Sustaining teacher researchers: What support really makes a difference?

National Teacher Research Panel
engaging teacher expertise

distributed to all maths teachers. We found that the use of a writing frame was seen as particularly helpful to teachers in reporting their work. In the second year, teachers found it even more helpful when they were given the writing frame and an example of a finished product as they were beginning their research. Teachers also valued their work being presented in a well-designed product as this gave it a professional status.

The problem with placing too much emphasis on the final report was the time delay between finishing the active period of the research and the finished report being available. While senior leaders and heads of department were willing to offer support and indeed encourage practitioner research, we found there was still a strong requirement that the work made a difference to practice within the school. Consequently, our reflection now is that it is important that various people in schools received ongoing oral reports during the course of a teacher's research work. While this had been done in a structured and thorough way within the seminars, many teachers did not have the opportunity to do this regularly within school.

Research methods

Over the three year period, the author used a range of research tools within an overall action research framework. The strategies described above that were used in leading the practitioner research were trialled and adapted over time based on ongoing evidence collection and reflection. This was done through the use of:

- a research journal that recorded the author's reflections on relevant reading and following informal discussions with teacher researchers;
- observation notes taken during seminars; and
- questionnaires with all the teacher researchers and semi-structured interviews with some.

This evidence was later supplemented by work done by an external researcher looking at practitioner enquiry within the NLC.

Conclusion

The main aim of our project had been to find out whether and how practitioner research can be established as an effective and sustainable form of professional development. Our conclusion is that it can indeed play an important part in helping our network and schools become strong professional learning communities. We have learned that a wide range of teachers have been motivated by participation in research, that there is a specific combination of support that is vital to a success; and that a diverse range of communication approaches are needed for the research to reach a wider audience. Our hope is that the lessons we have learnt might make it possible for many more teachers to engage in and be sustained during their own research.

Suggestions for further reading

McClaughlin, C. and Black Hawkins, K. (2005) *Practitioner Research and Enquiry in Networked Learning Communities.* Cambridge: University of Cambridge.
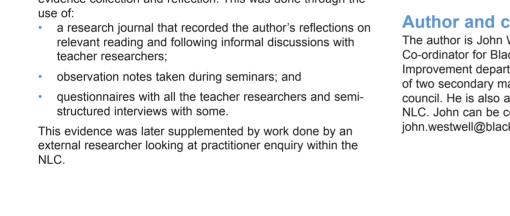
National College of School Leadership (NCSL) (2005) *Getting Started with Networked Research Lesson Study*. Nottingham: NCSL.

CUREE (2004) *Writing Research and Enquiry Summaries*, info@curee.co.uk

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Aims of the project

The main aim of the project was to explore how to establish practitioner research as an effective and sustainable form of continuing professional development both for participating researchers and, through their research work, for colleagues within the schools and network. It was hoped that this would contribute to the development of the schools and the network as effective professional learning communities.

The project set out to identify:
- what motivates teachers to both engage in practitioner research and to sustain their involvement over time;
- what forms of support teacher researchers need for their work to be successful; and
- how the learning generated by practitioner research can be effectively shared with colleagues within a school and across the network of schools.

Dimensions of the study

The project was carried out in the nine secondary schools in Blackburn with Darwen. It involved 25 mathematics teachers over a three year period from 2002 to 2005. There were two distinct teacher researcher groups, which employed different research methods and had different membership. The teacher researchers were supported by the author and another mathematics consultant working for the local authority. In 2003, the nine schools joined together to form the Leading into Learning Networked Learning Community (NLC).

Summary of main findings

The project found that:
- teachers were motivated to engage in and continue with research because:
  - their work seemed to make a positive difference to their teaching and their pupils;
  - they felt they were being treated as professionals and expected to think deeply about their practice; and
  - they were part of a group of supportive and challenging peers.

- teachers needed a range of support in order for their research to be successful. This included external support in the form of seminars and critical friends; protected time; and internal support from within their school in the form of interest and encouragement; and
- the learning generated by the practitioners' research needed to be communicated through both regular updates on progress to a range of audiences and well structured final reports.

Background and context

In 2001, the DfES launched the Key Stage 3 Strategy for all secondary schools. One aspect of the strategy was to be the identification of 'Leading Mathematics Teachers' within each local authority. The same strategy had been used within the Primary Numeracy Strategy. These teachers would then be available to demonstrate effective practice to visiting teachers. The author believed that such an approach would not be helpful in a secondary context. It could be divisive and did not support a professional learning culture, in which all teachers were seen as lifelong

learners working together to support each others' learning. As a consequence, it was agreed with Heads of Mathematics in the schools that instead a teacher researcher group would be set up to work on behalf of all the other mathematics teachers. The only entry requirement for the group was that teachers were prepared to critically enquire into their own practice.

In the year 2001/2 the group made some progress together with limited support. However, at that stage it did not really employ any formal research methodologies. From September 2002 (the timescale addressed in this report), now with the support of another consultant, the group began to use formal research methods. In September 2003, a second group was introduced. Also at the same time, given that the nine schools had become established as an NLC and so committed to new forms of professional learning, the project now had relevance for all teachers and not just the mathematics departments.

Strategies used in leading the practitioner research work

This study reports on the leadership and facilitation of two teacher researcher groups. The first group took as its research theme the question, "How do we engage pupils in the effective learning of mathematics?" The second group had a different research question, "How can the use of ICT effectively enhance the learning of mathematics?" In both cases, teachers chose their particular research focus related to the theme. This choice was normally based on their own interest. Teachers committed to a research group for a full academic year. Some continued into a second year, but would then carry out a new piece of research.

In leading practitioner research, there were various aspects to our work. These included:

- identifying and introducing appropriate research methodologies for each group;
- holding regular seminars for both groups;
- offering one-to-one support to researchers; and
- supporting teachers in sharing their work with other teachers.

Research models and processes

Most of the members of the research groups were unfamiliar with practitioner research, and so as facilitators we needed to identify and introduce appropriate research models to the teachers. With the first group, an action research model seemed the most relevant, since these researchers were experimenting over time with different approaches in engaging pupils. However, the second group were working more at a lesson level and considering how ICT impacted on learning. Consequently, having initially started the group with an action research model, we decided it would be better to change to a research lesson study model.

In the first year of the study, seminars were held on a termly basis and lasted for a full day. This required teachers to be released from their schools. It was decided that this model did not bring the group together frequently enough, so, the following year, a new framework of one full day, two half-days and three twilights was introduced. This meant the group could meet every half-term. The seminars usually had three main elements. There was always time

for the teachers to discuss their ongoing research work. The nature of this discussion varied according to the stage the research had reached. A second element was some kind of stimulus related to the research field; for example, the ICT research group shared resources and websites they found useful. The final element in each seminar was some support on research methods; for example, on one occasion the first group considered a range of evidence collection methods.

Support and communication

We gave ourselves various titles as we came to understand our role more fully, including 'Critical Friend' and 'Research Mentor'. Whatever the name, we tried to offer the researchers one-to-one support in between the seminars. This could involve school visits for discussion, classroom observation and help in evidence collection. It could also mean keeping in touch through e-mail, perhaps suggesting new material relevant to the teachers' research. We also encouraged the researchers to identify a supporter within their school, who would take an active interest in their work. This would normally be a fellow researcher, if there was one within their team.

It was expected that the results of the research work would be shared by teachers with their own colleagues in school and more widely with maths teachers across the network. Our main emphasis was on teachers producing a written report, but this was considered to be quite a challenge. So, to help teachers with this process, we developed a writing frame for both forms of research. Then, in the case of the first group, the teachers gave us their completed writing frames along with other research materials and these were repackaged to produce the group's research CD, 'Learn and Share'. Initially, we did this work, but later because of the length of time it took, a designer was brought in to finish the process. As well as developing the final product to be distributed to all the maths teachers, we had also encouraged researchers to talk to their teams about their research, while it was in progress.

Findings

What motivates and sustains teachers in carrying out practitioner research?

The members of the groups included a wide range of professionals with varying levels of experience. They were not people who would have particularly chosen research as a normal approach to professional development. Given this, it was very important to all the teachers that their research work made a difference to their teaching and the learning of their pupils. This was partly made possible because the research themes were broad enough to allow teachers the freedom to choose a research focus relevant to their own situation. However, if the research focus did not seem to be leading to an impact on practice then teachers could become discouraged.

If the first requirement of relevance was met, teachers also reported valuing the depth of thinking required by their research model. The emphases on evidence collection and on reading material from external sources were both said

to be helpful in changing their perspectives. It was good being treated as professional people, capable of thinking for themselves rather than a technician implementing the latest requirements. A third feature of the project that motivated the teachers in their work was being part of the research group. Teachers appreciated the professional dialogue and exchange that took place and indeed wished that there was more time for this within their own teams.

What forms of support teacher researchers need for their work to be successful?

Three separate conditions were identified as being important. However, perhaps more significantly, it was found that if just one of these conditions was not in place, then it became harder for the teachers to sustain their research work. The first supporting condition was having access to external support. Through the seminars and one-to-one support, we were able to offer the input on both research methods and the research theme that the teachers required. However, if teachers could not attend a seminar or we did not manage to visit them between seminars then the momentum of their work could be lost.

The second condition that was very evident was the need for time. The researchers wanted time to attend the seminars, to plan and read, to reflect, and to write up their work. This was not a surprising finding, but it was particularly important when time was pressured as the research work would often be the first thing to be squeezed. There were examples of teachers being given protected time to attend the seminars, to plan their work and to produce their final reports. However, there were very few who had dedicated time for all of these. Instead, because of teachers' motivation, many of them would find time for their research work over and above their normal workload.

The third condition that emerged in our study was the need for internal support within the school. The nature of this support was mainly in the form of taking an interest and offering encouragement. If teachers knew their research work was valued by colleagues, by their line manager and by senior leadership, it made a big difference to their work. Teachers appreciated colleagues asking about what they were doing and perhaps then trying things in their own classroom. It was also seen as helpful when a head of department would make time in meetings for the researcher to report on progress. Finally, if a member of the senior management team enquired to see what support a researcher needed, this immediately gave the work more status. This third condition of the need for internal support became clearer over time and on reflection was an area to which we did not give enough attention.

How can the learning generated by practitioner research be effectively shared with colleagues within a school and across the network of schools?

A key finding in this area is the need for the research work to be communicated in diverse forms, both during and at the end of the work. Our main emphasis as facilitators had been on the production of a final product, which could be