(EDU) LB CHRISTCHURCH COLLEGE OF EDUCATION

1073 JOH

le Whare Whai Matauraka Ki Otautahi

1028 .A1 .J867

Journal of

Educational Research

Volume 5, No 1 1999/2000



ISSN 1173-0471

Copyright © 2000, Christchurch College of Education All rights reserved. No part of this work may be reproduced or copied in any form or by any means—graphic, electronic or mechanical, including photocopying, recording, taping or information storage and retrieval systems—without written permission of the publisher.

ISSN 1173-0471

Editors Alan Scott Paula Wagemaker

Assistant Editor Simon Burge

Research Committee 1999-2000
Lindsey Conner, Secondary representative, Chair Jane Abbiss, Secondary representative
Kathy Anderson, Support Services
Simon Burge, Library representative
Penni Cushman, Primary representative
Coralanne Child, Early Childhood representative
Sheila Grainger, Nelson campus representative
Janinka Greenwood, Secondary representative
Vince Ham, Research co-ordinator
Anna Johnstone, Primary representative
John Longbottom, Primary representative
John Rosanowski, Advanced Education representative
Greg Scott, Business Studies representative

Editorial Address
The Editors
Christchurch College of Education Journal of Educational Research
PO Box 31 065
Ilam
Christchurch 8004
New Zealand

Designed and typeset by Becky Bliss Design and Production, Wellington Printed by Christchurch College of Education Printery.

Contents

Male Teachers' Attitudes Towards Primary School Teaching Penni Cushman	5
Teaching Social and Ethical Issues in Senior High School Science: An Investigation Lindsey N Conner	23
The Bungy Mechanic as an Aid to Trampoline Coaching Doug McClymont and Peter Burley	45
Who Succeeds? Who Finishes? An Analysis of First Year Teacher Education Students Jo Fletcher	57
Learning Journeys in Times of Change: Facilitating Teachers' Professional Development Through the Use of NEMP Reports and Quality Learning Circles Susan Lovett	73
What on Earth's Our Future? Reflections on Examples of Science/Speculative Fiction and Its Relevance for Young People Today Jilaine Johnson	87
Opening Windows on the Real World of Teachers: Mission Impossible? The Potential of Interview Analysis to Access Teachers' 'Theories in Action' Sheila Grainger	99
Notes for Contributors	109

Learning Journeys in Times of Change

Facilitating Teachers' Professional Development Through the Use of NEMP Reports and Quality Learning Circles

Susan Lovett

Throughout the past 10 years, New Zealand teachers have been inundated with changes to school curricula and methods of assessing learning. While professional development has accompanied many of these changes, teachers have had little time to absorb one change before another has descended upon them. Like grasshoppers, teachers have jumped from one change to another, rarely looking back or stopping for breath. This situation has markedly eroded professional development, with teachers unable to engage in or even complete development-related activities.

The new knowledge, skills and understandings that teachers need to implement the new curriculum documents successfully take time to acquire, and it is therefore not surprising that teachers resist such change simply because they do not have this time available to them. Many also resist change because they have been on the receiving end of it for so long, and have felt powerless in their efforts to slow down the process to a more manageable pace. School principals have been caught between ensuring that new curriculum developments improve learning and teaching at the school level while at the same time complying with national deadlines for implementation. The processes associated with change have therefore become more complicated and problematic for school staffs.

Several of Fullan's (1993) basic lessons regarding changes associated with educational reforms are relevant to this discussion:

Lesson One— 'You Can't Mandate What Matters': This means that you cannot force teachers to change their beliefs and knowledge about teaching. They require time to see the need for change, its relevance to their context, and to build enthusiasm for the change. Guskey's (1986) implications of change for staff development are pertinent here, namely that change is a gradual and difficult process for teachers. It also brings anxiety and can be threatening because changing or trying something new means risking failure. Teachers therefore need to be convinced that the developments creating this anxiety will have positive outcomes.

Susan Lovett is a senior lecturer in educational management with the Christchurch College of Education. The study reported here is part of the author's wider PhD research.

Lesson Two—'Change is a Journey not a Blueprint': This lesson demonstrates that the change is a process rather than an event and so is unique for each individual. The same path will not be trodden by all, and this needs to be realised when planning any change.

Lesson Three—'Problems are our Friends': When efforts to effect change in schools are treated as natural, inquiring minds and a sense of ownership of and commitment towards these efforts develop.

Lesson Four—'Vision and Strategic Planning Come Later': Personal visions emerge from reflective experience. Those holding these visions therefore need to interact with significant others to ensure that the visions take on a shared identity, even when they develop and shift over time.

Lesson Five—'Individualism and Collectivism Must Have Equal Power': The ideas from individuals and groups as a whole are important for school-level change. If teachers do not collaborate with one another, they risk being cut off from inquiry and learning. Isolation is becoming an increasing concern in pressured environments where people often become competitive or try to ignore demands for change and more work.

Lesson Six—'Neither Centralization nor Decentralization Work': Here, an image of a sandwich is useful for understanding the message of this lesson. Both the top and the bottom of the sandwich are required for it to stay intact. The same can be said of the roles of national-and local-level organisations during change. One should not squash the other. Those at the national level need to be sensitive to the timing of their initiatives and the presence of other changes affecting those at the local level. Those at the local level need to understand the purpose behind changes imposed upon them from the national level.

Lesson Seven—'Connection with the Wider Environment': Schools need to work with individual students while at the same time ensuring that what their students learn will meet the needs of the wider society.

Lesson Eight—'Every Person is a Change Agent': A learning organisation where continuous improvements are the order of the day requires commitment and leadership from all participants. Everyone needs to be a leader and a learner. This means that all have a part to play in shaping the learning process.

These eight lessons recognise that there is a people dimension to the change process and that each lesson takes on different dimensions in different settings. Evans (1993) supports this view: 'Treating reform [change] as a product and focusing on its structural frame often overlooks its human face. Change must be accomplished by people' (p19).

Change therefore is more than task accomplishment. Adair (1986) uses a three-circles model when considering how best to effect change. The three overlapping circles represent task, individual and team needs. Those leading change at the school level need to address all three needs, not just the task aspect. Adair argues that if the focus on accomplishing a task (change) does not consider the people involved, then there will be resistance to that change. People will not accept change for change's sake. They need to see the reason for change and to be convinced that benefits will emerge. A focus that takes people into account allows them to take ownership of the change and so build their commitment to it. Consequently, as the agenda for change continues, there is a real need for change agents to look for different approaches that will excite and motivate teachers as learners. Without attention to these needs, it is doubtful whether current methods of effecting change will suffice in the long term.

In line with these premises, I decided to use the reports of New Zealand's National Education Monitoring Project (NEMP) as a vehicle for exploring teacher attitudes towards and strategies for dealing with change. I also decided to trial the quality learning circle (QLC) as a venue within which teachers could accomplish professional development tasks. To these ends, I surveyed Canterbury teachers about their use of the reports and then brought together a small group of teachers within a QLC to discuss, learn from and apply in their schools the lessons of these reports.

The Role of NEMP Reports

The NEMP, set up in Dunedin in 1995, has the potential to improve classroom learning if its assessment tasks are linked back to classroom planning for more needs-based teaching. NEMP undertakes nationwide monitoring of a representative sample of New Zealand students at Years 4 and 8 in all essential curriculum areas, and the detailed information obtained from this process is used to highlight for educational practitioners those educational practices in need of review and improvement. Two other major foci of the project are accountability and the identification and reporting of patterns and trends in educational performance.

The project was developed after close scrutiny of national monitoring models used in other countries. However, a number of unique features emerged in the New Zealand model. These were:

The decision to use a 3 per cent light sample.

- The decision to test in three curriculum areas per year over a fouryear cycle.
- The use of a wide variety of stimulation materials for the assessment tasks (photos, card equipment, video excerpts, real-life scenarios).
- The use of assessment tasks involving individuals, pairs and groups of four children in practical activities (that is, not necessarily pen and paper tests).
- The secondment of one group of teachers to administer the tests and of another group to mark them.
- The dissemination of written reports and summary documents to the teaching profession to show the assessment tasks used and the results of the assessments.
- Emphases on gaining a rich picture of what students know and can do and how they go about this. These emphases involve assessing learning processes, not just their products.

These features have the potential to improve classroom learning for students, but only if teachers are aware of the possible benefits that these features have for their own classroom planning. Those teachers who are involved in the project's task design, trials, subject advisory committees and marking are receiving this type of useful professional development but most teachers are as yet untouched by NEMP. Without a more widespread impact, NEMP is in danger of becoming a lost resource to teachers.

Introducing new information to schools now requires a special sensitivity. It is no longer sufficient to produce booklets and circulate them to schools with the expectation that teachers will find time to read them. The reality is that even the better teachers are struggling to keep up to date with their professional reading and development. If attention is not given to adult learning theory, to an understanding of change and to school improvement processes, then documents detailing the assessments of national education monitoring may fall into the same pool of resistance as the curriculum documents.

It is unfortunate that the NEMP reports have been sent to schools without accompanying systematic professional development. As a teaching resource, the NEMP reports have the potential to expand teachers' knowledge about what children know and can do. In addition to reporting the results of each assessment task, the reports include details of these tasks. The tasks include individual tests and paired-and small-group activities and can be adapted by teachers for classroom use. They also provide teachers with a means of assessing their own students' skills, attitudes and knowledge in all curriculum areas.

In August 1998 I carried out a 40 per cent random survey of Years 1 to 8 schools in Canterbury. The survey responses revealed that teachers were largely unaware of the NEMP reports and their potential for enhancing the quality of classroom programmes. The reality was that while copies of the reports had arrived in schools, very few teachers knew of their existence or had looked beyond their covers. Typically it had been the principal or another staff member who had 'waved' the NEMP reports at staff and suggested that they read them. In most cases, there had been no discussion about the reports because staff were already focusing on other developments; NEMP was not seen as a priority. Furthermore, although teachers with curriculum responsibilities had been given a copy of their corresponding report, they generally had done little more than skim read the contents. Where assessment tasks had received media attention (for example, the section on locational geography in the social studies report), some teachers had repeated the tasks to ascertain whether their students' results were similar to those of learners in the nationwide sample.

The following comments from teachers represent their common reactions to receiving more documents to read:

'We are being bombarded with new curriculum documents and a raft of other documentation. We only have a 24 hour day, not the 48 to 56 hours that would be needed to take in your documents alongside everything else!'

'We are very busy people and do not always get lunch times to peruse the flood of material that passes into the school.'

'[They're] just another booklet that arrives at school, and they go in the pile with all the other glossy publications the Ministry of Education spend money on.'

'I don't have time to read a big booklet. As a consequence it goes on the shelf. The fact that the information is really useful becomes secondary.'

These comments highlight the pressures on teacher time for new learning even when an acknowledgement of useful content is made.

The Role of the QLC

In February 1999, in an effort to learn more about what the NEMP reports offer teachers, eight Christchurch teachers joined a 'quality learning circle' (QLC). Seven of these teachers had answered the above survey. The eighth teacher had to be replaced when she was appointed as acting principal for term 1, 1999. The group met fortnightly over four terms in 1999. The meetings were held during the school day, and the schools were given paid release time for the teachers to attend. During the meetings, I assumed the role of participant observer and took notes.

The QLC offered the eight teachers an opportunity to undertake 'free' professional development with a small group of teachers from other schools. This approach to professional development was new to the teachers, who were accustomed to receiving professional

development at their own schools and having it led by one of their own staff or an outsider working with the full staff.

The QLC that is used in education today had its origins in American industries of the 1960s. Here, the QLC allowed people to select a common focus or issue within their organisation or profession and then to use one another to explore ways of effecting improvements in work practices. It required colleagues to share experiences and to talk with and work alongside one another in order to learn from each other. Each participant was seen as an equal, which meant that the circle could work together without fear of someone having power over them or of having their performance appraised.

In 1993, Stewart and Prebble adapted the industry-based QLC model for school settings. They described their model as having the following features:

- Selection of a theme for exploration.
- Discussion and story telling within the group about experiences related to the theme.
- Observation in classrooms to enhance the meaning of the stories. (The visitor to the classroom is the learner.)
- Discussion of these observations in pairs and then with the whole group.
- The sharing of examples of practice with the group.

To ensure that the QLC model would allow teachers to gain professional development from their use of the NEMP reports, a few modifications were made to the model. As a result, the circle's members represented different school communities and age levels taught, and had a varied range of experience as teachers. The bringing together of teachers who had not worked with one another before added a new dimension to the group, but one that initially created a few difficulties. The group needed to bond and to gain a shared sense of the purpose and direction of its learning. It needed to go through the usual stages of team development, that is, forming, storming, norming and performing as participants grappled with the nature of the task, their own confidence levels and acceptance by the group.

Learning Journey Themes

Four themes emerged from the teachers' journeys with the nine NEMP reports. These were:

- 1. Structuring meetings.
- 2. Sharing experiences and ideas with the other teachers at these meetings.
- 3. Visiting one another's schools.
- 4. Finding ways to disseminate learning to other teachers back in their schools.

Each of these themes highlighted the unpredictability of the change process. They also highlighted the process of implementing change initiatives among teachers whose unique needs, circumstances and histories both help and hinder the process. Fullan's (1999) complexity and evolutionary theories provide a framework for discussing these themes within the context of facilitating teachers' professional development in times of change and uncertainty.

1. Structuring the Journey

The biggest challenge was to find a common pathway into the selected theme. Most of the teachers had only a brief experience of the NEMP reports. This meant they were entering 'unknown waters', a situation that in itself took them out of their usual comfort zones. All of the teachers also wanted their respective work in the QLC to benefit their particular school situation. They desired links with existing professional development areas and saw NEMP as a supplementary resource to enhance curriculum delivery.

This desire to link each school's priorities with the NEMP reports proved to be too broad for the group as a whole to manage. It soon became obvious that if the group were to bind and provide support for its members, then a narrower, common focus was needed. It was therefore decided, by mutual agreement, that the group sessions would focus on one NEMP report per session and that members would share any details of trialing the reports' tasks and activities at the next meeting. Teachers often reported on other NEMP reports that they had not yet studied as a group. This allowed them to link their trialing with classroom units of work.

Initially the group struggled with its chosen focus because most of these teachers were accustomed to professional development models with a definite sequence and content to be followed. Unlike the usual professional development contracts they had encountered in their schools, the QLC model did not offer a programme of work to be followed from A to Z. The purpose of the QLC was to let the group decide on the route and destination. If I had determined the destination, then the teachers in the group would have expected to be 'spoon fed'. Instead my aim was to trace the journey of the group in whichever direction(s) it took and then analyse the reasons for the route and its particular landmarks. This would then highlight factors that either helped or hindered the individual and combined journeys of these eight teachers. As a feature of the journey, the tension between the teachers wanting a structure and me resisting leadership played an important part of the storming stage of team development. During this stage there was a need to clarify the expectations of the study, the amount of work required of each of the teachers, the structure of the meetings and some

idea of an outcome. Diane's words echoed the feelings of the group when she said:

'I like something structured. I want to know what is happening. I like to know why we're going there, what the purpose is and sort of basically what I then know I'll be getting out of it . . . I have to know exactly where to go and it will get done!'

Fullan's (1999) acknowledgement that learning occurs on the edge of chaos is somewhat comforting when trying to maintain the delicate balance between too much and too little structure. He argues that the old way of managing change, appropriate in more stable times, no longer works. Instead he finds it helpful to consider two different theories: complexity or chaos theory and evolutionary theory.

In regard to *complexity theory*, Fullan (1999) contends that 'The link between cause and effect is difficult to trace, that change (planned and otherwise) unfolds in non-linear ways, that paradoxes and contradictions abound and that creative solutions arise out of interaction under conditions of uncertainty, diversity and instability' (p4).

The teachers' initial concerns related closely to this theory. They were worried about lack of structure, of embarking on a journey without a set route and destinations, and they also were uncertain about what they were supposed to learn. One of the teachers' tasks was to become more familiar with the assessment strategies presented in the NEMP reports, and the process of doing this was like opening Pandora's Box. On seeing how much the 'box' contained, they became somewhat overwhelmed with the enormity of the task. As Diane said:

'It was just the content that we were using that I couldn't get my hands around ... It was a huge thing because I didn't know where to start. There were six books in front of me and I thought, "Oh no!" I didn't know whether I should be doing something that I liked doing, like say reading, or pick something like technology, which I don't even want to go into because that would expand me more. The picture was just too big.'

What the group had yet to realise was that the challenge of this diversity, uncertainty and instability would involve a very satisfying learning journey. In the meantime, however, they managed to agree on a structure for subsequent meetings, and this eased their feelings of uncertainty. They agreed that each meeting would follow this format:

- 1. The teachers to share any trials they had undertaken of the NEMP tasks outlined in the report that they had discussed at their last meeting (or any other of the NEMP reports for that matter).
- 2. The researcher to present a synopsis of the present session's report, highlighting the variety of tasks and assessment strategies in it.

- 3. The group to comment on either the implications of these tasks and strategies for future classroom practice or their links with previous classroom work (for example, curriculum integration, units of work, suitability for various age and interest groups).
- 4. The group to determine which report would be discussed at the next meeting.

According to Fullan (1999), 'while complexity theory is about learning and adapting under unstable and uncertain conditions, the evolutionary theory of relationships raises the question of how humans evolve over time, especially in relation to interaction and co-operative behaviour' (my emphasis, p6). Evolutionary theory therefore provides a useful framework for the QLC approach. The group moved through various stages whereby the eight teachers were able to share their experiences of trialing the NEMP tasks, take risks and visit one another in their classrooms. This approach highlighted the role of interactions and co-operative behaviour in learning. At times this was a painful process and not without risks for the teachers. However, as the members of the group bonded, fear of risks diminished because they found they were learning together and supporting one another. The QLC helped them work through the NEMP reports and meet their own individual and school needs for obtaining and disseminating the ideas contained in them.

2. Sharing

As each report was introduced according to the established pattern, the group became familiar with the layout of the reports and how their content might be shared with other teachers in their own schools. They therefore began to see the benefit of coming together and sharing their workloads. Lois:

'I probably wouldn't have done anything as in-depth on my own. It has been a focus and definitely made me look at the exemplars and think which ones I could use. I wouldn't have done it without the meetings.'

Katrina also felt she benefited from the group focus:

'If I'd just had the reports sitting on my desk, I wouldn't have done any more than dipped. Because you [the researcher] had gone through them and summarised them, which makes it a lot easier, and focussed our attention on a different one each time, I've made a point of using them in the classroom and selling them to other teachers. So they've now become a useful part of my programme, rather than an extra dumped on top of everything else.'

Application of the content of these reports in the classroom was very important to the teachers. As the number of trials increased, more and more of the meeting time became devoted to sharing information, with the teachers increasingly directing their own learning and

becoming less dependent on me, the researcher, to facilitate the meetings. (In fact my role was often one of ensuring that the agenda was covered.) Diane had this to say:

'I think being able to share with each other the things we were doing... has prodded us into, "Oh, that looks all right. Oh I think I can handle that one," and I'll have a go at it, you know? I think they've [the meetings] developed into a style that's functional and effective.'

In regard to the fortnightly spacing of the meetings, Katrina mentioned the momentum that gathered as each meeting approached:

'When you know you have another meeting coming, you think,"Oh I must remember to do something for that," so you get the books out. So they've actually encouraged me to use them, because the others, and you, expect something at each of the meetings. And I suppose, in all fairness, it's not fair of me to have my Wednesday meetings unless I have done preparation or follow up... I look forward to seeing everybody and seeing how they've gone on the tasks. I look forward to what we are doing next, and I'm always enthused when I go away to try some of the activities.'

The need for teachers to talk regularly about their teaching practice with interested others was clearly an important feature of the QLC, as is the case with a 'learning community'. These teachers loved talking to each other, and once they started, it was often hard to interrupt them. Given that the development of collegiality in schools is closely aligned with teacher talk, the work of Judith Warren Little (1981) is appropriate here. She writes that collegiality depends on the presence of four specific behaviours in schools. By coincidence, each of these is common to the QLC approach, even the classroom visits (discussed below). According to Little, adults in schools:

- [T] alk about practice. These conversations are frequent, continuous, concrete and precise.
- [O]bserve each other engaged in the practice of teaching and administration. These observations become the practice to reflect on and talk about.
- [E]ngage together in work on curriculum by planning, designing, researching and evaluating curriculum.
- [T]each each other what they know about teaching, learning and leading. Craft knowledge is revealed, articulated and shared. (pp12– 13)

When comparing the usefulness of QLC to teacher talk in their own schools, the teachers offered several comments. Mary:

'I like, actually, professional rapport with other people, and I think the difficulty sometimes is discussing some things that others aren't interested in, whereas here, we all have a common focus.'

All of the teachers felt that they were better able to reflect on their practice outside of their school environment. Katrina spoke about her realisation of a personal need to 'bounce' ideas off somebody else and the value of looking at other people's teaching styles in order to understand her own. Lois, who worked in the largest of the schools represented by the group, said:

'As teachers we need time to reflect, and this situation with the QLC is perfect in that it is away from school . . . It's people who have similar interests or experience . . . It's actual time to talk to other people about what we do. And as a teacher, I don't feel I do enough of that perhaps in this school. I do have other people in the community I ring and say . . . "I want to discuss" . . . '

Mavis, who had earlier described her experience of school professional development as spoon-feeding, found the QLC model quite different:

'Here we are having to do an equal amount to bring to it because we are all helping each other... I think the QLC is good in the fact that we are feeling we have some sort of ownership in it.'

3. School Visits

After a term of meetings, the teachers were ready to exchange classroom visits. As had occurred with decisions on how best to structure the QLC meetings, the teachers needed to discuss the best way of carrying out these visits. They needed time to feel comfortable with the idea of an observer in their classrooms, and they needed to reach a certain level of confidence with their NEMP work to welcome the visit of a colleague.

At about this time, the teachers gained access to some of the NEMP resources (for example, video extracts, card equipment and photographs). These provided them with a real incentive to trial the NEMP tasks and marked another turning point in their journey with NEMP. As Katrina observed at the time:

'Well having the gear has helped. You know, as soon as we got our packs of gear, I could try activities that I couldn't try without it . . . Before I was picking out activities that I could adapt to worksheet or teacher talking stuff. As soon as I got the equipment, I could try different activities . . . Also when we went to other schools, we could try tasks that could be taken with a smaller group and we divided the class into three groups of 10.'

This arrival of the resources reduced some of the pressure of preparation work for these teachers. It also answered their initial concerns about whole class management when using NEMP activities because they could now involve the visiting teacher in a meaningful way rather than have that person simply observe. Usually, the extra pair of hands allowed the two teachers to divide the class into groups

for station activities, freeing them up to discuss with each other the class, individual children and the success of the activities used. Comparisons were possible across the schools, as several teachers repeated the same activities.

Most of the teachers experienced four visits, either visiting someone else or having another person visit them. They valued these experiences, seeing them as a rare chance to go beyond their own school gates. By trialing the various activities across age groups and schools, the teachers obtained a good idea of how their children related to those at other schools. Suddenly, when a teacher spoke about using a particular activity the other teachers wanted to try it, even though it might not fit alongside their classroom themes of the moment. Here was 'movement over the threshold' and a willingness to give anything a try. Earlier caution had disappeared. Having accepted the need to take risks, the teachers were now experiencing real learning.

4. Dissemination of NEMP-related Knowledge

All of the teachers wanted to share their newly gained knowledge about NEMP with colleagues in their schools. This proved to be a challenge, as the staff development programmes were already full and teachers had no other meeting slots. The QLC teachers did not want to give written material to their colleagues. They wanted to demonstrate the potential of the NEMP reports in practical ways by using the NEMP resources and samples of children's work.

It was interesting to watch the approaches adopted by each of the teachers as they attempted to familiarise their staff with the content of the reports. Katrina and Diane were able to 'drip feed' information to their colleagues after each QLC meeting at their respective schools. Diane, for example, found out who was doing particular units of work and then rushed to each teacher with a bag of NEMP resources. She felt that in order to 'hook' the teachers, she needed to make it easy for them and so provided typed sheets all ready for use. As syndicate leaders, Lois, Sarah and Harriet were able to make time in syndicate meetings to share the information obtained from their latest trials. For Mary and Mavis, however, there was a longish wait before time could be found to accommodate a meeting at their schools. However, they made sure that the meeting time eventually arranged coincided with the release of the latest NEMP reports. Their presentations were so successful that their colleagues wanted further sessions. Lara had participated in the QLC for her personal benefit, and as a part-time teacher did not have the same opportunities as the other members of the group to share information with staff.

The challenge now facing these teachers is to take teachers in their own schools on NEMP journeys in ways that will disseminate the content of the NEMP reports at the classroom level and empower teachers to use the information to benefit teaching and learning. The test for the QLC model will be to see if it can indeed contribute to the development of sustained collaborative learning teams amongst teachers in the same school.

Conclusions

Fullan's (1999) lessons regarding change have links with the journeys undertaken by the eight teachers in this study. These acknowledge the need for a theoretical base to guide the work of change agents, a recognition of the anxiety it may invoke and the need for a collaborative problem-solving approach. Taken together these guidelines provided the eight teachers with a better chance of meeting their needs and of allowing them to complete tasks, as Katrina's verse (below) marking the end of the QLC meetings testifies. Her words also highlight the stages of the group's development from the initial coaxing of its members to participate, through its storming stage (where members fought for a structure and norms for operating) and on to the point where they bonded with one another, reaching a level of confidence regarding the content of the NEMP reports that allowed them to relay their knowledge successfully to colleagues in their schools.

Says Susan

Come and learn about assessment Lots of wondrous things to do, Play with all the NEMP equipment Fun for me and you...

Says Susan.

Alternate Wednesdays College bound Leaving time to park the car All new faces, schools and ages Time to start work now...

Says Susan.

And off to schools to try the tests
Different classes and places to see
Back to College to talk it through
Yummy, scrummy afternoon tea...

Says Susan.

Our numbers did swell and swell and swell And the rest of us thought, 'glad it's not me' Babies and NEMP, what's the connection Maybe it's because we're all so happy...

Says Susan.

So thanks for the learnings, the chats
And the sharing.
We go on enthused and enriched and well fed,
And to Susan, our mentor, our teacher and friend
This is one garden path up which we were happily led . . .

Says us all.

Evans' (1996) reminder about the complexity of change serves as a warning for those leading or embarking on change journeys: '... change offers growth and progress but it also stirs fear because it challenges competence and power, creates confusion and conflict and risks the loss of continuity and meaning' (p32). However, the real challenge for teachers is offered by Barth (1991), who writes: 'Learning is not something like chicken pox, a childhood disease that makes you itch for a while and then leaves you immune for the rest of your life' (p46). If this is our challenge, then we need to be more creative in finding ways to demonstrate that change can be exciting, stimulating and lead to improvements. The QLC would seem to be a move in the right direction for it provides an opportunity for teachers to be at the centre of the educational change process, sharing examples of good practice and actively reflecting on their work. Teachers must move beyond being victims of change to become 'agents of change' (Fullan, 1993, p4).

References

Adair, J (1986) Effective Team Building. London: Pan.

Barth, R S (1991) Improving Schools from Within. San Francisco: Jossey Bass.

Evans, R (1993) The human face of reform. Educational Leadership, 51(1), 19-23.

Evans, R (1996) The Human Side of School Change: reform, resistance and the real life problems of innovation. San Francisco: Jossey Bass.

Fullan, M G (1993) Change Forces: probing the depths of educational reform. London: Falmer Press.

Fullan, M G (1999) Change Forces: the sequel. London: Falmer Press.

Guskey, T (1986) Staff development and the process of teacher change. *Educational Researcher*, May, 5–12.

Little, J W (1981) The Power of Organizational Setting: school norms and staff development. Paper presented to the Annual Meeting of the American Educational Research Association, Los Angeles.

Stewart, D and Prebble, T (1993) The Reflective Principal: school development within a learning community. Palmerston North: ERDC, Massey University.