

Changing teaching and learning relationships through collaborative action research: learning to ask different questions.

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Abstract

The paper reports work over one year by three teachers from the Milton Keynes Primary Schools Learning Network. Their collaborative classroom focused action research investigated the limits and possibilities of pupils' and teachers' learning through self evaluation. In phase one the teacher researchers used questionnaires, interviews and observations of pupils in first, middle and combined schools to assess their responses to writing. These responses resulted in new understandings of the ways in which pupils learned, and formed an evidence base for the development and implementation of new teaching and learning strategies. In phase two the teachers carried out research in each other's schools, in order to evaluate the effectiveness of these strategies from the pupils' perspectives. Initial results suggest improved pupil motivation, confidence and self knowledge and a greater use of evidence based strategies by teachers. The paper provides an example of sustained cross school action research which promotes teacher and pupil learning; and demonstrates how listening to pupils' voices changed teachers and learners, and teaching, learning relationships in the classroom

Introduction

...it is important to remember that the world's most foremost expert on a particular classroom or school setting is the teacher in that setting. The experience and expertise of a teacher may sometimes be enhanced or hopefully focused by drawing on the experiences of others outside the classroom. But, in the final analysis, the teacher is the planner, decision maker, and actor who has the most intimate knowledge of and greatest influence in his or her classroom. Teaching, like research, can be a humbling experience (Clark, 1995, p 49).

This article reports research by three schools in the Milton Keynes Primary Schools Learning Network (PSLN): Castlethorpe First School, Bradwell Village Middle School and Portfields Combined School. The work was collaborative, within and between groups of teachers who volunteered to undertake sustained inquiries into areas of classroom practice which were significant to them. The collective expectation was that such inquiries would have three purposes: i) to provide information to better understand processes and outcomes of pupil self-evaluation: ii) to further our own continuing professional development through interrogating our values and practices with a particular focus on the meaning of independent learning: iii) to build a professional learning community through collaborative work. As with any learning journey not all of these

purposes were clear when we began! However, as we collected data from our classrooms and from each other so we learned to ask different questions.

In this paper, we describe first the context in which the inquiries took place in terms of the school setting and nature of the teaching and learning relationships. Second, we describe how we conducted the inquiries. Third we reflect more analytically on what we and our pupils have learned through the inquiry process. We raise and discuss key issues which arise out of our work and that also may be of interest to others who undertake sustained collaborative inquiries-issues of change, pupil participation and voice, CPD, leadership, and inquiry for learning. We do not claim originality for the exploration of these ideas; only that what we conclude is grounded in our individual and collective experiences. Working in this way has provided a unique opportunity for each of us to become better at what we do, more thoughtful about how we do it and, as a result, able to review and renew our sense of professionalism.

1. Context

Bradwell Village Middle School is situated near the centre of Milton Keynes. There are 320 children on roll organised into 12 classes catering for years 4-7. There is a broad cross-section of social backgrounds and the school has above average numbers of pupils with English as an additional language. A third of the pupils have special educational needs. The school also experiences above average levels of mobility. General attainment on entry is wide and most children entering the school come from two different feeder schools.

The idea behind the research at Bradwell Village Middle School was to take another step on the road of assessment, this time on pupil self-assessment or pupil self-evaluation. The previous School Inquiry Group (SIG) Co-ordinator had done a lot of work on teacher's knowledge of assessment and how to use that knowledge in terms of improving children's work in terms of setting clear learning objectives or intentions and success criteria. The next stage was to develop the pupils' own self evaluation skills so that they could be independent in their learning, make the judgements about what to improve and give reasons why. It was also to develop the contributions of pupils' voices in terms of the overall school system.

Castlethorpe School is a small rural first school with two mixed - age classes, catering for Reception to Year 3. Prior to the project, learning was teacher-led, with learning objectives and expected outcomes always set by teachers. Lesson plenaries focused on the extent to which pupils' work demonstrated the achievement of teachers' expectations. Feedback and marking focused almost entirely on teachers' judgements about pupils' work.

Pupil achievement in writing was an area of concern for the school, with a number of pupils having been identified as underachieving compared to their achievements in other aspects of the curriculum. We were interested to know the reasons for this. These pupils

appeared to take little interest in, or responsibility for, the quality of the writing they produced. Instead, they were reliant on their teachers' judgements about their work. They gave the impression that they did not enjoy writing, often finding many excuses to avoid starting a writing task. We felt it was essential to work in partnership with these pupils, to involve them more in the learning process so that they could become active participants, rather than recipients of teacher instruction and request.

Portfields is a large combined school situated in the town of Newport Pagnell, within Milton Keynes. There are 630 children on roll from the Foundation Stage to Year 7. Classes are organised into separate year groups usually with 3 classes in each year. SAT results are above the national average in all key stages.

Children enter the Foundation stage with marked confidence in mathematics and science but a significant number are reluctant writers. SAT results are above the national average and reading levels are high. However, along with the national picture, writing remains an area of concern. This has been a trend for some years and as a result writing has been one of the school development foci. Children in our school show enthusiasm for learning and teacher/pupil relationships are very strong.

2. The Inquiry

The role of teachers as both users and generators of new knowledge in their pursuit of best practice was popularised in the United Kingdom by Lawrence Stenhouse (1975) and embedded in the action research movement (Elliott, 1991, Lewin, 1948, Zeichner 2001). Closely associated with action research are the conceptualisations of teachers as reflective practitioners' or teacher researchers, championed by Schon (1987); and in Canada, teachers' voice was first promoted by Clandinin and Connelly (1995) in their development of the importance of listening to and placing value upon teachers' personal practical knowledge. Essentially, these and many other researchers view teaching as a research led activity which, at its best, requires teachers to engage in forms of reflective and systematic inquiry in order to understand better their practices in relation to their purposes and empower them to change them (Kemmis and McTaggart, 1998). Underpinning inquiries into practice are notions of teacher autonomy, seen by many to be at the heart of teacher professionalism (Cochran-Smith and Lythe, 1999).

Through our joint participation in the Milton Keynes Primary Schools Learning Network (PSLN) we found that our respective schools were working on projects with a similar focus, exploring the notion of pupil self-evaluation to improve teaching and learning. We wanted to explore how children could develop their ability to improve their own writing by engaging in assessment of their own work. We began by focusing on successful areas of their work and gradually moved through a process of refinement where they gained confidence to be more critical at specific aspects of their work, for example looking at sentence structure. From this pupils began to make their own improvements to develop their writing.

Each school received a small financial award through the Best Practice Research Scholarship Scheme (BPRS). We began meeting to discuss the progress of our separate inquiries. From this we developed a way of working to support our projects. This mutual support took the form of acting as critical friends, which enabled us to clarify our thinking, challenge our perceptions of findings and share our experiences of working with our SIGs (School Inquiry Groups). We had a strong focus on planning the next stages, setting ourselves targets and producing tools for research. Visits to other schools provided further opportunities for professional development and an exchange of ideas. Due to our collaborative work these also became opportunities to develop our inquiries through interviews and observations with children. This broadened the experiences for other members of the SIGs and promoted their greater involvement in the research.

Methods of inquiry we used were:

- **Regular meetings to discuss, read, critique and plan**

We used a combination of release time and our own personal time.

- **Observations of teachers, class groups, pairs and individual children**

Observation proformas focused on how children used their time when working during writing tasks, whether as an individual or as a pair. This included behaviours, the balance of writing/off task activities, the type of discussions and the balance of pupil contributions. These were analysed in terms of time, behaviour and pupil comments. They revealed individual children's approaches to work and helped identify children to focus on. The observations also informed our decisions on which areas of writing needed development.

- **Questionnaires with teachers and children**

Initial questionnaires were designed to seek pupil comments on attitudes to writing across the age range on a ratings system. Findings, including written statements, were analysed by class, ability groupings and in the larger schools by year group. This enabled us to identify issues for particular groups and strategies put into place which we believed would support pupil learning. Questionnaires following the input of strategies asked for comments from children and teachers in order to access information from across the age range and abilities.

- **Interviews with teachers and children**

Teacher and pupil interviews were conducted based on issues arising from the analyses of the questionnaires. They were carried out in a discussion forum rather than completed in isolation and also involved some pupils reporting their views as a pair. Analyses looked at the changes and attitudes pupils displayed in the classroom, which were identified through their comments made in questionnaires

and discussions. Comparisons were also made with responses to the initial questionnaires.

- **The selection of different groups/year groups/individuals**

In conducting the research, the groups involved were selected to cover the particular focus of the inquiry e.g. underachievement, or to create a balance of views across a key stage or ability range.

- **Classroom Observation**

Classroom organisation was used to gauge the behaviour of both teachers and pupils when engaged in writing activities. This formed the basis of future research.

- **Prompt cards**

Prompt cards which provided a point of reference by which children could evaluate their work according to specific criteria.

Bradwell Village Middle School

Initially the SIG shared with each other some of the teaching strategies in their classroom to promote pupil self-evaluation. After this, all the members of the SIG conducted a number of classroom observations to see what was happening in the classroom with regard to pupil self-evaluation. The observations covered both what the teacher did in terms of giving pupils self-evaluation opportunities, and, what the pupils themselves did, whether they had been given self-evaluation opportunities or not by the teacher.

In light of the observations, the SIG looked again at what was meant by self-evaluation and agreed a narrower area on which to focus. This was Literacy, in the terms of focussing on self-assessment activities with a target group of between 6 and 8 pupils within each of the SIG's literacy group using 'Close the Gap' marking. A questionnaire for the children about self-assessment within Literacy lessons was also devised. The questionnaire was administered with the target group of children by staff from Portfields Combined and Castlethorpe First. This was done to provide a more objective view from the pupils. It was decided to repeat the same questionnaire with pupils from the more able Literacy Group in each year as all the members of the SIG had the less able group in their year group.

The analysis of the classroom observations showed that teachers seemed to be very clear on the learning objectives/intentions and the task to achieve these and this in turn was transferred to the pupils, even those who were not on task! These pupils knew what the learning objective/intention was and the task that had been set, even though they were not doing it!

Analysis of the questionnaire revealed several interesting features about children's views of self-evaluation. Most said they were given time to read and think about their teacher's comments. They knew that the teacher's comments were for their benefit, the reasons behind them and the need to respond to these. Despite these positive answers when asked the question how did they know they had achieved the learning objective 80% said only when the teacher puts TA (Target Achieved). "*The teacher will put TA at the bottom of my work.*" (More Able Year 4) was a typical comment. So much for developing pupils self –evaluation skills!! There was a glimmer of hope with Year 7 in that even with the less able they were self-evaluating their work. "*After we finish, the teacher will go through it with us and if we understand we write TA.*" (Less Able Year 7).

This finding raises the question about whether this has occurred due to particular training by particular teachers, or as a self development skill that develops over the years and comes to fruition in Year 7 when, suddenly, all pupils have the skill to self-evaluate! The former is more likely, but it was a timely reminder that the skills of self-evaluation need to be taught and honed explicitly and over time.

Castlethorpe First

We devised two methods of data collection which we hoped would give us information about the children's views on writing together with the children's own opinions of their achievements in writing. These took the form of classroom observations of the pupils during writing activities, followed by an interview with each pupil individually. The observations were intended to allow the class teachers to observe each pupil's behaviour, without teacher intervention, during writing tasks. The interviews were based on a series of set questions, which focused on motivational issues. We arranged a programme of 'Learning Walks' with our partner schools to learn more about each other's projects, and as part of this programme, staff from each of the two other schools carried out follow up observations and pupil interviews. We felt that because these staff were unknown to the children, the pupils might be more inclined to be open in their responses to questions.

Following the analysis of the data, we planned a programme of strategies that we believed would raise the level of pupil participation in, and responsibility for, the assessment of their own work. One focus was that of raising children's understanding of learning intentions. In the Foundation Stage / Year 1 class, two approaches were used. Firstly, the teacher and teaching assistants asked pupils to repeat aloud the learning intentions. Secondly, prompt cards were made for the children to use to check their work before bringing it to the class teacher. This required the children to reflect on their writing and make simple judgements about their work, linked to the learning objectives. In the Year 2 / 3 class, whole class discussions were held in which the pupils, with guidance from the class teacher, chose outcomes that they judged to be important for a particular piece of writing. They collectively agreed that these would be the outcomes they would work towards. At the end of a piece of work pupils were asked to evaluate their own writing against the criteria set by the class at the beginning of the lesson. This was later developed into a system of peer evaluation, where writing partners were established and

children were asked to discuss and evaluate each other's work, with a focus on making improvements to the work. The discussions enabled the teacher to assess the learning that had taken place, and also to guide the pupil towards the next steps for improvement.

The second focus involved supporting children who only seemed able to produce short pieces of writing, consisting of simple sentences, lacking in adjectives and connectives, and containing only the simplest of verbs. For these pupils we removed the secretarial aspects of writing altogether. They dictated their work to a teaching assistant, who typed it onto the computer. Having had the secretarial elements completely removed, pupils were then free to focus on the creative aspects of writing, and subsequently to participate in the evaluation of their own work.

Portfields

To meet our intended goal, our SIG decided to investigate the use of partner work in literacy sessions to promote self-evaluation. We were interested to know how working with a partner might support children in their planning, editing and evaluation of work and whether this would give them greater confidence to work individually. Our small scale study involved six classes of children and their teachers in years 3-7. As a starting point we sought the children's views on their perceptions of partner work to date and their views on what they considered were important factors in the development of their writing. Our focused pairs were also interviewed by staff from other schools in our network, to reinforce our understanding of their views. An interesting text was high in their priority. So too was spelling, which seemed to indicate that teachers could be giving mixed messages through their instructions and feedback to children. We hoped that following our work, we would see a growth in children's personal confidence in writing and that their ability to evaluate a range of features within their own writing would improve as a result of their collaboration. We hoped, also, that they would realise that the quality of a text was considerably more important than spelling, quantity and neatness.

The classes participating in the inquiry undertook paired activities in the areas outlined. Children had previously been evaluating their own work by highlighting aspects that they considered to be successful. This was extended to the pairs and children exchanged their finished texts and highlighted sections which were the focus of the task. Criteria were given to them and they were also asked to explain why particular sections met these. For whole pieces of work children had checklists which they would complete and then their partner would verify their own judgements. We also asked children to write comments on their partners work following writing and asked them to indicate pointers for improvement e.g. vocabulary choices or organisation of ideas. Through this direction, children confidently wrote on each other's work, usually in another colour. This was valued by the other child. In their comments they frequently selected the parts which the teacher would have commented on positively and offered advice for improvement. Having previously initiated 'closing the gap' marking, most of the children were already able to improve their work with relevant teacher prompts.

The use of pairs for planning writing proved particularly successful. Teachers gave significantly more time for children to do this aspect of work and found it necessary to consider their lesson structure carefully. Once engaged in the paired discussions children appeared more focused on the task and seemed more motivated. Teachers had to reconsider their role during such sessions and intervene to move children's thinking on. Editing of work became important in the final stages of drafting as there was a shift towards the quality of writing. However, when used, teacher modelling was used to train the children and then pairs worked together on one piece. It is still apparent that children find it easier to edit another's work rather than their own. However, children comment that they do find this easier to do now, as they regularly edit as a pair.

3. Reflections: What difference has our work made?

a. Differences to children

'When teachers dismiss student experience, they blind themselves to the way students learn, construct identity and negotiate their place in the world' (Steinberg and Kincheloe, 1998, p 230/231)

Our joint projects have shown the importance of pupil voice. As teachers we should not underestimate the role this has in improving the learning environment in the classroom. Through our projects children are clearly more active participants in their own learning. Our findings support other research which show that there is effective learning when there is active involvement of pupils in the learning process and that new knowledge becomes accessible when there is an emphasis on encouraging pupils to construct and share their own understandings during lessons.

'...a key issue... is the extent to which teachers are willing to share with pupils control over lesson content and learning objectives, and that effective teaching often seems to depend on the power-sharing in these areas' (Cooper and McIntyre, 1996, p 68)

In each of our schools children's self esteem and confidence in their writing abilities has shown marked improvements. They show greater enthusiasm for learning and say they find lessons more exciting. Children speak of feeling more confident and enjoy the writing process.

'I feel better about my writing' (Year 6 pupil)

'I feel confident, I do much better work' (Year 5 pupil)

'My writing is better now' (Year 2 pupil)

A range of strategies initiated by teachers has shown that children are effective in evaluating their own learning, in responding to the work of others and in setting the next stages of their own learning. Where partner work was used for planning writing and evaluating outcomes children believed that this helped the learning process.

'I'm not so easily sidetracked' (Year 6 pupil)

'If you couldn't see anything to change, your writing partner could.' (Year 3 pupil)

The children's attitude and commitment to the partner work is very positive and the trust and honesty of their partner is valued. How well they cared for and treated their partner was noticeable in the observations and children made very strong statements about their relationships and how they valued this.

... 'ultimately the intention of most educational systems is to help students not only grow in knowledge and expertise, but also to become progressively independent of the teacher for lifelong learning. Hence if teacher-supplied feedback is to give way to self-assessment and self-monitoring, some of what the teacher brings to the assessment act must itself become part of the curriculum for the student, not an accidental or inconsequential adjunct to it...' (Sadler, 1998, p 82)

Findings show that overall performance in pupils' writing, whether in SATS or QCA End of Year tests, has increased significantly, with children in the target groups making good progress and the majority progressing by 2 fine grades (4 points) or more. There may be other reasons that have contributed to this progress but we feel that the inquiries have been a significant factor in these developments.

Pupils' attitudes have shown improvement and the classroom environment has become more appealing to them. The atmosphere in classrooms is purposeful, lively and happy with pupils showing a greater willingness to engage in writing activities. Lesson planning and structure has enabled this to happen and indeed actively promotes this type of learning environment.

In focusing on the pupils' views of their work, we are empowering this group of individuals to develop their leadership by taking control of their own learning. This has an impact on the relationships within the classroom which teachers may find difficult to accept. The responsibility for providing judgements about pupils' work moves away from the domain of the teacher to that of the pupil. The role of the teacher remains just as critical as before, but it is different. Teachers may need to be helped through this change process.

Pupils now demonstrate a greater independence from the teacher. As a result of greater pupil autonomy in writing activities, the whole nature of the lesson, particularly plenaries has also changed. The teacher's role has been modified from one of appraiser of pupils' work, to that of facilitator of class discussions about pupils' work. This change in roles has been a significant feature of changing teaching and learning relationships in the classroom. Through particular strategies pupils are more in control of their finished work and its contents. Conversations between pupils and teachers about their work are now a two way process with pupils able to explain and justify their writing choices.

Attempts to separate the creative from the secretarial aspects of writing have had mixed success. Children are beginning to realise that the creative element of their writing is more important than the secretarial skills. However, there are still children, usually those less able, who still judge their writing by their ability to spell, punctuate, write neatly and produce a large quantity of text. Strategies given to improve the fluency of pupils' handwriting have had a negative effect on their attitudes towards writing. These have not helped them to overcome their difficulties and have had no positive effect on the quality of their work. It is evident that children need to engage in the process of writing, by first developing initial ideas into a first draft, editing content into a further draft with secretarial aspects only being considered for the final version

Children need to feel 'safe' and be encouraged to take risks in their learning. According to Gipps, McCallum & Hargreaves (2000) certain classroom structures can influence goal orientation in children. This includes a focus on evaluation at an individual level rather than a comparison between pupils. Pupils' efforts are rewarded and opportunities for improvement arise out of mistakes which are seen as part of the learning process. To achieve this there needs to be mutual respect between teacher and pupil to allow and encourage risk taking. Teachers in this climate deal with mistakes positively. Brown, (1994) found that collaboration in the classroom promoted an atmosphere of joint responsibility, mutual respect and a sense of personal and group identity. In our endeavours to initiate good learning strategies in our pupils, we need to develop autonomy in their learning and enable them to evaluate their own work and progress. This will only happen when the teacher-pupil relationships are normally more:

'open and enabling, or constructing, than directing' (Gipps, McCallum & Hargreaves, 2000, p161)

b. Differences to teachers

Teacher Development is a continuing and necessary part of teaching which enables practitioners to keep up with change and innovation (Day, 1999). Teachers are, "*action-orientated, practical people*" (Stoll and Fink, 1996, p155) and when faced with all the diverse pressures, both internal and external, simple solutions are often seen as attractive, in terms of doing what one has always done or what the teacher in the next class has developed rather than developing new strategies or evaluating current ones.

However, inquiry into learning gives teachers the chance to step outside this thinking and do two things; to reflect on their practice, and to initiate actions that enhance their practice and consequently the learning of their pupils. Put another way, reflection initiates action and action initiates reflection (Elliott 1991). Both of these ways, which enable teachers to reflectively develop their practice through inquiry, can be seen in our research.

As part of the reflective process which creates the climate for action, 'Learning Walks' have been valuable as a means of extending professional knowledge and understanding for both teachers and teaching assistants. They have provided an opportunity for all to

develop their thinking in a non threatening environment; and have also provided a forum for discussion not only about our inquiries but also about effective teaching and learning. One finding was the realisation that all schools face similar challenges, which is reassuring and gives a sense of perspective. Explorations of educational research texts related to our work broadened our perspectives as did regular extended conversations with our 'critical friend' who provided invaluable external perspectives. Through these shared understandings and discussions, strategies were collectively developed to meet such challenges for the benefit of all. Indeed, the knowledge we have acquired through this period of work has enabled us to promote effective learning strategies to our respective colleagues in our schools to develop whole school practice for the benefit of children.

The project has brought about improvements in the skills of class teachers and teaching assistants in data collection and analysis. We have gained experience in classroom observation and in interviewing pupils. Through trial and error, we learned that open questions produced a wealth of information which we could then analyse, while closed questions sometimes generated responses which were too limited to be of any value.

We are clearer about our learning intentions and the tasks that are set. We now give significantly more time for children to reflect on and evaluate their writing. This appears to be crucial for improvements in the quality of writing. Secretarial skills have become a feature of final drafts whilst the emphasis has been on the construction of writing.

'I have become more focused on what I want the children to learn...and what instructions I give them... I am more specific and ask them to concentrate on one or two things...I am making sure I find time for a plenary...where children have the chance to analyse/look more critically at their work' (Year 3 teacher)

'I think that working in pairs has made the children more excited and enthusiastic about their work as they feel they are not just doing something for the teacher' (Year 3 teacher)

Our reflection on issues of pupil self-evaluation has initiated actions such as peer pairs and quality writing. And our role has changed from appraising children's work to facilitating its development. We have been engaged in a *process of refinement [which] helps create autonomy in professional judgement and enhances practice.* (Stoll and Fink 1996, p 155) Our professional autonomy has grown out of our collaboration.

c. Differences to our schools

Whether a school is regarded as either successful or unsuccessful, it is often the headteacher who is seen as the responsible party. However, we believe this to be a narrow view of school leadership. Everyone in school has a role to play in the development and success of the school. Whitaker (1993) believes that in only focusing on the behaviour of the Headteacher and senior managers:

'We run the risk of losing sight of those aspects of human behaviour in organisations that lead to effectiveness and constantly high quality.' (1993, p 73)

Within our individual schools there has been a commitment through the SIG to research which has impacted upon school improvement. Within the SIGs there has been a mutual belief in the importance of making teaching and learning better for the benefit of children and of a commitment to teacher learning. There has been an opportunity to engage again in educational theory which for many has been motivating and refreshing. Findings from research have been used as an opportunity to develop whole school practice and training. The SIG has been important in taking on this lead role.

In giving more staff a voice in the research, the nature of professional relationships within the organisation has changed. A more autonomous staff team with a greater ability to think creatively and set their own school's agenda for improvement has been created.

Our collective experience has suggested that there are a number of key factors which have brought about changes in our own and our colleagues' thinking and practice. These factors are:

1. a general aspiration to inquire more closely and systematically into classroom learning and teaching
2. identification of a particular problem which was of significance to each of us, and the colleagues in our schools with whom we work.
3. acquiring external resources to enable us to pursue this over time
4. co-opting a 'critical friend' - an outsider who was, and remains, interested in and supportive of our work, willing to challenge our thinking at times and who has the knowledge and skills in research which complement our own knowledge of practice
5. regular meetings of the kind that Huberman (1995) called 'sustained interactivity' which has enabled the building of trust, exchange of ideas, values and practices and mutual critique, support and encouragement
6. the design of inquiries based upon action research principles and practices
7. the implementation of inquiry into the normal rhythm of school action
8. regular reflection on our work, individually and collectively, as an essential part of the action research process
9. regular evaluation of emerging consequences of our work in classrooms
10. regular sharing of progress in network meetings

As a consequence our schools have become more self-evaluative, more aware of the need to match our practice to our values. Without the presence of any one of these factors it is unlikely that our work would have moved from the level of teaching for short term increases in pupil attainment. Consequently we have moved beyond this, gaining a greater understanding of and commitment to teaching and learning as a partnership between teachers and pupils. Within this greater understanding, pupil voice now plays an important part. We believe systematic change will most effectively occur when these ten

factors are present, for it is not systems but people who will change practice by understanding it better, (Stenhouse, 1976).

4. Conclusion

An important characteristic of our projects is that they have passed through a number of phases as we reflected on progress, problems and possibilities. We began as leaders of our school inquiry groups in our individual schools and ended as a closely knit collaborative. We have met regularly, visited each others schools, spent days together in a library, reading and writing; we have designed and conducted inquiry projects which have changed the way we and some of our colleagues think about the roles and responsibilities of pupils and teachers in the classrooms.

Through our individual investigations we have gained experience in the processes of research and applied successful strategies to improve our own practice through a greater understanding of its implications for learning and the learners. We have the confidence to promote our findings as these strategies are based on our own experience and evidence in the classroom. This adds considerable weight to managing change and supporting teacher learning. Our collaboration has given us time to reflect on our individual inquiries and consider the positive benefits of networking through sharing our experiences of managing our own SIGs and how best to utilise their skills to initiate and manage wider change more effectively. Through listening to pupils voices we have made them feel valued, thus giving a clear message that pupil participation is important in our schools in developing effective practice which improves learning. The projects which began with a focus on self evaluation have developed into an exploration of the significance of pupil voice in extending pupil learning. We have learned the importance of consulting pupils and listening and acting upon what they tell us.

Inquiry for learning is not just about teachers nor about what is done to enhance pupils' learning but also about empowering pupils in their own learning:

'Research is crucial for the success of any pedagogical model, particularly when the focus is on the critical empowerment of students. When students are engaged to take an active role in the learning process they are empowered to shape their experiences, what they search for, interpret, understand and apply' (Villaverde and Kincheloe, 1998, p 150)

Refinement has occurred not only in our individual projects, but also in our working together. Autonomy in professional judgement has certainly been created through our inquiries because it is based on data we have collected, and methods we have tried and evaluated. Enhanced practice can also be seen, not only in both the pupils and the teachers of our own individual schools, but also in the creation of our mini network.

None of this has been without cost. Whilst membership of a networked learning community and being in receipt of a Best Practice Research Scholarship(BPRS) have

enabled us to have time to develop our work, we have also spent considerable personal time on our projects. We acknowledge the support which we have received from school colleagues and the sustained support of our 'critical friend' from the University of Nottingham. Nor have our inquiries ended. This is simply another 'stopping off' point.

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