Developing Effective Schools: Creating School Contexts that Facilitate Teacher Engagement with Collaborative Action Research

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ABSTRACT

The Welsh Assembly Government launched its School Effectiveness Framework in 2008. Evidence from the literature suggests that Collaborative Action Research is an effective method for facilitating teacher development however this approach is not widely adopted by schools. This article describes a study, which was part of the ESRCTLRP programme, which identified the school and teacher based factors that help and hinder teachers' engagement with Collaborative Action Research The conduct of the study in the seven participating schools is outlined. Findings that identified significant organisational and structural factors at the level of the school system and teacher group are described. On the basis of this evidence the paper concludes with a discussion of the cross cutting themes of collaboration and ownership which are important for teacher engagement with action research.

Introduction

A school effectiveness programme 'The School Effectiveness Framework' (WAG, 2008) is being implemented by the Welsh Assembly Government, and it will be an important focus for schools in Wales in the coming years.

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The ESRC funded project 'Prosiect Dysgu Cydradd' (hereafter referred to as the Project) which has been part of the Teaching and Learning Research Programme (TLRP) has findings that are apposite to this agenda. For the purposes of this paper discussion of the findings will be confined to aspects of the school context that enable teachers to engage in action research. For a fuller description of the Project's findings the reader is referred to Davies and Howes (2007).

The effectiveness of teachers to teach, so that their pupils are engaged and able to learn, has been perhaps unsurprisingly established as a core characteristic of effective schools (Teddlie and Reynolds, 2000). The literature indicates that the characteristics of effective teachers include having a task orientated, but relaxed style; presenting information clearly, and offering students structured opportunities for practice, clarification and review; monitoring pupils' progress and understanding to check understanding; having high expectations of achievement; and having the ability to establish comfortable and relaxed relationships with pupils (Sammons, 2007).

Achieving these characteristics requires a flexible and dynamic engagement by the teacher, on a daily basis, with the many complex factors that contribute to classroom learning. In order to do this the teacher must be able to reflect upon and respond to the changing demands of pupils' learning needs. The teachers who can accomplish this best are often reflective practitioners (Pedder et al., 2005). Teachers who reflect upon and evaluate their own practice and pupil learning are in the best position to be able to respond to the range of student needs, and so deliver a well rounded education.

Collaborative action research (CAR) is an effective method for facilitating teacher development that can be grounded in the context of each unique school community. It assumes that change can be created through the identification of a particular problem and by addressing the problem through a reflective, collaborative process of engagement and critical evaluation, and there is a growing body of literature which provides empirical support for this position. The field of action research includes a diverse range of approaches and practices that are grounded in different traditions (Reason and Bradbury, 2001). Reason and Bradbury distinguish three modes of action research:

First-person research practice brings inquiry into more and more of our moments of action – not as outside researchers but in the whole range of everyday activities ... Second-person inquiry starts with interpersonal dialogue and includes the development of communities of inquiry and learning organizations ... Third-person

research/practice aims to extend these relatively small-scale projects so that ... they are also defined as 'political events' ... the most compelling and enduring kind of action research will engage all three strategies. (Reason and Bradbury, 2001: xxvi)

The approach in this study has placed relatively light emphasis on the individual teacher reflecting systematically on his or her own practice, and relatively more on second and third person research.

CAR is a collective learning process, and one that can engage with complex real life issues in which the unexpected will sometimes emerge; it is collaborative and involves listening to others in new ways (Barton, 2004). It is able to grow professional self awareness and skills (Noffke, 2002) and can develop teachers' ability to think about what they do in the classroom, moving from just 'what works' to the 'why' and 'how' of the learning process (Baumfield and McGrane, 2000). It harnesses the potential that collaboration can open up new areas of awareness (Flecknoe, 2005) and expand opportunities for sharing practice between teachers working in different classes and departments (Hodkinson and Hodkinson, 2005).

However, there are relatively few examples of school-initiated action research projects. Notwithstanding, for example, the efforts of the General Teaching Councils in Wales and in England to support small scale teacher research, the majority of this work continues to rest with teachers cooperating with academics (McLaughlin et al., 2004). The literature suggests many possible reasons for this:

- Resistance from school managers who feel threatened because CAR empowers teachers and stimulates 'bottom up' change (Armstrong and Moore, 2004).
- Lack of teacher confidence because teachers feel they lack research skills and expertise (Hitchcock and Hughes, 1995).
- A fear that outcomes will not be relevant to the classroom (Johnson, 1998)
- A lack of time and resources (McLaughlin et al., 2004)
- A concern that the experience may take them out of their 'comfort zone' because the process may challenge previously held assumptions about teaching and learning (Strauss, 2002; Simpson, 2004).

It is of concern that a method that can provide fertile conditions for effective teacher development is not being more widely adopted by schools. Although there is a huge body of literature dedicated to action research, the gaps in the literature suggest that less is known about the conditions in the

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workplace that help to engage teachers with this approach. Studies of workplace learning (Eraut, 2005; Evans et al., 2006) have drawn attention to the 'situated' nature of professional learning. The socio-cultural influences of organisational structures and systems, as well as the interpersonal impact of workplace relationships are fundamental for creating the best conditions for knowledge and skill development. The research that is reported in this paper takes this issue as its focus. What are the aspects of the school context that can help and hinder teacher engagement with CAR?

The Project

The study took place in seven secondary schools between 2005–7. Groups of teachers in each school collaborated to develop an action research project to improve pupils' attitudes to learning and also engaged in networking between schools. The common issue to be addressed by the school projects – a focus on improving pupils' attitudes to learning – was the only aspect determined by the researchers. An inclusion issue was chosen as the aim of the projects because the researchers were interested in testing their hypothesis that CAR was a valuable method for development of this aspect of teacher practice. The specific focus of pupil motivation was selected as a topic of immediate classroom relevance for most teachers. Collaborative groups were free to interpret the direction of the project according to the unique needs of their school and classrooms, but when the groups networked the common theme made it more likely that these sessions would have more immediacy and be of greater interest. Some examples of teacher projects are shown in Table 1.

School	Project				
Neuadd	Increasing pupil participation by getting responses using individual whiteboards				
Pentre	Pupil mentoring scheme				
Parc	Engaging pupils by using constructive marking and giving opportunities for lesson feedback				

Table 1 Some examples of collaborative teacher projects

The Project took place in two phases: April 2005 to March 2006, April 2006 to March 2007. During the first phase the factors that impacted on the

implementation of CAR were studied; in the second phase methods were tested that aimed to increase affordances and decrease hindrances to the process.

Selection of teachers

Six schools participated in the first phase. Of these six schools five continued into the second phase (Cwrt, Hightown, Main Road, Neuadd, Parc), with a new school (Pentre) joining the Project for the second phase only. The schools were selected by their local authorities to participate in the Project. Schools were allowed to use their own methods for choosing the teachers who would participate and it was observed that various approaches were used; these ranged from requesting volunteers to forceful persuasion in order to recruit participants.

The characteristics of schools and the collaborative groups are briefly summarised in Table 2. All of the schools were state comprehensive schools and none had a large number of pupils in any group that might be at risk of exclusion. The collaborative groups varied in size and composition, some were all members of one subject department, and others were more variously composed.

Method

Each group was given the assistance of a facilitator. This was because the literature tells us that teachers when engaged with CAR can be helped by a facilitator who can provide an outsider's view (Barker, 2005). The selection of the school's educational psychologist to perform this role was made because the education psychologist can offer knowledge and experience of inter-personal group skills; a familiarity with research and the semi-detached perspective of an outside but frequent advisor to the school.

In each phase, the facilitator met with the group over a period of eight months to develop their project. This included the identification of a shared problem that would be the focus for the group's work; the discussion of new types of classroom practice that could be implemented to respond to the problem; and the development of empirical methods to evaluate the new approaches that were to be applied.

The researchers gathered qualitative data from all participants in order to understand the process as it occurred; this included interviewing head-

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	Phase(s)	No. of pupils	Geographical setting	No. of FSM(%)	Collaborative Group size	Collaborative Group composition
Bont	1	900	Semi-rural	7.6	Phase 1:2	Phase 1:RE Department
Cwrt	1&2	600	Semi-rural	1.6	Phase1:5	Phase 1: Humanities Department
					Phase 2:3	Phase 2:SEN support teacher, history teacher &LSA
Hightown	1&2	1044	Suburban	9.1	Phase1:5	Phase 1: Science Department
					Phase 2:3	Phase 2:Year 9 form tutors
Main Road	1&2	1028	Urban	13.8	Phase 1:3	Phase 1: History Department
					Phase 2:2	Phase 2: Maths Department
Neuadd	1&2	1000	Semi-rural	10.3	Phase 1:7	Phase 1: Welsh &English
					Phase 2:6	Departments Phase 2: Various departments
Parc	1	1800	Urban	5.3	Phase 1:3	Phase 1: Science Department
Pentre	2	1389	Semi-urban	7.7	Phase 2:4	Phase 2: Heads of year

The Welsh Journal of Education 14 (2) 2009 Table 2 Characteristics of participating schools and collaborative groups

teachers at the beginning and end of the Project. Participating teachers and educational psychologists completed questionnaires developed by the Project, before and after each phase.

The data gathered was analysed by scrutiny of the responses of all participants in order to identify factors that help or hinder the process. First, the findings were analysed on a within schools basis and the factors that were

identified and triangulated across more than one data source were regarded as reliable. Second, these factors were then compared across schools and where they were identified in more than one school, were judged to be significant.

Results

The teachers' experience of involvement and the trajectories of the projects varied greatly. There was variation in the response of teachers, facilitators and schools to the challenge of action research for the individual professional and school system where it was taking place. As described previously, key factors were identified that influenced the engagement of teachers. Those that relate to context are described and are divided into two categories - factors relating to the experience, structure or organisation of the teacher group (teacher level factors) or of the school system (school level factors). Activity theory (Engeström, 2005) has informed our analysis and developed our understanding of the fundamental inter-relationship of the learning experience of the individual with the socio-cultural systems in which it takes place (see for example, Davies et al., 2008). The factors that have been identified as important have similarity to key practices identified in other studies of workplace learning. Evans et al. (2006) also use Engeström's work to develop a heuristic to make sense of the features of situated learning. This 'expansiverestrictive continuum' will be used to frame our findings which are summarised in Table 3. Expansive contexts open up possibilities for transformational learning and changes in the system to occur; restrictive contexts as the label suggests reduce the opportunity for this type of learning.

Recognising the value of the process of action research

Some schools, as a result of previous experience (Main Road) or training (Neuadd), were aware that, although outcomes for pupils had to be kept firmly in view, ensuring that teachers had opportunity to gain benefit from the process of action research must also be a priority. In order for this to be the case it was important to find some space for teachers from competing demands so that time could be given to develop collaborative activity. This allowed issues to develop through discussion, the group to identify a shared focus and to jointly plan and evaluate a project. This was not always the case, for example in one school (Bont) teachers adopted a 'no-nonsense'

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Expansive	Restrictive			
School Level				
Recognition of value of process of action research for teacher development: and a balance between this and project outcomes	Little or no recognition of value of action research therefore prioritise project outcomes at expense of teacher development			
Managers provide support and celebration as project is on-going	Managers do not offer sufficient support and celebration as project is on-going			
Managers invest in the outcomes of the group project by making plans for implementation of wider impact	Managers do not invest in the outcomes of the group project and do not make plans for implementation of wider impact			
Teacher Level				
Teacher selection processes increase engagement	Teacher selection processes reduce teacher engagement			
Group structure contributes positively to progress	Group structure is on balance a hindrance to progress			
Group leaders emerge from the group who have enthusiasm for the project	Group leaders are appointed/assume seniority but lack enthusiasm for the project			
Regular 'space ' from everyday demands provides opportunities for collaboration	Little or no 'space' from everyday demands provides few opportunities for collaboration			

Table 3 The school context for collaborative action research

approach, quickly defined the problem on the basis of existing experience and assumptions, and took little time to explore issues or evaluate the impact of their actions as they developed. In this school the group project had little impact on the teachers' way of thinking or practice.

Managers provide support and celebration

Not surprisingly the approach of senior managers was found to be crucial to the progress of the teacher projects. Decisions about how the teacher group

were selected and structured proved influential on the effectiveness of the group (see below). It was not found to be necessary for the managers to lead the group but when 'backstage support' was not present the progress of the teacher project was severely hampered.

Senior managers attentiveness to the group process was evidenced in small but enabling organisational adjustments such as protecting staff time during free periods (Pentre, Main Road); listening to and celebrating on-going developments (Main Road, Hightown); and promoting the project by linking it into systems such as staff appraisal (Hightown). In other schools this concern and protection for the project were not evident, for example in one school (Parc) the participating teachers were not given any dispensation from a time consuming departmental review that was taking place and as a result the teacher project was blown off course.

Managers enable wider impact

At the end of the teachers' projects some managers ensured that outcomes were celebrated, communicated and understood by other teachers in the school (Main Road, Hightown). When this happened it added hugely to the confidence of the teacher group to maintain changes that had taken place in their practice. The work of groups – occurring within a department or within a small group of teachers – can easily become isolated from the wider institution, so that when the work ends, the impact quickly fades. In some institutions the group space was well structured but poorly connected to the rest of the institution (e.g. Parc); therefore had less impact on the wider institution than was merited. Teacher talk and informal networks sometimes spread knowledge (e.g. Neuadd) but unless there was senior management interest then no further school investment was made to build upon of the teacher work by disseminating it to other teachers (e.g. Cwrt).

These three features of the school context – recognising the value of the process, providing support and celebration and enabling wider impact – were the most important framing features to emerge from our study of the system in which the teacher projects took place. The factors that occurred at the teacher level, which will now be discussed, were in some cases a consequence of the approach that was being taken at the school level.

Group selection

Schools that understood the process best used methods for the selection of teachers that increased enthusiasm, for example requesting volunteers (Neuadd) or incentivised their involvement, for example, by departmental competition (Main Road). Where teachers were selected or dragooned into their projects (e.g. Bont, Cwrt) then initial feelings of resentment had sometimes to be overcome before progress could be made.

Group structure

The average group size was four (range two to eight). Smaller groups were able to meet relatively easily in shared free periods (for example, Main Road) but as groups became bigger this solution became challenging to senior management to prioritise and put into practice (Neuadd). So without senior management giving this support, regular meetings did not occur.

Larger groups offered both opportunities and challenges. Participants tended to have more diverse ways of framing the project (particularly when members came from more than one department); this made the project more complex but offered more challenges to existing thinking.

Group leaders

In general the most successful group leaders emerged rather than being agreed from the start, for example on the basis of seniority. Certainly senior managers seemed most effective when providing support for emergent leaders rather than when they took the leadership position for themselves. Some projects thrived on the motivational leadership provided by one enthusiastic individual (for example, Cwrt Group two, Hightown group one) and in some cases this provided a significant career opportunity for teachers and contributed to future promotion (Parc, Hightown).

Protected space to collaborate

Where senior managers worked actively to address the issues of time, then solutions were often found. Main Road identified a common free period shared by the group of three teachers and protected it. The Pentre teacher group observing that this approach was effective insisted on the same strategy for them.

Groups that had the opportunity to meet regularly developed as collaborators-encouraging and challenging each other, sharing risks, providing

energy and motivation for each other. For example one group (Neuadd Group one) at the outset of the process were confident that they could recognise the signs of pupil disengagement, it was only when as a group that they started to discuss and develop an evaluation tool that they began to challenge each others assumptions about this knowledge.

Having space from everyday demands meant that they could identify an issue and a process in terms meaningful to them at that time, for many this meant a focus on pedagogical issues that allowed them to develop new approaches to their own practice

Discussion

Teachers' practice and what happens in the classroom has a huge impact on the participation and achievement of school students. Finding ways to enable teachers to understand, develop and improve how they teach is one of the most important challenges to schools as they seek to become more effective.

The learning experiences that occurred in the most successful projects could be described as expansive. For example, a more developed awareness of pupil perspectives, led to some boundary crossing by assigning new status to pupil consultation. Teachers reported this had transformed the way in which they would plan and evaluate lessons in future.

Although it is acknowledged that teachers' life histories and personal dispositions contribute to their response to professional development opportunities (Hodkinson and Hodkinson, 2004); the school context also exerts a strong influence on teacher engagement. Expansive contexts increase the range and quantity of opportunities for new learning (Evans et al., 2006).

Schools where expansive learning was taking place were characterized at the school level by a commitment to the process, this in turn supported structures and organisation at the teacher level that made the process effective. Three key features recurred as we analysed the factors that contributed to success: collaboration, ownership and empirical attention. The first two are of immediate interest here, the third arose from analysis of the factors arising from teachers' development and evaluation of their projects in which is not the focus of this paper.

Collaboration

Collaboration was the driving engine for the process. This did not mean only working alongside others but involved teachers interrogating an issue together, identifying a shared focus, discussing and deciding the rationale for the particular action and evidence for its impact. Critical engagement within the group was necessary rather than simply group membership so the shared incubation and development of ideas provided colleagues with both stimulus and support. Collaboration has been identified in the literature (e.g. Ainscow et al., 2006) as an important aspect of organisation that can enhance the effectiveness of action research. Opportunities for collaboration have also been identified as a feature of expansive learning environments because they break down the entrenched culture of professional isolation that is common in secondary education (Evans et al., 2006)

Ownership

It made a difference if senior managers at earliest stages of the project were able to identify the potential value of the process for teacher development. If this occurred then the project was valued, and became an initiative that was more likely to be owned by the school. Without ownership, the process became yet another scheme handed down from above and deserved no greater priority than the many other agendas competing for school and teacher attention. Where a group owned an issue they put energy into thinking through the consequence for themselves and their practice, they were prepared to take risks to try and resolve issues, they created space to follow it through. This finding is congruent with other studies which have identified methods for professional learning that increase teacher agency, and enable the active critical engagement of teachers with their practice as the best type of teacher development (Cochran-Smith and Lytle, 1999).

Our findings suggest that school managers who engage meaningfully with action research foster a context that encourages the emergence of a collaborative project that is owned by its participants. The support of school leaders is pivotal to providing conditions in which teacher action research can thrive. However although teachers learning and developing in this way can have impact via dissemination, they can also create change in institutional culture. When practice becomes more effective as a result of a collaborative 'bottom-up', teacher led initiative, this can influence the development of the workplace learning environment and we believe make it more expansive. Further if schools are to sustain and embed methods of professional develop-

ment that value collaborative reflection and research then structural and cultural change is needed to support this,

"... interventions have to be directed specifically towards designing the working environment as a learning environment for teachers. Such interventions do not address particular learning events organized by staff developers, but concern structural and cultural changes within schools that provide time and stimulus for those activities that are characteristic of strong professional communities, such as interaction and reflection. (Kwakman, 2003: 168).

We would suggest that schools that reduce barriers and provide opportunities for collaborative action research are engaging in an enterprise that can build strong professional communities. Participation in action research can enhance the collective involvement of those individuals who work in that workplace, establish shared aims and a vested and serious interest in project outcomes. This is an approach through which more effective teaching and learning can develop.

Acknowledgements

- 1. We are grateful to the ESRC for funding this study as part of the TLRP.
- 2. Thanks are also due to those local authorities, schools, teachers and pupils who participated in the study.

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