes for teachers

engaging in research makes some level of collaboration inevitable. As they reflect on their classroom experiences teachers are trying to better understand what is happening, consider ways of improving their teaching and learning situations, and finally take some action. These purposes cannot be achieved in isolation. Learning about teaching, gaining ideas and possibilities and monitoring outcomes requires the support, constructive criticism and affirmation of colleagues if a teacher is to gain a realistic view of themselves as a professional. Participation of others in the conduct of teacher research is essential and a quality piece of teacher research should acknowledge this involvement with others and the way it has shaped the new understanding. Quality self-study invites others into the process and so respects the need to attend to questions of reliability, validity and generalisation and also provide some safeguards against the possibility of rationalising existing views and prejudices - that is finding out what a person wished to find.

A willingness to "reframe" classroom situations

The most interesting research for teachers to undertake, and for readers to read, occurs when an issue is considered in a different way.

Teachers regard their existing procedures and assumptions as problematic. The teacher is willing to suspend judgement rather than look for support of pre-existing views. Experience suggests that teachers do not wish to spend time documenting what they already know. Teachers are more likely to become involved when their existing frames of reference need to be modified to accommodate a deeper understanding of their classroom experience.

In a number of cases the "reframing" occurs when experiences are shared with others, a further support for collaboration opportunities as essential conditions for effective teacher research. A quality piece

of teacher research should indicate the way in which the area of concern can be perceived with descriptions of the way in which views were modified to allow further understanding and thinking to progress. The outcomes of quality teacher research

As described above, teacher research aspires to invite the reader to consider the issue in light of their experience. Teachers are tentative rather than definitive in their knowledge claims. The best teacher research therefore promotes dialogue and further thinking and must include enough detail to allow the reader to relate their experiences to the situation being described.

Finally, the incentives for teacher involvement must offer the hope that they will be able to alter their teaching to encourage better learning among their students. In striving for this outcome the teachers increase their understanding of an aspect of teaching and learning and take action to improve their professional practice. This process of generating knowledge and responding to findings are indicators of teacher development. Teachers become more confident in their ability to deal with other issues.

For the wider education community, a consistent output of teacher research can increase respect for practitioner knowledge, the way it is developed, and the particular contribution that teachers can make to our educational knowledge. The conditions for teachers to be continual learners about teaching could be regarded as expectations for inclusion in the role and workload of teaching. Teacher change and understanding will be seen as the key outcome of curriculum changes. Educational change will be seen as more than delivery of new curriculum documents and policies. The change that leads to improvement will involve follow up and interest in teacher experiences, their modifications to curriculum ideas, and documenting their new understandings. Some level of teacher research must always be part of any educational change that leads to improvement.

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