

Improving Coaching: Evolution not revolution

Research report

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About the research report

This research report documents a two-year research project conducted by Newcastle University and funded by CfBT Education Trust and the National College. Guidance, information and support for teachers and school leaders interested in this topic is available in the report 'Coaching for teaching and learning: A practical guide for schools', published by CfBT. Further coaching resources are available from the National College website: www.nationalcollege.org.uk/coaching.

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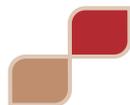
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Executive summary

This report is based on collaborative research with thirteen schools in four regions of England, which yielded 29 coaching transcripts, 13 interviews with school co-ordinators, school senior leaders (and one local authority representative) and online questionnaires from 23 teacher coaches, and notes from 8 focus group meetings. The research questions were:

1. What happens in teacher coaching sessions and how does this influence subsequent classroom teaching and pupil outcomes?
2. How can coaches improve their coaching practice; did the research project interventions support improvement, and were there any recognisable outcomes?
3. How is coaching being utilised within the context of whole school improvement and professional development?

What happens in teacher coaching sessions and how does this influence subsequent classroom teaching and pupil outcomes?

1. Coaching is a popular process amongst participating teachers with much potential for improving learning and teaching. It was compared very favourably to general professional development experience and was seen as more tailored and personalised.
2. However it has proved very difficult to study coaching as participants and support for the process come and go, for a number of reasons. These include:
 - there is a high turnover of staff involved;
 - allocation of resources can vary over time which can limit opportunities for practice;
 - teachers' commitment to the principle can be swamped by other priorities;
 - school leaders engage with coaching without a full appreciation of all the implications.
3. Much of the coaching practice sampled for this report is routine. Most discussion in coaching sessions is initiated by coaches. The common pattern is for the coach to ask questions and evaluate, while the coached teacher explains/justifies, clarifies and evaluates teaching episodes. There is relatively little analysis or evaluation of lesson planning
4. Coaches are successful in establishing rapport with their partners. The tone of coaching sessions is for the most part, appropriately neutral. The tone is more commonly positive than negative, and most of the negative tone arises from the coached teacher's negative evaluation of their own lessons.
5. Although the great majority of the lessons that were to be the focus of coaching were filmed, many coaches and coached teachers did not directly refer to this evidence.



6. There is little focus on critical moments or the small detail of teaching and learning in the coaching sessions and the greatest focus was on themes (general points), followed by whole lessons. The majority of coaching is therefore fairly generalised in its analysis of teaching and learning.
7. The discussion of themes during coaching did not make much reference to research informed pedagogical principles. There is hesitation on the part of many coaches to lay claim to any particular pedagogical expertise and coaching co-ordinators felt the need for the development of more guidance for coaches on common pedagogical themes.

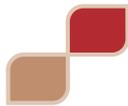
How can coaches improve their practice; did the research project interventions support improvement, and were there any recognisable outcomes?

8. There is room for substantial improvement in coaching practice in schools. The few coaches who initiated deep seated discussion of teacher learning have a much wider coaching repertoire than was the norm within our sample.
9. Where video is used well it allowed productive analysis of the relationship between what teachers did and how individuals or groups of students responded. Video analysis remains a significantly underused resource in teacher coaching and needs urgent attention.
10. There is considerable scope for coached teachers to take more responsibility for analysing their practice and this would be aided by both the use of video and the necessary time for its use.
11. Challenge by coaches is very important as it can trigger rethinking (dissonance) around teachers' planning and practice and the beliefs that underpin them. Only 2 coaches out of 23 sampled used challenge significantly as part of their repertoire.
12. The video of coaching sessions and dimensions of coaching developed through this project proved to be very valuable for developing a language of practice through which to analyse coaching. A small amount of stimulus and support from the project team encouraged teachers to reflect on and analyse their practice. Coaching dimensions and video of coaching sessions proved to be very valuable for developing a language of practice through which to analyse coaching.
13. Many coaches showed early signs of being able to analyse and monitor their coaching practice. There is considerable scope for the further development of coaching practice.



How is coaching being utilised within the context of whole school improvement and professional development?

14. The implementation of coaching tends to be driven by individual enthusiasts and/or by managerial imperatives related to teaching performance and both can be easily derailed. Coaching is rarely at the centre of thinking about professional development and school improvement practices.
15. In most schools there is considerable evidence of practical and logistical difficulties in bringing two coaches together, sufficiently prepared, at the same time (for pre- and post coaching sessions) and in conducive conditions, without one or both of them feeling some degree of guilt (e.g. for missing lessons).
16. There is very little evidence of active analysis of the impact of coaching on students' learning – either the major concern is with improving professional development experience or it is with bringing more teaching in line with a school template of 'good' teaching which may or may not be influenced by Ofsted criteria.
17. There is a clash of cultures evident in coaching. The culture of hierarchical management and a focus on short term measurable outcomes can militate against a longer term commitment to a culture which encourages professional inquiry. There is considerable resistance from teachers to coaching becoming a predominantly managerial process.
18. Overall there are significant issues in the management of coaching in schools – only one school in the project had a sustainable and effective model for the management of coaching.
19. Coaching can play a significant role in securing three important outcomes for schools:
 - a) Shifting the culture towards self-evaluation and inquiry in which teachers learn collaboratively;
 - b) Improving the general CPD experience of teachers, making it school based and classroom focused, but with important links to pedagogical knowledge, thus achieving research-informed practice;
 - c) Improving teaching by providing feedback to teachers and allowing them to reflect intensively on classroom evidence generated by video.



Aims of the project

The project had two related aims: to observe and analyse a range of current coaching practice and to develop the means to enhance that practice. Much educational research is about teaching and learning, but the teachers, school leaders and students are the subjects of study. Once research outcomes are produced various means are used to disseminate the results in the pursuit of impact. Unfortunately the relationship between research and practice is uncertain and it is often difficult to find mechanisms which secure the translation from the former to the latter.

Inevitably this research has not been able to free itself completely from such shackles. However where possible we have worked closely with teachers from the start of the project to ensure that the outcomes will be of direct benefit to practice. We have taken results and ideas back to the project teachers repeatedly during the project lifetime for evaluation and validation and we have used ideas and methods that have promise in informing thinking and action. We have given thought to how research outcomes can be represented so that the ideas underpinning can be internalised and we have heavily promoted the use of filming of lessons to promote analysis in coaching. Most importantly we have strived to provide a language and visual representations through which teachers can analyse and plan their coaching practice.

Introduction

Most coaching programmes draw upon common but eclectic roots. They are strongly influenced by clinical supervision, psychotherapy and counselling (e.g. Goldhammer et al., 1993, Watkins, 1997) which particularly underpin the Costa and Garmston (1994) model of cognitive coaching. The influence of Neuro Linguistic Programming is evident in places and there are signs of Vygotskian (1962) ideas in the notion that thinking first appears on the social plane before being internalised by the individual as a psychic or mental process. Transactional analysis is also a frame used in some materials to develop insight into practice. More recently there is an interesting trend to apply conversational (Strong et al., 2006) and content analysis (Bergen, 2000) to coaching interactions.

Coaching in education gained particular attention in the UK with the publication of the book *Student Achievement through Staff Development* by Joyce and Showers (1981). However coaching courses only started to appear in education in Britain on any scale in the late 1990s. Further milestones are visible in the coaching materials in the Secondary Strategy (DfES, 2003), the promotion of coaching in the materials of the National College for the Leadership of Schools and Children's services (see Creasy & Paterson, 2005), the National Coaching and Mentoring framework (see <http://www.curee-paccts.com/dynamic/curee4.jsp#MandC>) and the programme for Subject Coaches in Further Education (Portillo, 2006). The Secondary Strategy materials were significant in promoting the use of videoing of coached lessons. In the last five years therefore coaching for teachers has become a familiar concept. A number of factors can be seen as underpinning this trend:



1. The proliferation of coaching training providers in the UK, some with a business background but others primarily education oriented;
2. The popularity of life coaching (Observer, 2006) influenced by Neuro Linguistic Programming;
3. The prevalence and visibility of coaching in sport which breeds an acceptance of the concept;
4. The development of coaching as a management paradigm in the private sector, notably in the banking and finance sector (Clutterbuck & Megginson, 2005);

As a consequence there has been an increase in the number of schools and colleges using coaching as a tool for professional development. This is usually for pragmatic reasons as coaching is associated with improved classroom teaching. However there is virtually no research in this country to provide a description and analysis of what is happening in coaching relationships and coaching sessions, and what effect this is having. Further there is little evidence of how coaching is being managed as a process as it easily becomes entangled in mentoring and thinking about performance management (Simkins, et al., 2006).

The Mentoring and Coaching National Framework developed by the independent research organisation CUREE for the DfES has proved very valuable in promoting dialogue about the respective meaning of mentoring and coaching. More than 700 people attended and contributed to the consultation meetings. It is widely accepted that mentoring usually takes place at significant career events, such as induction and taking on new roles, it has an element of gatekeeping and the mentor is almost always someone more senior in the organisation and indeed there is an organisational motive for the process. Coaching however is associated with developing repertoire through focused experimenting with new classroom strategies and often has the objective of assisting in the development of open and collaborative cultures. Coaches do not have to be senior staff just someone with particular expertise and they should be supportive and not judgemental. Indeed there is a variant of coaching - peer or co-coaching - in which neither partner has particular expertise but they support one another and take turns in the role of coach and professional learner. Trust is seen as a particular prerequisite for making coaching work effectively. Bergen et al. (2000) give a workable definition as follows: 'We define coaching as a form of professional collaboration and support to improve professional development and craftsmanship through experimentation, reflection, exchanging of professional ideas and problem solving'. We would add that it is a process that has the potential to increase the capacity of both parties to undertake such action unaided - thus the coaching process is initially inter-personal but intra-personal as it is internalised.



Relevant literature

Coaching

The evidence base for the effect of coaching on a number of criteria is reasonable (see Costa & Garmston, 1994 for a summary at that date). Joyce & Showers (1988) present evidence that it is, by a significant margin, the most effective form of continuing professional development (CPD) when judged by student learning outcomes. However this evidence is predominantly from the US. In Europe, academic research on coaching is most evident in Holland. Veenman & Dennesen (2001) provide strong evidence from a number of studies which included control groups, that there is a 'treatment' effect for trained coaches in terms of empowering teachers, good feedback, business-like approach, value placed on coaching by coached teachers, planning observations and coaching skills. Despite the claims for coach training and the evidence from other countries, coaching is proceeding as a favoured model with little examination in the UK context. In the UK (Roberts & Henderson, 2005, Cordingley, et al., 2005, Leat & Lofthouse, 2006) there is evidence that coaching is evaluated very positively as a face to face process, with teachers particularly valuing the opportunity to review their thinking and teaching in detail in a supportive environment. There are signs that such an approach spills over into teachers talking to colleagues more about teaching, and thinking more intensely about other lessons. Trust is often mentioned and some marked comparisons are made between coaching and performance management. Videoing lessons for use in the coaching process, despite some initial reluctance, is reviewed very favourably, both in respect of revisiting the minutiae of lessons and importantly allowing the coached teacher to do much of the analytical work without dependence on the coach's notes, which helps diffuse power relationships.

However there is also evidence that most of the difficulties in enacting coaching arise from making the process work as part of school improvement systems. This may be interpreted as a clash of cultures. As stated earlier, coaching models tend to have their roots in psychotherapy and counselling in which the establishment of trust is paramount and confidentiality is assured. Coaching, if it is to be embedded as a school improvement, has to be implemented by schools, which usually have managerial, somewhat hierarchical cultures. So, for example, some schools confuse coaching with performance management and see coaching as a process in which more senior staff coach more junior staff without consideration of where expertise lies, or they see it as a way of dealing with weak teachers.

These dangers are further exemplified in a number of studies. Hargreaves & Dawe (1990) reporting from North America suggested that many teachers resist peer coaching as they see it as a management tool to impose collegiality. Lam et al (2002) report from Hong Kong that when teachers normally encounter observation of teaching it is for staff appraisal, with the observation forms comprised of rating scales, which gives them a negative predisposition to visitors in their classrooms. The teachers feel that their self-esteem is 'on the line' and they fear negative comments of their peers - trust was seen as the vital antidote. There are indeed some studies which report or discuss attempts to improve the work of underperforming teachers through the process of mentoring/coaching (Rhodes & Beneicke, 2003, Flesch, 2005). In such circumstances coaching may be ascribed some unfortunate meanings - you are coached because you are a bad teacher. School cultures are therefore of major



significance in determining how coaching is both perceived and introduced (Holmes, 2003). Cordingley (2005) also reports in relation to the national consultation exercise that most models in England at present are hierarchical and power relationships confuse coaching relationships. This is critical in relation to the evidence of the importance of networks (Hargreaves, 2003) and collaborative professional development where trust pervades (Clement & Vandenberghe, 2000, Cordingley et al., 2003).

Zwart et al. (2007) in their analysis of peer coaching draw on a model developed by Clarke and Hollingsworth (2002) which suggests that changes resulting from professional development occur in four distinct domains. The domains are: the personal domain (PD, teacher knowledge, beliefs and attitudes), the domain of practice (DP, professional experimentation), the domain of consequence (DC, inferred salient student learning outcomes, teacher control, student motivation and student development) and the external domain (ED, sources of information, stimulus or support, such as in-service sessions, professional publications and conversations with colleagues). Zwart and colleagues found that in coaching conversations changes could develop in any of the domains but the important point was the sense of a chain reaction in stimulation, thinking, attitude change, experimentation, impact on pupils and consequences, which did not follow strong set patterns. Professional learning is not just a technical process, it is complex.

Perhaps of most significance in the literature is a dearth of analysis of the conduct of coaching partnerships in the UK in educational settings. Some research exists in Holland (Bergen et al. 2000) which used content analysis of tape recorded coaching sessions. Their analysis showed that coaches spent an inordinate amount of time clarifying their interpretation of what they had observed and what the teacher had intended. The coaches thus dominated the conversation more than intended. Where coaches make suggestions for improvement, many of these are not followed up. The coaches also varied enormously in terms of the roles that they played: companionship, feedback, analysis, adaptation and support. Although these findings are interesting in that they do provide some analysis, the setup of the coaching pairs is different in that there is more emphasis on feedback, less emphasis on collaboration and video of the lesson was not used.

A New Zealand study by Timperley & Parr (2008) considered teacher coaching within a project focused on improving children's writing. Baseline data showed that coached teachers did not and did not intend to act on the indirect suggestions of teacher coaches. The coaches were provided with training in principles and practice of effective feedback process using protocols (Robinson, 1993; Timperley, 2001) focused on a process of collaborative knowledge construction which includes the process of jointly deconstructing practice and engaging teachers' theories. A second phase of research analysis showed an improvement in coaching practices with most indicating an intention to enact the suggestions discussed. An analysis of the transcripts, however, revealed that the focus of the interactions were restricted to the immediate context. The coach's suggestions, when made, were very practical and made no reference to wider principles or theories of effective teaching. In addition, the coaches failed to develop explicit strategies for how teachers would judge the effectiveness of proposed changes in their practice in the absence of the coach. New practices were developed with the coaches that linked practice with relevant theoretical frameworks and focused on developing teachers' self-regulatory strategies so that they could monitor the effectiveness of any changes.



In concluding this section it is important to state that coaching is generally evaluated positively by participants and a number of studies show impacts on a range of indicators. Although there may be some technical teething troubles, these are usually surmountable. Many of the reported problems with coaching relate to the tension that is generated when it encounters managerial hierarchical cultures. Furthermore there are concerns about the commitment and understanding of some school leaders. Lastly questions have been raised about the quality of coaching and its effectiveness in changing practice.

Professional Learning

This section goes beyond coaching research to provide a wider context in which it sits – that of professional development/learning. We have concentrated on four reviews on the topic.

Major themes that emerge are:

- School-based collaborative professional development is rated highly by most teachers and headteachers, but not practised commonly;
- A range of activities is important to professional learning but experimentation with new ideas in classrooms and the opportunity to reflect on the outcomes appears critical;
- Leadership and co-ordination of CPD is generally lacking, and those responsible have little explicit training;
- CPD inputs benefit from theoretical underpinning and challenges to existing beliefs although the latter can be uncomfortable for individuals;
- There is a worrying lack of coherence to CPD;
- Time and resources are a significant issue.

There are three EPPI (Evidence for Policy and Practice Co-ordinating Centre) reviews related to collaborative CPD the first of which was 'The impact of collaborative CPD on classroom teaching and learning' (Cordingley et al. 2003), on which we will focus. 15 studies met the inclusion criteria for the review. The changes in teacher behaviours reported in the studies included: enhanced beliefs amongst teachers of their power to make a difference to their pupils' learning (self efficacy); the development of enthusiasm for collaborative working, notwithstanding initial anxieties about being observed and receiving feedback and a greater commitment to changing practice and willingness to try new things.

The benefits of collaborative CPD sometimes materialised only after periods of relative discomfort in trying out new practices and teacher collaboration was important in sustaining progress. Some of the limiting factors were time for discussion, planning and feedback, and suitable resources.



The important characteristics of collaborative CPD included:

- the use of external expertise linked to school-based activity;
- observation;
- feedback (usually based on observation);
- an emphasis on peer support rather than leadership by supervisors;
- scope for teacher participants to identify their own CPD focus;
- processes to encourage, extend and structure professional dialogue;
- processes for sustaining the CPD over time to enable teachers to embed the practices in their own classroom settings.

This list, at least superficially, maps strongly onto models of coaching processes.

The Best Evidence Synthesis (BES) from New Zealand (Timperley et al., 2007) is important because it focuses on studies which relate features of professional development to positive student outcomes. 97 studies met their criteria for inclusion in the review. Important conclusions include that changing the beliefs of teachers through CPD is important, which typically involves challenging assumptions that some groups of students cannot learn. This depends upon iterative cycles of changed teaching approaches and examining the learning gains made. The BES also highlighted the importance of linking theory and practice through the assistance of CPD. In addition it concluded that leaders had to provide important conditions, such as an environment in which new practices can be implemented in the classroom and the creation of a learning culture where teachers are also learners.

In the 'State of the Nation' (Pedder et al., 2008) it is reported that most teachers' experience of CPD is not collaborative or informed by research, it tends to involve passive forms of learning, is not sustained or embedded and the outcomes are fragmented. Ironically teachers in the highest performing schools had more variety and better experiences, including coaching, mentoring and observation, whilst teachers in lowest achieving schools experienced more in-school workshops.

Eraut's research, as part of the ESRC Teaching and Learning Research Programme, provides a broader canvas still, as it focuses on early career professional learning in three professions: nursing, accountancy and engineering. Although teaching was not included the insights and models developed provide an important landmark for most professions. Eraut (2007) developed the project analysis round three dimensions: elements of practice, time and context. Elements of practice provide a description of four distinct but interconnected elements (p. 406):



1. Assessing clients and/or situations ... and continuing to monitor them;
2. Deciding what, if any, action to take, both immediately and over a longer period ...;
3. Pursuing an agreed course of action, modifying, consulting and reassessing when necessary;
4. Metacognitive monitoring of oneself, people needing attention and the general progress of the case, problem, project or situation.

As Eraut argues, following Weick (1983) that although best regarded as distinct for analytical purposes these four elements are combined in performance. Eraut et al. in earlier work (2000) stress the importance of confidence in mid-career learning, which was equally important in early career learning which arises from both successfully meeting challenges and from feeling supported. Coaching, when practised well, provides a structured framework for analytical and reflective deliberation in the first three elements – assessing situations, deciding on action and taking action with appropriate ongoing adjustment. The deliberative element can build over time to develop metacognitive awareness and control, through the ability to stand back and evaluate. Teachers are usually consumed by ‘busyness’ which robs them of this reflective capacity.

In addition the development of coaching will go a considerable way towards operationalising the key learning activities located within work identified by Eraut. He stresses the importance of informal learning and identifies the following learning activities: asking questions, getting information, locating resource people, listening and observing, reflecting, learning from mistakes, giving and receiving feedback and use of mediating artefacts. This represents very active, situated learning, where early career professionals learn significantly from experience, context and colleagues

The NFER report on ‘Mentoring and Coaching for Professionals: A Study of the Research Evidence’ (Lord, Atkinson & Mitchell, 2008) also contains a valuable overview of literature. However, although some attention is given to defining the two terms, the distinctions are not maintained throughout the report, making it difficult to interpret the findings in relation to coaching alone. It does confirm the paucity of training in coaching, although more people have apparently been trained as mentors. Only 10% of the sample were aware of and had used the National Framework for Mentoring and Coaching, but those teachers that had did report finding it useful.

Finally mention should be made of an individual paper by Dymoke and Harrison (2006), who report, from a sample of second year teachers (n=14), that support systems in school do not encourage new teachers to become self-monitoring or critically reflective practitioners. Their professional development seems to be locked into school performance management systems that do not support career aspirations and personal and professional targets.



Organisational Learning

It has also been useful to consider a small selection of literature on organisational learning as it provides a perspective on the tensions between individuals and systems within schools. Miner and Mezias (1996) draw a clear distinction between the learning of individuals and learning that occurs at an institutional or organisational level. Individual learning is seen as a process of skill acquisition, driven by experience and framed by the subjective interpretation each learner places on that experience. The 'Behavioural Theory of the Firm' (Cyert and March 1963), on the other hand, couches organisational learning as a problem-driven process triggered when data systems indicate current collective performance as falling below that to which the institution aspires. Underpinning this concept is the idea that an organisation's learning is not necessarily the accumulation of each employees' knowledge and aspirations but, instead, should be seen as developing independently of individual actors', under the stewardship of management, and capable of surviving considerable turnover in personnel (Levitt and March, 1988).

Questions

It is evident that coaching as a professional development practice in England is rapidly outpacing any evidence base about its processes and effects. Three major questions which arise are:

1. What happens in teacher coaching sessions and how does this influence subsequent classroom teaching and pupil outcomes?
2. How can coaches improve their coaching practice; did the research project interventions support improvement, and were there any recognisable outcomes?
3. How is coaching being utilised within the context of whole school improvement and professional development?

Methodology

The intention of this project has been very explicitly about improving coaching. Our starting point for this has been that it is hard to analyse and improve practice in any sphere if there is a dearth of evidence and language to describe that practice. We seek to improve the experiences and outcomes of compulsory education – whilst recognising that 'improve' can be a loaded word. The methodology is therefore a hybrid. It is strongly informed by a broadly socio-cultural view, in as much as we regard the use of tools (which include language and ideas as well as physical artefacts) as a critical process in shared knowledge development in an organisation (Boreham & Morgan, 2004). The use of a tool and the talk about practice that it can generate helps create knowledge and develop practice. Kozulin (1998, p.13) quotes an important distinction made by Vygotsky:

The most essential feature distinguishing the psychological tool from the technical tool, is that it directs the mind and behaviour whereas the technical tool ... is directed towards producing one or other set of changes in the object itself.



In practical terms we have used an adapted design experiment approach (Cobb et al, 2002) in which we set out to progressively improve an innovation through cycles of experiment, evaluation and development. The innovation is coaching. However we have involved schools and teachers as much as possible in this process, rather than relying solely on our own analysis and creativity. We have endeavoured to transform research into tools to support practice development.

We initially recruited schools in four areas, based on recommendations and contacts. We originally intended to have a purposive approach to sampling, to reflect contrasting locality characteristics, such as schools in large urban areas, schools in rural areas, schools with a long standing coaching history those without, and obviously geographical locality. In practice it was not possible to achieve all these ambitions, as it was difficult to find clusters of schools, who used coaching, that were prepared to commit to a two year project. Thus we worked with clusters that were keen. Cluster 1 was in a county in SE England on London's fringe and included four schools. Cluster 2 was in the West Midlands, in a semi-rural area (two schools). Cluster 3 was in a large northern urban authority (three schools) and Cluster 4 was across a number of local authorities in NE England (four schools). Cluster 3 was significantly affected by changes in key staff at crucial times and it was not possible to collect much meaningful data from the cluster. Staffing changes also significantly disrupted data collection in the Cluster 1. We planned to collect data from a cohort of coaches across the two years of the project but it is a reflection of some of the issues in the management of coaching that only one teacher was able to do this, despite the best intentions of the schools. This made aspects of the research questions problematic as the schools had no capacity to address questions related to the impact on student learning nor indeed impact on teaching, except in the most general terms. Whilst the teachers were willing and co-operative in general and we had a very good response rate for the online questionnaire, it required great perseverance to get the recordings of coaching sessions. Teachers found it difficult to fit coaching in, and recording of coaching sessions added another layer of difficulty.

From our experience of coach training we were convinced of the value that the filming of lessons could add to analysis and reflection in coaching, once permissions have been obtained from participants. So we were concerned to promote the use of video extensively in the research as it provides a number of significant advantages. These include:

1. It captures a broad spectrum of behaviours and phenomena in real time and in such away that interactions between people and events can be studied retrospectively;
2. It allows stimulated recall to be used as a method - coaching sessions can use the playback to review and reflect upon and lessons can be played to pupils to reflect and comment upon;
3. It is very useful for encouraging groups of teachers to collectively analyse their practice and in the process create their own coaching language and meaningful concepts.



We have employed 4 methods of data collection.

- We received 29 video tapes of coaching sessions;
- There have been two rounds of interviews with coaching co-ordinators and senior leaders in the participating schools regarding their views, experience and ambitions for coaching (see Appendix 2 for interview schedule).
- There have been focus group meetings with teachers to set up data collection and feed back findings from the data analysis. Field notes were taken and in one case a video recording was made with the permission of the participants.
- We have administered an on-line questionnaire for teachers who had been involved in the project and provided data (see Appendix 3 for questionnaire).

The videos have allowed us to address question one concerning coaching practice and the analysis has generated important outcomes for the improvement of coaching. The questionnaire and focus group sessions have provided data for question 2 on the improvement of coaching. The interviews have provided the data concerning the utilisation and management of coaching (question 3). The focus meetings were also very important in validating our emerging findings and to communicate with teachers so that we understand their context.

The videos have been transcribed and then coded for 8 main categories. These categories were developed in order to characterise the content, processes and outcomes of the coaching sessions. The term dimensions was adopted for these categories, most of which were further subdivided. The dimensions and subcategories were as follows

1. Subject matter addressed in the coaching session ;
2. Initiation – who was responsible for each new section or unit of analysis in the conversation;
3. Stimulus – for each unit of conversation what evidence or stimulus was cited;
4. Tone – this was rated on a five point scale from very negative to very positive;
5. Scale – this was rated from 1 to 5 in terms of the scope of the unit of discussion, 1 relating to critical moments and 5 relating to wide school or societal issues;
6. Time – there were four time references depending on whether the segment referred to the planning of the lesson (past), to the lesson events, to future specific lessons and finally to no specific time reference.
7. The interaction function – this was the most complicated in that there were 17 sub-categories capturing elements of the purposes, processes and outcomes of interaction.
8. Co-construction



We started with seven dimensions but during the course of rounds of the coding of transcripts, thinking about the dimensions did evolve further. One new dimension was added near the end of the project - co-construction. This stands outside of the interaction functions as it is a feature of a number of 'turns' which are characteristically short and where the coach and coached teacher are collaboratively developing an idea, building on the successive contributions of their partner. It is not common but does mark more productive coaching conversations.

See Appendix 4 for a full itemisation of the dimensions.

After development of the dimensions there was trial coding to discuss and refine sub-categories. Two of the researchers conducted an inter-rater reliability exercise and had a 77% agreement on coding. However most of the variation was in the interaction dimension, which is not surprising given that it has more sub-categories. Much of the coding difference centred on interpretation of the original sub-categories observation, description, explanation and justification, as for example description often ran into explanation and observation and description were hard to separate. This was resolved by dropping the observation and description categories and replacing them with a more global category 'clarification'. Explanation and justification were themselves clarified by relating justification to explanations which contained an element of decisions based on personal theories or beliefs, whereas explanations were associated with 'this happened because'. From here all coding was undertaken by one researcher. As more data was collected experience suggested one further interaction sub-category would be valuable. This was acceptance indicating that a challenge or a suggestion from the coach had been, seemingly, accepted.

The interviews with six coaching co-ordinators, eight school senior leaders and one local authority representatives were conducted on the telephone or in person, depending on travel and convenience factors. The interviews were transcribed and analysed purposively to provide data to address the research question(s) concerning the management of coaching.

An online survey was designed for teacher coaches and coachees near the end of the project and was completed by twenty-three teachers.

Results

Research Question 1: What happens in teacher coaching sessions and how does this influence subsequent classroom teaching and pupil outcomes?

Coaching patterns

Much coaching is routine and follows set patterns. This typically involves the coach asking the coached teacher how they think either the whole lesson, or particular parts of it, 'went'. These are frequently those parts that were the focus of discussion in the pre-lesson session. Thus a number of lesson episodes are evaluated.

- a) In terms of interaction functions the majority of teacher activity in coaching sessions is explaining/justifying, clarifying and evaluating episodes in the lessons. This dominates (see Figure 1 and 2).



Figure 1. Use of each interaction function by coach and coachee in pre-lesson conversations as a percentage of the total units of analysis

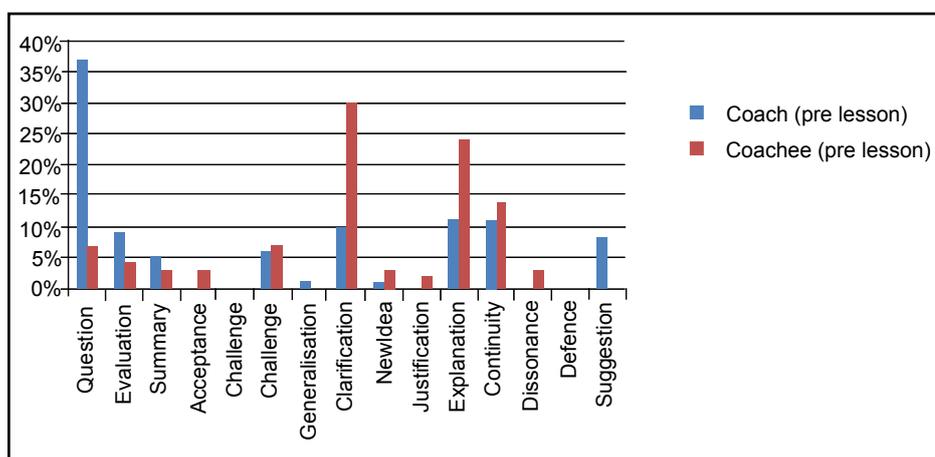


Table 1. Use of each interaction function by coach and coachee in pre lesson conversations

	Coach (N)	%	Coachee (N)	%
Question	128	37%	26	7%
Evaluation	31	9%	17	4%
Summary	19	5%	11	3%
Acceptance	1	0%	11	3%
Challenge	1	0%	0	0%
Context	21	6%	25	7%
Generalisation	2	1%	1	0%
Clarification	34	10%	116	30%
NewIdea	5	1%	10	3%
Justification	0	0%	6	2%
Explanation	37	11%	93	24%
Continuity	40	11%	54	14%
Dissonance	1	0%	11	3%
Defence	0	0%	0	0%
Suggestion	28	8%	1	0%
	348	100%	382	100%



Figure 2. Use of each interaction function by coach and coachee in post lesson conversations as a percentage of the total units of analysis

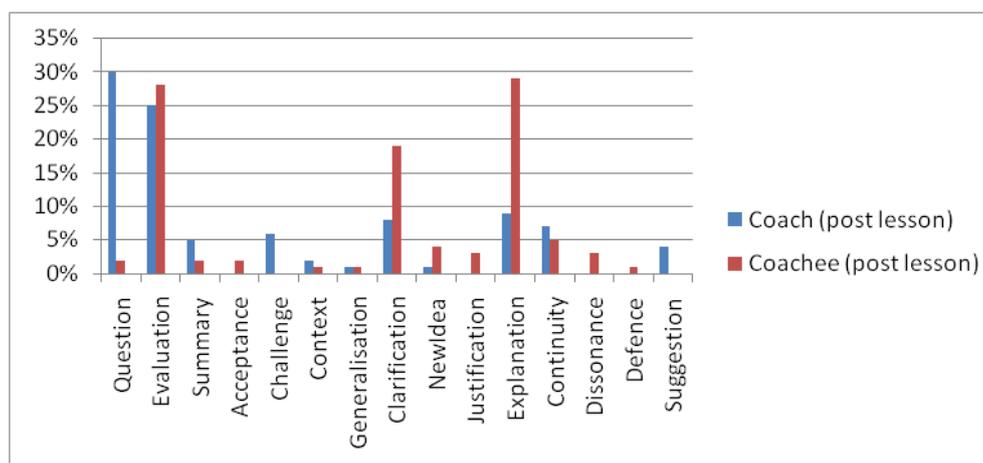


Table 2. Use of each interaction function by coach and coachee in post lesson conversations

	Coach (N)	%	Coachee	%
Question	149	30%	19	2%
Evaluation	125	25%	243	28%
Summary	27	5%	17	2%
Acceptance	2	0%	17	2%
Challenge	28	6%	1	0%
Context	8	2%	6	1%
Generalisation	5	1%	13	1%
Clarification	42	8%	163	19%
New Idea	5	1%	39	4%
Justification	1	0%	27	3%
Explanation	47	9%	253	29%
Continuity	34	7%	43	5%
Dissonance	1	0%	22	3%
Defence	2	0%	13	1%
Suggestion	19	4%	0	0%
	495	100%	876	100%

- b) In terms of time-frame many of references are to the lesson itself (39% for coaches and 41% for the coached teachers), and very few are backwards to the thinking and factors which underpinned the planning of the lesson (1 and 2% for coach and coached teacher). Neither are many of the references forwards to future lessons (23% and 17%). A fairly high percentage does relate to non-specific time (37% and 40%) – when teachers are generalising about pupils, teaching, learning, examination courses etc (see Figure 3).



Figure 3. Raw score for coach and coachees' use of time references across pre and post lesson conversations combined

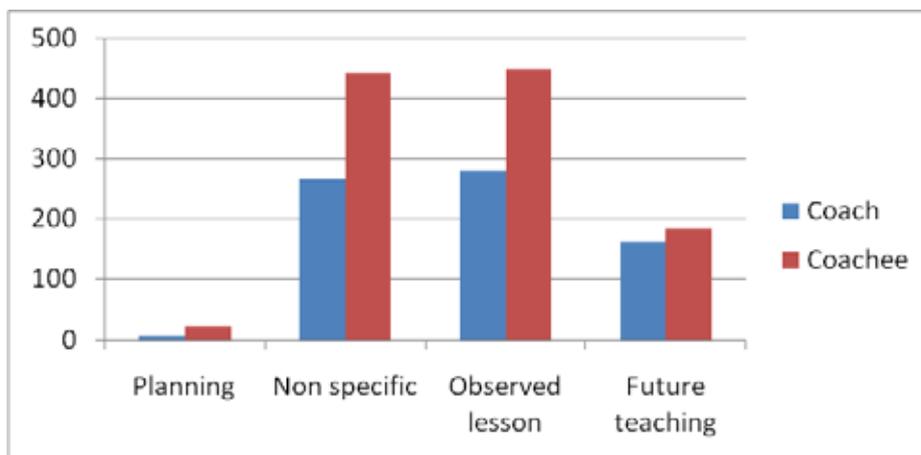


Table 3. Coach and coachees' use of time references across pre and post lesson conversations combined

	Coach (N)	%	Coachee (N)	%
Planning	7	1%	23	2%
Non specific	267	37%	442	40%
Observed lesson	281	39%	449	41%
Future teaching	163	23%	185	17%
	718	100%	1099	100%

- c) The tone is generally neutral (69 and 56% respectively for coach and coachee) with much smaller percentages moderately positive and moderately negative. The coached teachers make more negative comments as they evaluate the quality of particular episodes of the lesson (see Figure 4 below);



d)

Figure 4. Raw score for coach and coachees' use of tone categories across pre- and post-lesson conversations combined

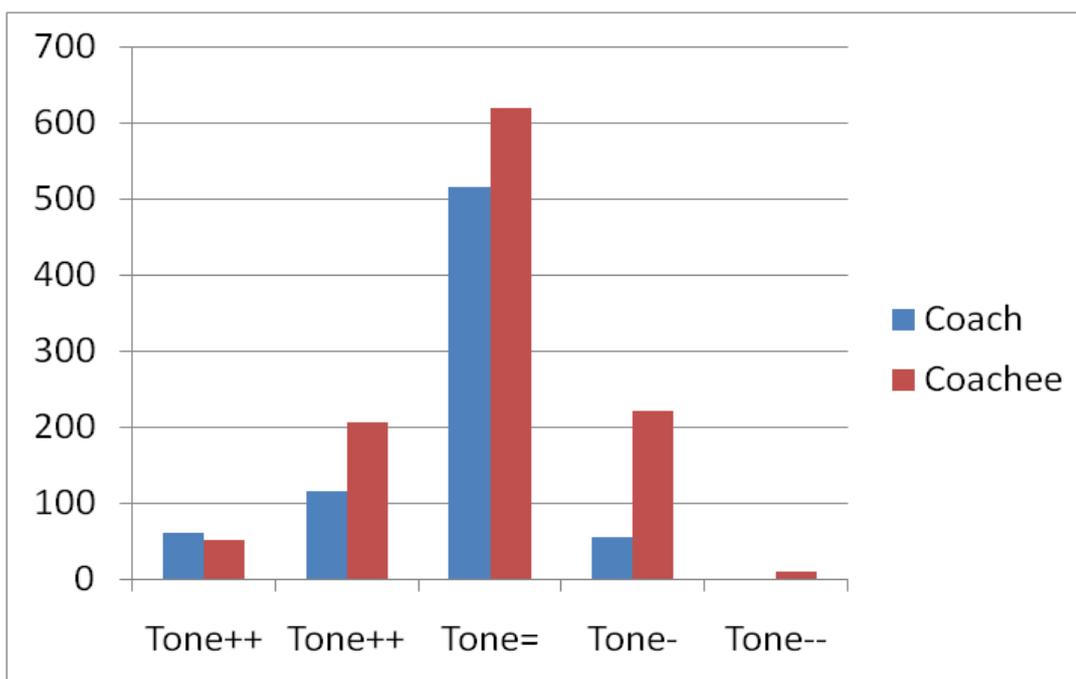


Table 4. Coach and coachees' use of tone categories across pre-and post-lesson conversations combined

	Coach (N)	%	Coachee (N)	%
Tone++	61	8%	52	5%
Tone+	116	15%	207	18%
Tone=	516	69%	620	56%
Tone-	56	7%	222	20%
Tone--	0	0%	10	1%
	749	100%	1111	100%

e) There are relatively few extreme positive or negative comments or intonation. Most of the extremely negative comments come from the coached teacher where they are particularly unhappy with an aspect of the lesson. The extreme positive comments are more evenly spread between the two parties. Where the coachee is particularly negative the coach will often try to balance this criticism with positive comments perhaps saying another aspect was good.



- f) Again, in terms of interaction function the most common coach activity was asking questions (37% pre-lesson and 30% post-lesson – see Figure 1 and 2), which is unsurprising and the second most common was evaluation when pre and post-lesson coaching are taken together (19%). However individual coaches varied somewhat in their balance of these two features, as with some coaches evaluation was much more common. Evaluation appeared to serve two distinct purposes. The first and most common was in responding to the coached teacher's evaluation, perhaps confirming a positive evaluation. The second, that was much rarer, was as part of a challenge to a coached teacher's interpretation.
- g) Initiation was predominantly by the coach, although in some coaching pairings there was parity.
- h) Challenge by coaches was unusual (only 6% of post-lesson interactions) and this seemed to be a style issue. Those coaches that did challenge used it as part of their routine practice, while many others did not challenge at all. 38% of all challenges were generated by one coach and 17% by another.
- i) Similarly while all coaches helped their partners to deconstruct their teaching and evaluate it, only 12 out of 23 made suggestions for developing practice or alternatives.
- j) Dissonance was not common. Dissonance is a state in which existing conceptions are challenged by experience or feedback, the latter does not coincide with the former. Dissonance might be generated 'internally' by a teacher reflecting on experience, or it can be generated 'externally' by the coach if they provide a different interpretation on events, or evidence that contradicts the coached teacher's perspective. Less than 1% of coaches' interactions expressed dissonance, while the figure for coached teachers was 3%. Many coaching sessions contained no dissonance. This is not necessarily a weakness, but dissonance is a sign of shifting thoughts and beliefs.
- k) There is a variable amount of moving from the particular to the general, but where this happens the generalisations are typically at the craft level. These in other circumstances have been termed situated generalisations, sifting out what seems to work with these students (and perhaps similar others) in this particular school.
- l) The most important focus in terms of scale concerned themes (scale 4), followed by episodes (scale 2) and then whole lessons (scale 3), but the differences are small (see Figure 4). Episodes tended to focus on lesson segments, such as starters, or whole activities or in a few cases transitions between activities (see Figure 5). There was very little consideration and unpacking of critical moments, and although many of the focus lessons had been video-recorded, there was relatively little reference to the evidence from the video, despite the fact that many teachers and coaches had watched the video beforehand.



Figure 5. Raw score for coach and coachees' scale of analysis across pre- and post-lesson conversations combined

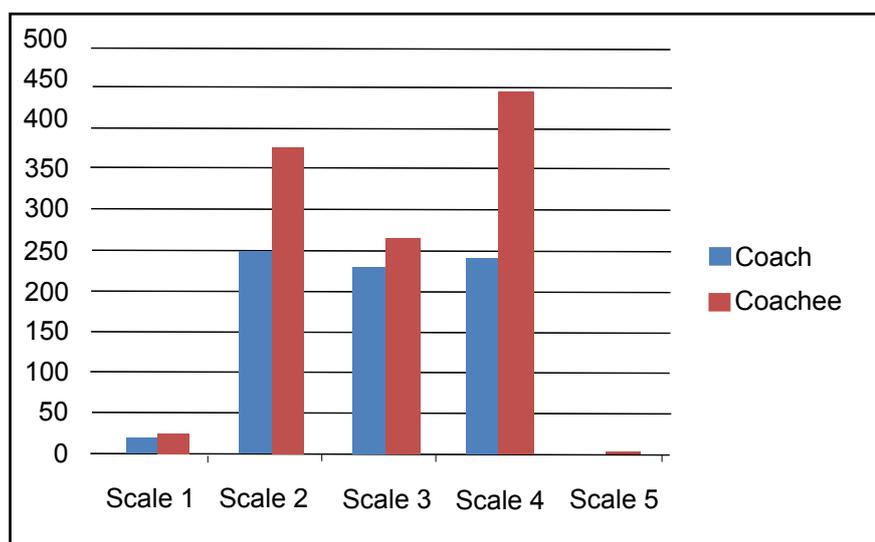


Table 5. Coach and coachees' use of scale across pre and post lesson conversations combined

	Coach (N)	%	Coachee (N)	%
Scale 1	21	3%	26	2%
Scale 2	252	34%	377	34%
Scale 3	230	31%	265	24%
Scale 4	243	33%	446	40%
Scale 5	0	0%	1	0%
	746	100%	1115	100%

Extreme examples

To illustrate the differences between coaches two examples are offered, using the pseudonyms Angela and Miriam (see Figures 6 and 7). In Angela's transcripts it is clear that as a coach she has considerable variety in her interactions. She does ask questions, she offers evaluation, she injects considerable challenge into interaction, she engages in her own explanation and clarification, she offers suggestions and reaches generalisations. In short she is an active cognitive partner, fully engaged in the professional learning of her colleague. Miriam on the other hand has a more limited range, just asking questions and engaging in a small amount of contextualisation.



Figure 6 Frequency with which each interaction function is employed by ‘Angela’ and her coachee (Transcript 7)

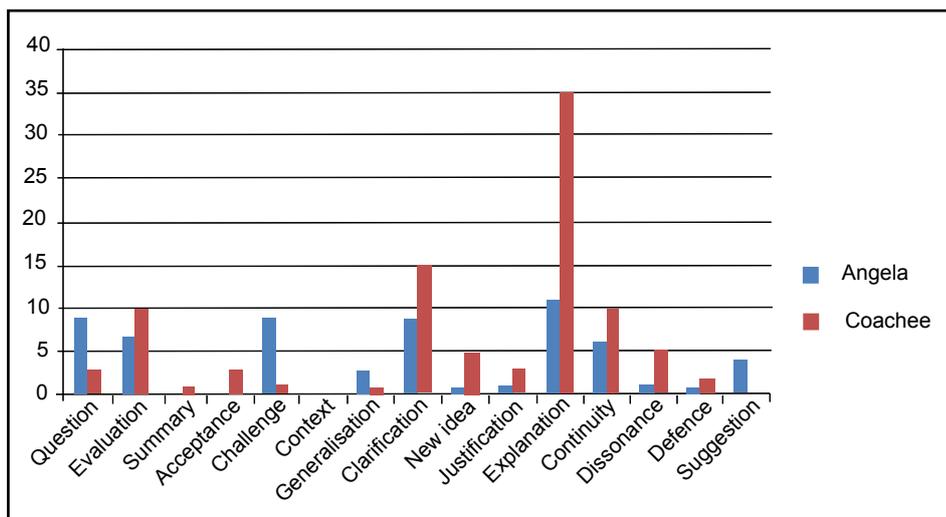


Table 6 Figure 6 Frequency with which each interaction function is employed by ‘Angela’ and her coachee (Transcript 7)

	Angela (N)	Coachee(N)
Question	9	3
Evaluation	7	10
Summary	0	1
Acceptance	0	3
Challenge	9	1
Context	0	0
Generalisation	3	1
Clarification	9	15
New Idea	1	5
Justification	1	3
Explanation	11	35
Continuity	6	10
Dissonance	1	5
Defence	1	2
Suggestion	4	0



Figure 7 Frequency with which each interaction function is employed by ‘Miriam’ and her coachee (Transcript 8)

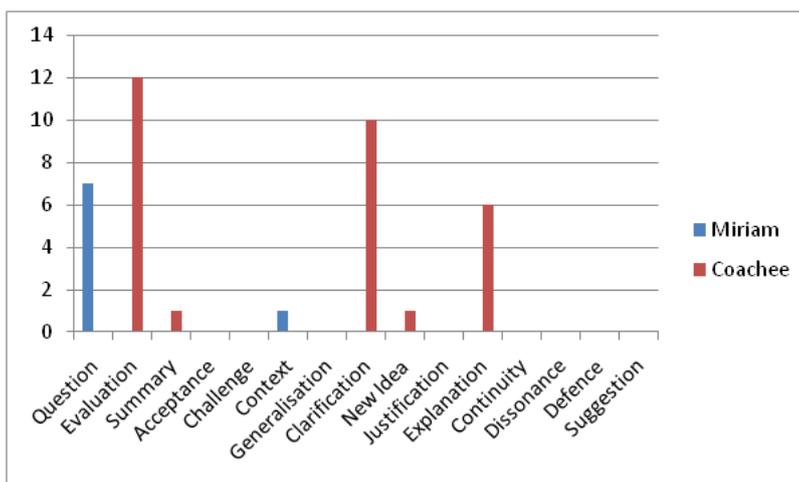


Table 7. Frequency with which each interaction function is employed by Miriam and her coachee (Transcript 8)

	Miriam (N)	Cochee (N)
Question	7	0
Evaluation	0	12
Summary	0	1
Acceptance	0	0
Challenge	0	0
Context	1	0
Generalisation	0	0
Clarification	0	10
New Idea	0	1
Justification	0	0
Explanation	0	6
Continuity	0	0
Dissonance	0	0
Defence	0	0
Suggestion	0	0



Co-construction

Co-construction, where the coaching pair work co-operatively to solve a problem in planning or analysing lessons, is also unusual. Figure 8 shows that it occurred in only four coaching sessions and that it occurred five times in one coaching session. These four coaching sessions were conducted by two coaches only. Figure 9 shows that co-construction is also uncommon in relation to the number of interactions. Co-construction can be regarded as the creative aspect of coaching in that both parties challenge their own practice and work together to develop new suggestions for teaching and learning. This has the potential to lead to new action in the classroom and an opportunity to review it.

Figure 8 No. of co-constructions across all thirty transcripts.

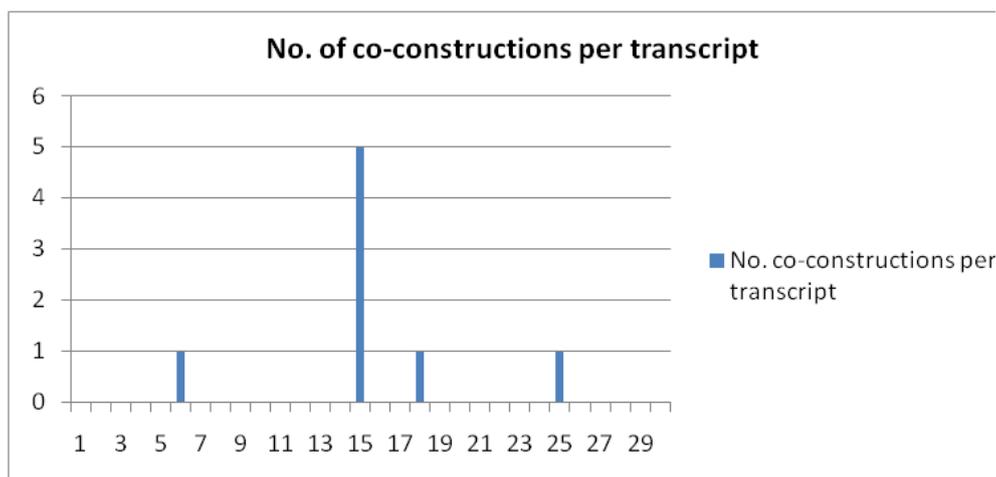
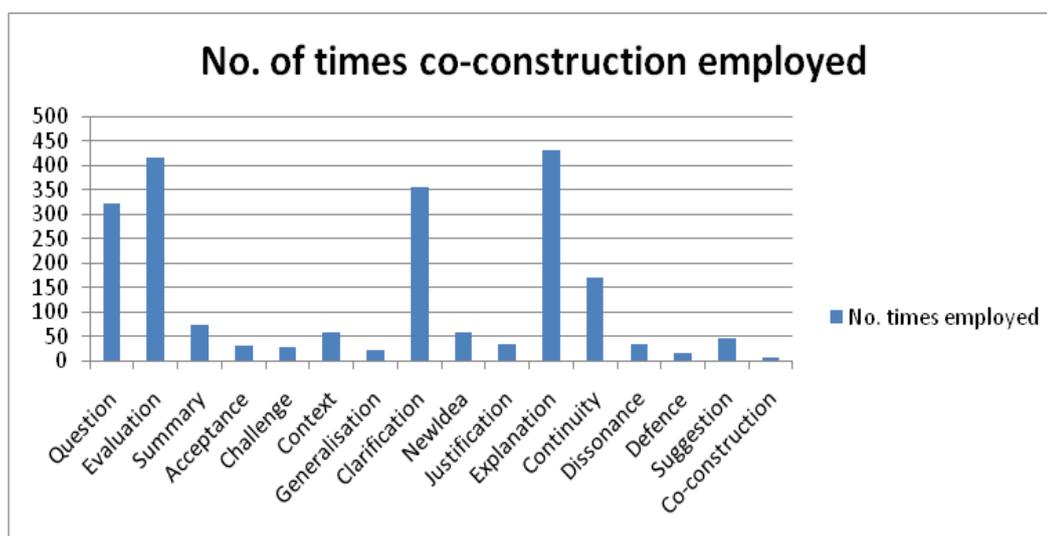


Figure 9 Total count of use of interaction functions by coach and coachee combined, compared with overall frequency of co-construction





Research Question 2: How can coaches improve their coaching practice; did the research project interventions support improvement, and were there any recognisable outcomes?

Developing a language and tools to improve coaching

One of the main premises of the project was that coaches had little language through which to understand, analyse and develop their practice. In socio-cultural terms language is regarded as a tool through which practitioners can redefine both the discourse and the goal of their activity and this is achieved through the shared use and meaning that comes with the development of concepts through language. For example, through introducing the concept and language of scale in coaching, we believed, teachers could begin to analyse their practice using this frame.

The evidence in support of this proposal is strong, at least for most teachers. As soon as this idea was fed back to teachers a minority adopted the language almost instantly and started reflecting on their practice.

One way in which we shared this language with teachers was through visual coding of transcripts. The idea of highly visual coding is adventurous and drew on ideas from Tufte (1990, 1997). We used a layered process in feedback sessions with teachers. This entailed initially rehearsing the dimensions categories and then asking the teachers to engage in an active processing of transcripts. We asked the first teacher to read a segment, the second teacher to explain the coding we had arrived at and the third to comment on /evaluate our judgements, encouraging them to be critical. Sometimes this led to wider discussion in the whole group. Once a segment had been unpacked the second teacher now read the next segment, the third teacher explained our coding and the next teacher in the group commented and/or evaluated. This continued for 3 or 4 pages of coding. This process was carried out in 3 regions only as in the fourth, it was difficult to organise a meeting as there had been too many staff changes (including maternity leave). In two meetings this process worked well, while in the third it was a little more laboured. The methodological issue is important in a project seeking to make an impact with teachers. So the process of feedback is important in order to develop practice, but it is equally important that teachers get the opportunity to process new ideas and thus engage in a process of active learning.

The visual layout of the transcript was important. So the following principles were adopted in the layout of the transcript (see Appendix 5). The coach and the coached teacher were laid out on different sides of the sheet. Initiations were represented by 'blocky' arrows and other interactions by ovals, the tone by pluses and minuses and the scale by numbers. The shapes (blocky arrows and ovals) were coloured in according to the time scale. Thus not only was the coding of each segment accessible, but by flicking through several pages very quickly patterns were very evident, such as the number of initiations by the coach, the scale that characterised certain passages and the tone used by the coach and the coached teacher and how this changed. The layout provided opportunity for teachers to 'eyeball' the data and relate this to their insight into the transcript from the collaborative reading process.



Many of the teachers took to the dimensions readily and have quickly appropriated them in their thinking about practice. One coach commented:

I have watched my DVD and even from memory I can think I was mainly 2 [referring to the scale dimension], did I do enough 4, watch that 5 does not become whingeing and you need the video for 1 because you miss the 1s, they are easily missed. ... Actually I can almost see the colours.

Another said:

It is really useful about the colours, I can handle 4 colours or at least 3, they are a reminder that it should not all be, what was it? Yellow. And I can remember green as being future, 'the grass is always greener'... you need to do that, look forward to another ... And orange is about coming out of the lesson and doing that generalising making sure that you are getting messages than can help for other lessons.

A Newcastle coach:

I can see myself slowing down thinking 'am I doing this am I doing that?' And it might get in the way, so I want to look at my video to see before I coach again. Can I have it back?

An Essex coach had similar concerns about becoming too deliberate, if she tried to 'monitor her coaching' as this would probably distract her from the process. A school co-ordinator particularly saw the value for communicating with his coaching peers in school:

I can use this with the other coaches. I will have to think about the interactions, there are a lot of them to think about. I don't think that we can remember them all, you can only do so much.

What does coaching focus on?

From the questionnaire the most common topics were student engagement and motivation (mentioned by 47.8%), followed by classroom talk (34.8%), and four topics all mentioned by 30.4%: starters or plenaries, student group work, behaviour for learning and assessment for learning. 43.5% reported joint planning of lessons with their partner.

The use of video

82.6% of the respondents reported using video to record the lesson. As few teachers were using video at the start of the project, this is an indication of an improvement in the quality of evidence being used. There were detailed comments on the use of video from seven respondents, all of whom made somewhat similar points about the value of being able to examine and reflect on the detail of events, which in several cases had not been noticed in the heat of the moment. One teacher commented that it was central to the process and that it allowed space, distance and the necessary detachment to be objective. Another had the view that it 'clarifies the lesson from the students' perspective, and allows the coachee in particular to see round the class in more detail, things a teacher inevitably cannot catch in a large class.' One teacher summarised it as a great tool for self reflection and analysis.



The coaching dimensions

Teachers (n=23) responding to the questionnaire provide an indication of the extent to which they are able to recognise and work on the dimensions of coaching conversations. For example 52% of the coaches and coachees stated, at the end of the second year of the project, that they had already worked successfully to improve their use of stimulus (such as video, observation, and pupil work) to prompt thinking during coaching and a further 38% of respondents reported that they were actively working to improve the same features. 57% stated that they were consciously managing their tone of voice during the conversation, and 33% said they were working to improve this. 81% had been working to improve their awareness of, or had already been successful in, creating a balance between the coach and coachee initiating the lines of discussion and also in managing the scale of discussion (e.g. critical incident, episode, whole lesson, theme). In the case of the remaining two dimensions (time frame and interaction function) at least 75% of respondents were consciously working on them, although proportionally fewer felt that they were successfully using an awareness of interaction functions (e.g. question, explanation, evaluation, challenge, hypothesising) to improve their coaching practice.

Outcomes of the coaching experience

As a means to connect the processes and cognitive outcomes of coaching a model of coaching development was constructed and validated by teacher focus groups. This draws on the dimensions but also recognises progression in Coaching practice. From analysing the dimensions we have determined that the most productive Coaching conversations involve co-construction, but we also recognise that this is relatively rarely achieved. A key indicator of progression is the degree to which Coaching triggers the coachee to critically analyse their practice and the extent to which reflection is prompted. The role of the coach is in scaffolding reflection, analysis and problem solving, but an ambition of the process is that once these habits become embedded the coachee achieves a degree of self-regulation. The four levels of Coaching practice development are outlined in Table 8.

Table 8. Levels of Coaching Practice Development

Description of Coaching conversation	Characteristic dimensions of Coaching conversation
Level 1: Emerging Coaching practice	
The coach asks questions which lead the coachee to give an account of episodes of the lesson by drawing on recall and anecdotal evidence, with a general focus on teaching. The conversation is largely descriptive. The lesson being discussed tends not to be considered in relation to wider educational contexts or the coachee's professional development or learning. However some comparison may be drawn with the coachee's past experiences.	Coaching often 'led' by the coach (initiation) prompting coachee to recall elements of the lesson (stimulus). The coach's questions lead to descriptions and explanations, perhaps with some evaluation of particular practice and outcomes shared (interaction function). Discussion tends to focus on the lesson as a whole or key episodes within it (scale), and reference to former or future teaching is relatively limited (time).



Level 2: Developing Coaching practice	
<p>The coach asks the coachee to consider the impact of their teaching on pupils' learning. The coachee describes the decisions they made before and during the lesson and how the pupils responded, drawing out links between teaching and learning. The coachee's wider experiences may be considered and this may lead to specific problems or issues being discussed. The coach and coachee might begin to consider the lesson in relation to the wider educational contexts or the coachee's professional development or learning.</p>	<p>Coaching triggers the coachee to start to justify their practice or the learning outcomes through clarification of intent (interaction function). This may be prompted by the coach's observation notes, video or other lesson artefacts (stimulus). Specific episodes within the lesson (scale) are related to the focus derived through the pre-lesson Coaching conversation and teaching objectives which may in turn be related to previous experience (time). Suggestions (interaction function) may be made for development of practice.</p>
Level 3: Refining Coaching practice	
<p>The coach and coachee discuss teaching and learning making explicit use of evidence gathered during the lesson, focusing on learners' progress. The coach's questions prompt the coachee to begin to problem-solve, hypothesise and reflect on the significance of their actions or beliefs. The coach begins to challenge the coachee's assumptions about teaching and learning, leading to critical reflection and analysis of experience, knowledge and wider educational contexts.</p>	<p>The coach and coachee engage in dialogue (initiation) during which they jointly review the lesson outcomes, the coachee's reflections &/or video evidence (stimulus). Scrutiny of a range of 'evidence' at a variety of levels within and beyond the specific lesson (scales) allows them to challenge practice and begin to generalise (interaction functions). Focus on future practice is productive and based on critical reflection (time and interaction function).</p>
Level 4: Co-constructive collaborative Coaching practice	
<p>The coach and coachee collaboratively develop ideas, building on the successive contributions of their partner. There is significant focus on enhancing learning opportunities. The questions that they ask each other allow them to successfully explore their own understandings. Through reflecting on, and responding to, each others' contributions they identify alternative pedagogic approaches. This leads to exploratory talk related to opportunities for professional learning and development and the ways in which they might analyse the impact of this on pupils' progress. As such this is a knowledge creating process.</p>	<p>Both coach and coachee are adept at navigating the conversation (initiation) so that the relationships between critical incidents, episodes, the lesson as whole and relevant pedagogical frameworks are discussed (scale). Conversation is such that the role of coach and coachee blurs as they explore practice, recognising and resolving dissonance (interaction function) so that new ideas emerge through their collaborative dialogue (co-construction). This creates a feedback loop which prompts future planning (time).</p>



When coaches and coached teachers report on the outcomes of their coaching experience they authenticate particular aspects the four levels of coaching development proposed. 96% of questionnaire respondents (teachers engaged in the coaching research process) indicated that the process had supported them to reflect on and analyse their practice. However from this measure alone it is not possible to determine the type of reflective thinking occurring, for example whether it could be described as descriptive, dialogic or critical reflection (Hatton and Smith, 1995). More specifically 44% of respondents stated that coaching had helped them to make sense of what was going on in their classroom. 63% of respondents agreed that coaching had challenged them to justify existing practice, while 22% indicated that it had provided a solution to a problem being experienced. Such coaching conversations might be described as developing (level 2), as illustrated by these coachees' responses;

Once I had completed the 3 cycles of coaching - my classes settled down and responded well to praise and reward systems put in place during coaching

It allowed me to think about what I was doing and how the students reacted to the lesson by two of us looking at the lesson and discussing how it was going and possible developments and changes to future planning.

39% of questionnaire respondents indicated that coaching allowed them to explore their beliefs about teaching, learning and/or education more widely. One coach who indicated that this was the case for her also reported that;

Coaching always challenges my own practice, encourages me to reflect and review my own practice in discussion with the coachee, and improve it. It challenged both of us and it had an impact upon both our teaching with that class and others.

This reflection suggests at least some characteristics of refining coaching (level 3) in which assumptions are questioned and issues relating to teaching and learning are considered beyond the specific context of the focus lesson. It also illustrates the reciprocal impact of coaching for the coach herself. Refining coaching (level 3) is also described as enabling participants to develop an understanding of the inter-relationships between teachers' practice, the classroom environment and pupils' learning experiences and outcomes and a 'stepping back' from the focus lesson. This more holistic reflection is described as follows by a coachee, showing how coaching around specific lessons can trigger consideration of core principles of teaching and learning;

It made me reflect more on what I was doing as a classroom teacher in terms of making opportunities available for students to be independent. It encouraged me to focus on the quality and challenge of learning objectives. It also highlighted the balance needed between teacher talk and student talk. We also focused on transferable learning skills rather than subject specific.

In addition strategic coaching may lead to purposeful classroom experimentation, and 52% of questionnaire respondents indicated that it had given them permission to experiment with and refine practice. Indeed the teacher quoted above clearly brought her students into her confidence in relation to this;



Students having an understanding that I was being coached for their benefit/learning had a positive impact on the behaviour and motivation of the class. They liked that we referred to each other's lessons with them. We are going to continue working together with these students this year.

As indicated above it is worth noting that acting as a coach is in itself reported as a professional development opportunity, providing opportunities for self-reflection, sharing of practice with others, and engagement with the nature of effective teaching and learning. Coaches often talked about 'we' when describing the outcomes of the coaching process, indicating that they had felt challenged and prompted to question their practice and experiment with teaching and learning strategies alongside the coachee.

Effects on Teaching

The effects on teaching are grounded in teachers' intense work on their planning and practice that they 'own'. Considerable criticism was made in National Strategy evaluations about training dependency and it was felt that there was a need for headteachers and teachers to take ownership of their own development agendas. For some teachers their improvements are at the technical level, improving the efficiency or effectiveness of their work:

(It) helped use methods that suited the class better - e.g. clarity of instructions / tasks etc - this has been continued where appropriate.

and from another

Helped with the layout of the class during a singing lesson, to get the best performance

and from a third teacher

It made me consider how best to achieve the objectives I wanted, and reflect and discuss with another professional to see if my ideas made sense and would tick the boxes as such

There are clear explanations about how these improvements are achieved:

It has had a positive impact on my planning in that my starter activities are planned more thoroughly, I now welcome pupils into the classroom and deal with any issues that arise at the very beginning of a lesson and has improved the amount of praise I give students who are working well. It has also improved my confidence in dealing with classes where behaviour problems are an issue.

It allowed me to think about what I was doing and how the students reacted to the lesson by two of us looking at the lesson and discussing how it was going and possible developments and changes to future planning.

More integration of focus area and more concentrated planning.



And there is evidence too in the open section of the questionnaire that the conversation is becoming internalised, so that reflection carries on beyond coaching sessions.

It made me reflect much more carefully on what I was doing and to analyse more carefully the reasoning behind the activities/questions I was asking the students to do.

Not only do teachers change facets of their teaching but their self efficacy improves and in the more elaborate cases they begin to see learning more from the viewpoint of students:

It made me reflect more on what I was doing as a classroom teacher in terms of making opportunities available for students to be independent. It encouraged me to focus on the quality and challenge of learning objectives. It also highlighted the balance needed between teacher talk and student talk. We also focused on transferable learning skills rather than subject specific. Students having an understanding that I was being coached for their benefit/learning had a positive impact on the behaviour and motivation of the class. They liked that we referred to each other's lessons with them. We are going to continue working together with these students this year.

This last comment encapsulates the potential for the effect of coaching on classroom practice.

(It has) totally changed the way I plan and deliver my lessons.

Research Question 3: How is coaching being utilised within the context of whole school improvement and professional development?

Managing coaching

We have been surprised by both the range and number of difficulties in managing coaching. This impacted upon our own project management in as much as the strength of coaching activity varied considerably in most schools, not least in terms of personnel involved. This presented a challenge in terms of continuity. Leading and managing coaching is much harder than it might first appear. This raises significant challenges for school leaders to employ a mechanism of professional development which has such promise. This section draws on the interviews with coaching coordinators and senior leaders with responsibility for coaching, as well as a feedback meeting with coaching coordinators. Although they do overlap we deal with issues under four headings: The Purpose of Coaching, School Cultures and Structures, Accountability and School 'Busyness'.

The Purpose of Coaching

The first fundamental problem is clarifying, communicating and justifying the purpose of coaching. On occasions leaders are not clear about what they intend to achieve, perhaps because they have not thought it through themselves as it came to their attention as a 'good thing', with some promise of improving outcomes. Sometimes they try to accommodate different purposes which conflict, and in some schools some staff have their own views on



coaching and can resist or resent the senior leaders. The most common causes of these tensions derive from mixing performance management with coaching and from a conceptual confusion with mentoring. Therefore senior leaders can catch onto a sense that coaching is about addressing the under-performance of teachers identified through inspection, observation or value-added data. This is exemplified in the interview extracts from a co-ordinator and senior leader from the same school, who see coaching differently.

Coordinator: *With a mentor, you are offering advice and guidance on how best to go about doing things whereas with coaching it's just not about that which is why I was in conflict with the way we were doing it. Because he was saying 'You need to coach the people on your team so you know what they are doing.'*

Manager *There have been some links to performance management, which may be a good way of getting people to consider it, since many staff don't know what coaching might do for them, even now. They become converts once they get into it. (School 2)*

It is certainly true that many staff members are uncertain about coaching as it does not have a stable and unequivocal identity. A similar pattern is evident in School 5, in that an organisational spur was deemed necessary to kick-start staff participation. Although successful in stimulating initial engagement with coaching, the association with performance management seems, at the same time, to have introduced an element of judgement that set staff and managers at loggerheads.

Coordinator *Some staff used it to work towards their performance management targets and when that was done then it was completed. But when it was a bit of an add on, there was a lack of determination to keep it on track.*

Manager *The pre-2003 judgement system in performance management, we drove it through against objections and we have carried it on, with judgements, but we have adapted our system. We call it Spotlight. It is a week of observations, but it is a still 'a done to you' system. So we have decided to try a biennial system where we have Spotlight one year and in the other year the Subject Leaders. It is better but it is still judgemental. (School 5)*

In this school, an attempt was made to ameliorate staff anxieties through offering them the chance to self select the focus for performance management related coaching sessions.

Manager *So since Christmas we have been piloting different methods for Spotlight and Subject Review. It gives them a chance to decide the focus. English are choosing best practice for one focus and for the other they have chosen a lesson that they are struggling with. There is no judgement but they use the coaching conversation and they will return in a second observation to see if it is effective.*

Perceived attempts to impose collegiality through coaching or to link coaching with performance management, therefore, risk confusing coaching as learning with coaching as compliance (Hargreaves & Dawe, 1990).



A fundamental schism between top down and bottom up change is reflected in these tensions. Healy and De Stefano (1997) suggest that school-wide innovations per se are not enough to bring about radical reform, but that ownership needs to be distributed throughout the institution if new knowledge is to become part of the revised landscape. Comments from interviewees support this view, as in the case of this school where it is felt a plateau is being reached through management led change.

Manager *We are looking for a 'school name' way. Certain things are in place. Best Practice, structure and sharing objectives, but you stifle creativity. We would never move the average to Good/Outstanding in this way. We need more ownership and development if we are to move beyond Satisfactory to Good. (School 5)*

The link made between ownership and time for this to develop is a significant one and is borne out by the following statements from a school that had used coaching as a tool to raise standards in English and Maths, following the work of a pioneering individual.

Coordinator *One of my coaches last year worked with an English teacher, who had set six, on helping to get the C/D borderlines and she went in throughout the course of the year and she got a really good set of results and it was great.*

Management *This year staff in English and maths have been targeted as part of the Raising Achievement agenda. This hasn't been very successful (one volunteer) and because it's coaching, you can't railroad people. (School 2)*

Central to the successful embedding of coaching may therefore be a willingness on the part of school managers to act as the guides of professional learning in this arena rather than its owners and keepers.

A very telling comment came from a school co-ordinator who expressed ambivalence about leadership involvement which we have heard from other teachers in other coaching contexts.

Coordinator: *In a way I don't want the senior team to be involved because they might start sticking in what they think needs to happen as well. Part of me doesn't want them involved, but part of me knows very well that I need them on my side and I need their support. (School 4)*

In essence some teachers who are keen on coaching see it as an epitome of a positive culture in which teachers exercise trust, have deep professional conversations which get to the heart of issues and through which social capital develops. Senior leadership involvement, despite the resource advantages, can be seen as a threat to that. Whilst coaching can be used for a variety of purposes, it does seem clear that there is advantage either in senior leaders being clear about how and why they are using coaching processes if they impose them, or in allowing a coaching system to grow slowly and organically, substantially shaped by participating teachers.



School Culture and Structures

School culture and structures are inter-twined. It is expected that they would influence and be influenced by the deployment or development of coaching models. Interviews with senior managers and coaching staff, focusing on agendas, barriers and affordances for the project in schools, suggest that the potential and sustainability of coaching may be affected by the presence or absence of the certain conditions for professional learning. This is indicated by one interview as follows:

Coordinator *We don't have a lot of staff turnover- it's a very cohesive staff and the danger of that is that some staff get complacent and don't challenge themselves and are happy to go along doing the same thing. It's difficult to motivate them to change their teaching style. (School 5)*

The existence of a tension between the coaching agendas of individuals and school organisations is nothing new. In the course of a national consultation Cordingley (2005) found that the hierarchical power relationships that characterise school leadership may act to confuse and confound coaching initiatives. The model of coaching available in most training has its roots in psychotherapy and counselling and is centred on coachees having the personal resources to pursue their own development as practitioners. In this sense coaching is in opposition to organisational learning in that it is insight gained through reflection on action that influences performance rather than a rubric of conformity. The behaviour in an organization is based on routines as action stems from a logic of legitimacy of normal practice. One of the co-ordinators expressed frustration because learning was not seen as the ultimate priority by those who are in senior posts.

Coordinator *I've been teaching here twenty years and I've just been made assistant headteache- and I've had a conversation with an assistant headteacher who said that his priority is not his teaching. They just don't see it. So if you filter that down to their perception of how the school becomes successful, then coaching becomes, like... It's not that people are unprofessional. It's just that people see it that that's their job. If they're head of sixth form, they're head of sixth form- they teach two days a week, but that gets in the way of the head of sixth form bit. (School 10)*

Although nominally united in the pursuit of a shared goal, the interpretation of what a goal means and how it translates to action within an organisation is open to interpretation biased by personal experience (Levitt & March 1988). Consequently different groups within an organisation may have conflicting views as to what 'success' is and how it may be measured and interpreted. Comments from both managers and coordinators in project schools indicated that transition from teaching to school management can involve a shift from one sub-culture to another, both coexisting within the same organisation, but serving different agendas and priorities. In another school there was considerable agreement between co-ordinator and senior leader over the way coaching was being used for organisational purposes:

Coordinator *Because we have very specific things that we want to do to develop learning in school. We are at a point where we are saying 'This is how we want you to teach. This is how we want learning to happen in your classroom.'*

Manager *We are directing this (leadership skills) project from the school improvement plan. All are working on school objectives. (School 1)*



Greenwood and Hinings (1996) suggest that the behaviour of people within an organisation is governed by an 'archetypal template' which amounts to a tacit understanding of governing rules and principles derived from collective experience over time. These overriding practices are considered to be resistant to turnover in individual staff and become enshrined in documents, such as plans, policies and procedures that determine the path of future action as well as recording the route of history (Levitt & March 1988). Although unacknowledged, these cultural 'rules of thumb' are a powerful force in determining employee practices within an institution and are rarely examined or questioned. This has echoes in education research showing that school cultures are of major significance in determining how coaching is perceived and implemented (Holmes 2003) and this is reflected in the comments below.

Manager *We're trying to pick up a knowledge base and embed it in the classroom – it helps people to form habits. It's easier when things are automatic. If people have the habit of writing objectives on the little whiteboard, it's taken care of. Once straightforward things are taken on as a habit, then it frees time to focus on harder things. (School 6)*

Consequently, it appears that management may gradually slide out of intimate contact with the teaching and learning agenda for coaching, even though they as practitioners themselves are in sympathy with it. In some instances this is expressed in the way coaching evolves within school, drifting from an initial focus on pedagogy and moving more towards an agenda of developing leadership skills and capabilities. In this sense, it seems, management can be seen as appropriating coaching for its own ends.

Manager *The next year there was a dropping off in numbers. So we took them through the NCL (NOW NATIONAL COLLEGE) materials, Leading From the Middle, and Learning Pathways and coaching is core to that. I have been linked up with a business coach, who has supported action learning sets. That has been very good, but not focused on teaching and learning. (School 5)*

Co-ordinator *He does have hopes for coaching as a tool to bring on middle leaders and he's keen for coaches to concentrate on working with them, particularly on their management and team building skills. He wishes that he had had some sort of coaching at that stage, since being a good teacher wasn't an adequate preparation for a job which is two thirds out of the classroom. (School 5)*

Specifically, comments by managers suggest an 'organisational learning' perspective on pedagogic innovation that is in contrast to the personalised, reflexive model on which the coaches' work is founded.

Accountability

The models of accountability evident in many schools reflect a culture in which managerialism is influential. The heart of this tension between coaching practitioners and senior managers seems to be the timeframe set for evidencing impact. Facing imposed deadlines within which they must show evidence of improvement, senior managers may feel forced to employ coaching as a tool for revolutionary change when, by its very nature, coaching is intrinsically an evolutionary professional learning tool. This is reflected in the assertion from a school with a well established and extensive coaching capability, that learning to be a coach, in itself, is not something that can be accomplished quickly in response to short term agendas, but takes time and requires regular updating of knowledge and skills.



Manager *It takes time to become a very good coach – many years of practice. That’s a difficulty. Some people go on a one-day course and then ‘they are a coach.’ When you are involved with teaching coaching skills, then you are better again. You’re working with different people and situations, refining what you do.*

Coordinator *Every year we put on coaching training, around about this time really, April/May time. We open it up to everyone in the school. We have about a 100 staff and each year we have 7, maybe as many as 10 staff who we train to be coaches. (School 6)*

Schools are oriented to targets. Their organisational behaviour depends on the relation between the outcomes they observe and the aspirations (targets) they have for those outcomes. This resonates with comments from schools revealing managers’ and coordinators’ differing perspectives on what constitutes proof of success in the pursuit of the common goal of improvement in teaching and learning.

Coordinator *They like proof. I feel like I have to justify my time because they are paying me. Essentially I am accountable to the senior team so I would like them to respect what I am doing. Therefore if I start collecting evidence that something is actually happening, and I don’t want to do that, but if we did have those meetings then I could say fill in one of those to show what we have done.*

Manager *There are issues of accountability to Ofsted etc which concern him (the headteacher), since the coaching training and the time taken by staff to do the coaching are expensive and though he has a gut feeling that coaching is worthwhile, he would be hard pressed to provide figures. (School 4)*

In another school a senior leader registered a common awareness about the significant cost of coaching and some frustration concerning the difficulty of being able to quantify the outcomes. This probably reflects a culture in which quantification is commonplace.

Manager *Have arranged to get around 80% of teachers who want to be coaches released from full timetable. X wants to expand further but there are cost implications and it is hard to make the case without hard data. Other members of SMT are keen for coaching to be evaluated but H regards this as knocking on impossible. We can get some qualitative data but nothing quantitative. (School 2)*

In both of the above cases, managers express the need for ‘figures’ and ‘hard data’ to justify allocation of resources and money to coaching that the coaches are unable or unwilling to gather. Becker (1982) suggests that this dilemma is founded in the nature of the organisation concerned and that the performance of employees in craft based institutions is more reliant on tacit, hard to measure knowledge, than those working in fully fledged bureaucracies. In the case of School 2 this difficulty in marshalling ‘hard data’ appears to be a major factor limiting the expansion of coaching capacity within the school. For the coordinator in School 4, below, the consequences seem to be that, in the absence of data that is deemed credible by senior managers, she has been ‘cut loose’ and operates with the consent of management but largely without their support or direction:



Coordinator *There is not an official post for someone as leader of this group. At the moment there is a person (in the senior management). I wouldn't say he supports me. I tell him what I do. If I do something- I tell him I've done it.*

Management *Currently it isn't being evaluated. He has some idea of how many people are working as coaches and who they're working with but not of the details: focus, timescales or outcomes. He is interested in ways of doing this without turning it into performance management. (School 4)*

It appears that concrete support for coaching and the financial commitment this entails may require managers to reassess the way they measure and establish impact and, in effect, take coaching on trust as far as the need for quantitative evidence is concerned. The comments below demonstrate that qualitative indicators of impact have weight, so long as teaching and learning rather than accountancy and best value structures are privileged and that relationships between managers and staff are characterised by trust.

Manager *I don't feel under pressure to produce data. I feel trusted that my team is doing a good job as regards staff development, which makes a difference.*

We know how it's working by staff reaction – what you see in the classroom, a gut feel. It's not scientific. We know staff are more confident, more risk-taking than at the start of the cycle. Their ideas are feeding into the departments and the department minutes come to the Management Team. The ideas impact on the students – we observe interested and engaged students. We have an enormous T & L intranet – new ideas have built up there over the past years.

Coordinator *Our head has been the head now for three years. Before that he was heavily involved in teaching and learning. His progression was very much by the teaching and learning route. So he is very much of the belief that there has to be time put aside for these things to be put into place, otherwise it won't work. (School 6)*

It should be remembered that approaches to evaluation and accountability do, of course, reflect organisational culture.

School 'Busyness'

This last heading demonstrates that whatever the goals and culture in play, coaching still has to compete for attention in the short and medium term, especially against external agendas. There are limits to time and resources:

Coordinator *Sometimes I think we need something that's more intense but I haven't got the capacity to make it more intense or the school system hasn't got the capacity for it to be more frequent. (School 2)*

For some participants in the project, incremental change has not been an option and substantial outside pressure has been exerted to revise or even replace the previous template for teaching practice. In these instances, schools, departments or individual teachers may



be perceived by outside agencies as in danger of 'failing'. Essentially, the school is forced to move from an incremental model to a radical model of learning whereby the old pattern for action is discarded in favour of new policies and plans. Often this transition entails rapid change over short time horizons, thus resulting in coaching efforts being marginalised or suspended altogether.

Manager *Coaching needs to be kicked off again, now that Ofsted have gone, now that the school is deemed satisfactory. Staff have told him (the headteacher) that he came in with too high expectations of his teachers and he feels that the level of competence was much lower than he'd realised, so there is some serious developmental work still to be done. (School 3)*

Miner and Mezias (1996) point to the dangers inherent in such a rapid and imposed paradigm shift within an organisation. 'Forced marches' of all employees into learning systems created with some simplistic learning ideologies can create information overload, personal anxiety and organisations that fail to provide important social continuity. (p.97). The comments below reflect this.

Coordinator *The school's A-C pass rate has gone up from 43% three years ago to 67% - and this, he felt, had put a huge strain on teachers' workload. Coaching was very much seen as something that happened 'on top of' everything else. (School 3)*

With such pressures on time co-ordinators have to pick their times carefully to catch the moments when teachers will engage

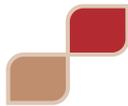
Co-ordinator *It's a busy time of year. The member of staff had students to prepare for, performance coursework. It's partly a priority thing. If I start approaching staff now in the lead up to Easter, it's the worst time of year to be harassing staff. I'd be better to leave it to the summer when there is more gain time and they may be more willing to engage. (School 5)*

In two other schools the pressures on time have meant that the processes are truncated and there is a danger of coaching losing its distinctive character.

Coordinator *I would say that it's not a five (referring to a scoring system) in the sense that people don't always get through all the stages they need to and there is always the time pressure and that it sometimes drifts from being coaching into mentoring.*

Senior Leader: *At the moment the coaching pairs are giving up their own time in order to sustain coaching and this has made it very difficult to motivate pairs to complete cycles. (School 3)*

The senior leader in another school felt hemmed in because existing thinking which reflects school structures had left very little room for manoeuvre in terms of finding time. The subsequent extract also shows the effort and imagination that co-ordinators have to resort to in trying to maintain interest and focus amongst staff.



Manager *Subject Leaders have extra time but no one else has it. There is no time in the timetable for coaches. The time the Subject Leaders have – we expect them to do supervision, they could use it for coaching. It's very limited. The timetable is a tyranny. It is relentless, once it is fixed any disruption is a big problem.*

Coordinator *So time, even if it is not 'official time', but something where people can meet as coach and coaches. If there was a coaching drop - in where people could come in and ask to get involved and I could facilitate what it is they need. Is it one of their lessons needs covering? (School 4)*

However in some schools strategic decisions had been made to allocate resources to coaching by headteachers who see the process as part of a long term strategy to maintain high standards whilst at the same time improving students' autonomy:

Coordinator *Given the enormous pressures on staff time, he felt the most powerful incentive would be time, in the form of an hour per week, earmarked for staff and coaches to work together. (School 6)*

It seems that in schools where sufficient time is allocated to coaching there is recognition of the opportunity that coaching offers for integrated professional development of both the coaches and coachees. There was limited evidence from the management interviews of this dual outcome being recognised or promoted. In addition there was limited evidence, in our sample, of coaching programmes being used as a strategic component of capacity building for the school development agenda. For example links are rarely made between coaching for teaching and learning and other coaching programmes (such as those linked with National College programmes).

Case study of High Hill Comprehensive

This school emerged as having the most coherent and long-standing coaching programme.

Purpose

The purpose of coaching in the school has deep roots. The current headteacher was a deputy in the school and was jointly responsible for a very strong professional development culture. More than ten years ago he initiated teacher study groups, in which groups of teachers studied texts with important ideas for improving practice. They tried them out and collectively reviewed their experiences over a series of cycles. He also, with colleagues took a Higher Education masters module on coaching and practised the principles in school, later bringing a training provider to the school. From the co-ordinator's point of view:

Before (being headteacher) he was heavily involved in teaching and learning. His progression was very much by the teaching and learning route. So he is very much of the belief that there has to be time put aside for these things to be put into place, otherwise it won't work. He is very generous with the time he has given.



School Culture and Structures

One of the structural features of the school is that there are seven 'Teaching and Learning Co-ordinators' which is a considerable investment of resource. These 'coaches' are responsible for two important ongoing programmes within the school. Firstly they coach all new teachers in the school, whether they are NQTs or heads of department, through three coaching cycles. On average there are ten new teachers a year and coaching occurs between September and December. Despite a healthy turnover of staff, many staff have experienced coaching already and within 2-3 years it will be the majority. In pre-observation stage of the cycle, the coach contributes as appropriate to the planning of the lesson. The evaluation from new staff is positive:

We always get positive feedback. I'm involved in looking after the new staff- when we get feedback on the induction period, one of the big positives is normally the coaching element.

The second programme is to work with departments to help introduce new ideas to departments over a two year period. In our experience it is highly unusual for schools to commit to such long term support for a department to work in a broadly 'bottom up' fashion. In the words of the co-ordinator:

So departments are ... allocated on a random basis. Someone in that department will have time given - and again I think time is the important factor- where they have an hour a week to work on a project that is teaching and learning related and will move their department forwards. Someone on the Teaching and Learning team will work with them. Being a two year project the first year is spent creating new resources, new ideas, researching new ideas and just working with that one individual. The second year is that any new idea tried out between the pair, the Teaching and Learning Coordinator and the member of the department with the time gets rolled out to the entire department. So then my time would be used to work with people within that department. For example, last year I worked with people from chemistry and we came up with ideas to do with assessment for learning- lots of ideas we could use in the classroom- so I spent time coaching every member of staff, so that every member of staff had an experience of coaching.

In addition training is offered on a voluntary basis to any member of staff who is interested in April or May. This may then be used in the departmental projects. Each year between seven and ten staff take up the offer. After some front-loaded training, trios are formed with two 'trainees' and an established coach and the roles of coach, coached teacher and observer are rotated.



The culture of the school is captured to an extent in this extract:

The school prides itself on having a good strong ethos of CPD and professional development. It's been made aware to us that development is what it's all about. I think we are very fortunate as a school because there are so many things to get involved in ... You may only be here three or four years before a position becomes available where you can develop yourself. I think people know that ...

The co-ordinator recognises that there are limits to the time and resource that can be devoted to coaching. He is also clear in his views about the dangers of using coaching for directly addressing teacher (in)competence:

Every member of staff would probably put their hands up and say that I'll happily be coached, but I haven't the time in which to do it. There is that element that you are infringing on people's time a little bit. So it's very much them that's wanting to do it. If we ever went down the route where - I've heard horror stories where some schools have actually done this - you've been highlighted as being in need of coaching. It completely demolishes the whole ethos behind coaching.

Accountability

It is notable that this school has a different stance on accountability. There is a view that monitoring is inappropriate as it would, in that school at least, be antithetical to a positive approach:

My background is in science so obviously when you implement something, you want to measure its effect. Being a scientist at heart, I like numbers; facts. But this very process, as soon as you start bringing in exam performance, people start to feel that there is some kind of monitoring going on and it loses that, not relaxed, but more positive approach. Because the idea of coaching is that we have had members of staff who have signed up and said that 'I would like to be coached'. I'd think we'd lose a little bit of that if we went down the monitoring route.

Busyness and Competing Agendas

Achievement at the school is high so it escapes some of the external scrutiny that deflects some schools from such a coherent approach. In judging that the school was level 3-4 on a scale of 1-5 in developing its coaching, the co-ordinator asks and answers his own question:

The latter part says 'what was the reason for that?' and its time. That's the biggest factor that's allowed us to progress really. I think as a school we feel that we have a good model as to how coaching works in our school. They really like the fact that they work with a coach who isn't their mentor, is someone who is not from their department. It's a completely fresh look. And it's very non-judgemental non-invasive-people are very relaxed with it and they really really like that process.



We've certainly had the support from on-high in that respect. Over the past two or three years it's really taken off. I think it's been a two way process in that as time has been given to do this work, the positive that has come from it has been fed back to the SMT and they have said this is obviously working so you can have more time. However the school does have a formal monitoring system, involving line manager observations, but the two systems are kept apart.

Discussion

The engagement with teachers interested in coaching in this project was a very positive experience. They were very motivated about learning as professionals and they had appreciated the opportunity to be involved in coaching, as it provides the chance to openly discuss and dissect their practice and seek to improve it. Coaching maps well onto research findings on effective professional development. It is school based and classroom focused, there is dialogue and peer support, there is the chance, with permission, to experiment with new ideas and there is the opportunity to draw on external expertise. Coaching is undertaken in a positive atmosphere in which coached teachers generally feel able to be critical of their own practice, whilst having the chance to celebrate success. Coaches do an excellent job in generating trust. We should take seriously the commonly expressed view that coaching is for most teachers a far more positive experience than performance management. It is worth remembering the observation that teachers usually experience visitors to their classroom as 'hostile witnesses'.

On the other hand there are signs from our data sample that coaching can be improved. Most coaches found the use of video very helpful, even if it adds to the logistical challenge of coaching. However none of the schools had watched videos either of observed lessons or of coaching sessions, as a coaching group. This holds considerable promise for the development of shared language and understanding, if confidentiality and ethical issues do not arise. There is space for more challenge, examination of learning from pupils' perspectives (through critical moments), for connecting the particular with the general and more support for planning. This accords with research elsewhere which points to lack of pedagogical underpinning in coaching. Our focus groups were very keen on idea of topic guides for coaches, which would not act as a straightjacket but as a reference point and stimulus. They also recognised the issue of challenge as one that was most pressing, but in seeking to generate more challenge they were anxious to avoid confrontation.

Engestrom et al. (1997) and Daniels et al. (2000) have developed the notion of three levels of interaction (reflecting purpose/object of activity):

1. Co-ordination – actors follow their scripted roles, each concentrating on performance of habitual actions.
2. Co-operation – this occurs when different people focus on a shared problem or object and try to find ways of solving it or conceptualising it. Given roles begin to flex, but questioning of the 'script' is not explicit.



3. Communication – this may be considered as the most productive level as there is ‘reflective communication’ and subjects do work on reconceptualising their organisation and interaction in relation to the purpose. All aspects of the activity are explicit and are the focus of critical attention. Engestrom suggests that such communication is rare in organisations, as the everyday routine dominates.

This was part of the inspiration for the development of the Levels of Coaching Practice Development (Table 8). There are a few transcripts which might have been labelled as co-ordination. In such sessions the I-R- F discourse structure dominates with evaluation being the tenor adopted by the coach. But the great majority did focus on shared problems and attempted to solve them through planning of lessons (sometimes implicitly) and in these transcripts there is a broader range of coach activity, beyond questions and evaluation. The limiting factors are that most such sessions focus primarily on teaching and they do not problematise the issues which surface, so that the assumptions on which the school operates are left undisturbed. For most teachers most of the time, this is just sensible. However two coaches in particular did push the limits, included more challenge in their practice and they were prepared to open up difficult issues. Such coaches are to some degree exercising the metacognitive monitoring and control emphasised by Eraut (2007) as important in early career professional learning, but here within the context of coaching. They are seeing the ‘case’ or coached teacher as an entity with particular needs in order to develop beyond efficiency.

Our major concern in this report has been the fault lines between coaching as a process and the individuals engaging in it and the organisational and managerial processes in schools. At all the focus group meetings there were discussions and frustrations regarding the difficulty of making coaching work at scale. These difficulties encompassed both cultural issues such as the pressures of accountability related to measuring the impact of coaching and structural issues such as time allocations for coaching and linkages to performance management. Although a number of cluster schools were feeling their way forward with their management of coaching as a process and a cultural phenomenon within the school, only one seemed to have achieved sustainability. In other schools changes of leadership, staffing or external events took coaching back to square one, or removed it from school improvement agendas. According to Archer (1988), people are influenced by, but never controlled by, the cultural system and the structures in which they work. In some contexts new ideas are consistent with the existing norms and values and are accommodated. In other contexts, there is tension and contradictions arise. Using Archer’s framework Priestly & Sime (2005) argue that in many schools both old and new ideas are adapted to reduce the contradictions, leading to elaboration of the culture (and structures). The terms ‘morphogenesis’ and ‘morphostasis’ are used to delineate the change and lack of change contexts. Currently coaching is struggling to be adapted to professional development contexts; it is not offering a revolution, but in schools there is evidence of evolution.



Conclusions

Coaching can play a significant role in securing three important outcomes for schools:

1. Shifting the culture towards self-evaluation and inquiry in which teachers learn collaboratively;
2. Improving the general CPD experience of teachers, making it school based and classroom focused, but with important links to pedagogical knowledge, thus achieving research-informed practice;
3. Improving teaching by providing feedback to teachers and allowing them to reflect intensively on classroom evidence generated by video.

The research questions of the project were:

1. What happens in teacher coaching sessions and how does this influence subsequent classroom teaching and pupil outcomes?
2. How can coaches improve their coaching practice; did the research project interventions support improvement, and were there any recognisable outcomes?
3. How is coaching being utilised within the context of whole school improvement and professional development?

It is important to observe at an early stage that coaching was very popular amongst the sample teachers. Despite some minor reservations by some, all the teachers involved were positive. This might be expected as they were essentially volunteers, but in other studies we have found comparable levels of enthusiasm. This can be partially explained by the fact that coaching matches most of the characteristics identified with successful or effective professional development. There are opportunities for experimentation, observation, feedback, collaboration and dialogue with a strong classroom focus. The benefits of reflection were magnified by the availability of video, which are a long way from being fully recognised in teaching (Hennessy & Deaney, 2009). So coaching is a popular aspect of professional development with much potential for improving professional learning and student outcomes as measured by research studies. However it is in imminent danger of becoming another innovation which has lost its shine. Many schools have tried coaching in some form but our evidence suggests that the implementation and management issues are causing significant friction.

A fundamental problem is that coaching requires clear purposes based on understandings of variants of coaching models and what they can achieve, and of coaching principles and processes. Such clarity is missing from many of the decisions taken in introducing coaching and the result is a combination of confusion and tension. School cultures and structures are heavily implicated in these problems. Structural problems are evident in the failure to allocate sufficient responsibility, time and resources to coaches. So for example, if a coaching leader/co-ordinator leaves or goes on maternity leave they are not necessarily replaced, as would



be the norm for a subject leader. Cultural difficulties are represented by the managerial impulses for short term measurable outcomes and a desire to control and manage all aspects of school improvement. One of the important decisions for schools, therefore, is how performance management should be accommodated. It can be related to coaching, but it is inadvisable to create messages which associate coaching with poor performance by teachers – coaching should be seen as a process for all. Other barriers include the limited success in pulling together coaching initiatives (including those for teaching and learning and those for leadership) into a coherent sustainable programme of capacity building within the school. The benefits of coaching to coaches are rarely considered, perhaps because the practical problems of establishing coaching dominate thinking. There are a few notable exceptions and there are schools which are making a success of coaching. Their expertise needs to be learned from.

Coaching also needs a richer language, for without words practice cannot be articulated. The language of the dimensions of coaching is a very powerful framework for coaches to improve their practice. In this project the majority of coaches adopted some of the dimensions in analysing and seeking to improve their practice, and some did so very rapidly. Much of coaching sampled in this study was limited by its lack of variety. Coaches were successful in asking questions and encouraging their partners to describe, explain and evaluate their thinking and actions. This is in line with the findings of Bergen et al. (2000) where the dominant activity in coaching sessions was clarifying of observations and teacher intentions. Although the coaches in this study did participate in evaluation this was not harsh judgement, but often very positive. Coached teachers were often more critical of their own teaching than their coaches.

It is only the minority of coaches who challenged their partners or created dissonance through their feedback. Without challenge and dissonance there is small probability of coached teachers changing their beliefs, which is strongly associated with effective professional development (Timperley et al., 2007). Furthermore although there was considerable reference to scale 4 (themes) this was what usually has been termed 'situated generalisation' (Simons et al., 2003), rather than broader more abstract generalisation, what one might term pedagogical principle. Another way of expressing this is that the coaches did not have a wide repertoire of general pedagogical or learning theory available to connect to the particularities of the observed lessons. This is in line with Pedder's (2007) report on teachers' professional learning practices in Learning How to Learn Schools in that many teachers struggle to put into practice their values relating to 'classroom contextualised collaborative teacher learning' (p.250).

Therefore one of the suggestions for improvement which has received much support from teachers is the construction of 'content guides' for coaches. These would consist of a clear statement of the theory underpinning a pedagogical theme (such as Assessment for Learning), the teaching principles implied by this theory, practical activities for activating these principles and criteria for judging the success of implementing the principles. It might also contain some guidance on common pitfalls.

Although the coaching partners had video of the observed lesson available and in most cases had watched it, they did not often refer explicitly to the video. There were few instances of moments or critical incidents being revisited and analysed. It was the broad sweep of teaching that provided the focus with much consideration of lesson 'parts' (starter, main



activity or plenary) or of particular planned activities. Thus the details of the reaction or learning of particular students or groups of students was much less common. It might be said that it was coaching on teaching rather than coaching on learning.

There is considerable evidence that teachers are being encouraged to think more carefully both before and after observed lessons. Through collaborative planning and reflective analysis new ideas are emerging. The majority of this is what one might term craft coaching – improving the effectiveness and efficiency of their teaching, rather than rethinking the principles on which the planning is based.

However these broadly positive outcomes are unlikely to be secured unless there are substantial changes in leadership of coaching. That this presents a challenge to leadership given the high stakes accountability structures in which they work is undeniable. The responses of project participants suggest that without this accommodating shift in leadership culture, coaching may become little more than a gesture or worse, may serve to exacerbate existing divisions within a school. The following four factors, derived from interviews from schools across the project, suggest important considerations for managers charged with overseeing and supporting coaching practice.

Coaching as evolution not revolution

A phased and long term plan linking coaching and school improvement that is sensitive to changes in the teaching and learning environment is required that supports radical change in increments tailored to teachers' emerging competence and evolving skill. Instead of front end loading that emphasises heavy initial recruitment, the reach of coaching could be extended organically through networks for the dissemination of success stories within the school.

Manager *Specialist coaching relates to the delivery of thinking skills across the curriculum. 6 teachers are currently co-coaching (they themselves coached in previous term) and 6 involved in specialist coaching across departments, a great opportunity for staff to look more closely at pedagogy. Noticeably, new staff are opting in to the group and it is therefore growing. (School 8)*

Coordinator *Being a two year project the first year is spent creating new resources, new ideas, researching new ideas and just working with that one individual. The second year is that any new idea tried out between the pair, the Teaching and Learning Coordinator and the member of the department with the time gets rolled out to the entire department. So then my time would be used to work with people within that department. (School 6)*

It would seem that that coaching may not be an effective mechanism for introducing rapid change and may not serve any useful purpose until or unless a school is out of special measures or an individual practitioner's practice is, at least, deemed satisfactory. In this sense, coaching might be seen as prevention rather than cure.



Coaching could also be seen as an evolutionary practice in terms of the need for a long term plan for training and development of coaches in order to maintain capacity and sustain expertise and knowledge growth. Allowing management driven initiatives to determine a one size fits all focus for coaching is likely to result in tokenism and a reluctance of some sub-groups to engage in the process. Alternatively, change agendas could be presented as a wider context within which the parameters of individual coaching relationships may be negotiated by teachers and tailored to their learning needs.

Finally, it sends a signal from the outset that coaching is concerned with developing expertise in teaching and learning and avoids the stigma of early association with poor performance.

Coordinator *I very bravely coached an assistant head at our place and she is an AST as well and that coaching session went really well and that was quite important that I, as a head of year, could coach someone who is higher than me in the hierarchy and an AST as well, so someone who is very good. So that was good that I could coach someone who is higher than me to kind of dispel the hierarchy myth. (School 11)*

Performance management

Performance management 'opt in' Staff could opt to introduce performance management targets into the coaching process if they so wished. There would otherwise be no connection between a school's quality assurance mechanisms and the agenda set by the coaching teams.

Coordinator *The third prong of coaching in the school is the performance management prong. Staff are invited, during the review and planning stage, to indicate their training needs and whether they would like to be coached or not. (School 10)*

Manager *We can help people out of their comfort zone – willing to take risks. It's about developing good things, it's not about performance management. If as part of the performance management dialogue, we had identified skills you would like to develop, then I would find you a coach. (School 1)*

Qualitative outputs

Indicators of success would need to be identified that are commensurate with the subjective and complex nature of coaching work itself. As the aim of coaching is in part to add new conceptual artefacts to those already extant within a school culture, this could take the form of evidencing the application of new knowledge in teaching plans, departmental minutes and their contribution to collective repositories of good practice and learning resources.

Manager *It promotes 'learning conversations' about process and pedagogy which then impacts on student learning. The teacher develops more resources and becomes more effective through the use of that conversation. (School 7)*

Such data could be cross checked with quantitative information, such as scores for teaching quality or learner achievement. For example, attainment data could be used to measure the general impact of coaching across the cohort, but not as a mechanism to feedback on the effectiveness of individual coaching cycles.



Manager *We are hoping that overall teacher effectiveness will improve either through improved confidence or more focused engagement and that this will ultimately show up in student achievement. We want a culture of learning for teachers as well as students, which includes action research and training school status. (School 8)*

Coaching enshrined in school culture and structure

There needs to be time for coaching built into school timetables and the necessary monies allocated to support it. These resources need to be related to either departmental goals or staff development goals.

Manager *The teaching and learning team have one day per week free - between three and four double lessons. This frees up time to prepare for coaching and training.*

People being coached- for new staff and NQTs it's on their timetable. Department projects- we started these where there was some slack time- at least a double period per week to give over to teaching and learning in the department. (School 6)

In short coaching must be seen as an integral part of school improvement planning and as a key process in developing school culture. Coaching is not a quick fix. It has substantial appeal to teachers because it meets professional development needs and reflects personal values for many teachers who wish to take their profession seriously. Whilst it can be used to target key areas of pedagogy this is best done through maintaining the trust of teachers.

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Appendix 1

Interview Schedule for Senior Leaders in 2007-08

School:

Name:

Post:

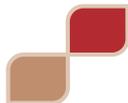
What is currently going on in your school in terms of coaching?

What do you think coaching can do for your staff and your school?

How is coaching being evaluated?

What are your aspirations for the development of coaching at your school?

What issues does coaching create?



Appendix 2

Interview Schedule for Senior Leaders and Coaching Co-ordinators in 2009

1. Can you describe the current coaching activity in school, within and beyond the project?

E.g. Who is involved, how do they get involved, frequency, how is it managed, what feedback exists

2. On a scale of 1-5 (5 being at the top end) how embedded or successful? Do you feel coaching is within the school, and what factors influence this current position (rating)?

E.g. capacity, time, leadership, knowledge and understanding, relationship to other agendas, sustainability

3. What would it take to move to the next level and is this desirable in your school?

E.g. internal, external (include university), do we want a few more prompts? Money? Time? Training? Official support? Materials? Quality control?

4. Given what you have told me, what kind of feedback / analysis from this research project would you find most useful, and why?

E.g. coded data, overviews of outcomes, feedback to coaches themselves, feedback to leaders/governors etc



Appendix 3

Questionnaire for teacher coaches

1. Please let us know whether you completing this with a colleague who you have been in a coaching partnership with. Please indicate what roles you have taken.

Completing questionnaire individually

Completing questionnaire with a colleague

I / we have been a coach

I / we have been a coachee

2. Please indicate ONE of the following descriptors which best describes how the coaching that you have been involved with is organised in your school.

a) Voluntary arrangement between colleagues who choose to work together

b) Voluntary participation in coaching with pairings negotiated or organised through a coaching co-ordinator

c) Obligatory participation in coaching with pairings selected by participants

d) Obligatory participation in coaching with pairings negotiated or organised through a coaching co-ordinator



3. Please indicate what the intended purpose of your coaching practice was. You can select as many responses as are appropriate.

To simply try coaching out

Sharing practice with a colleague

Supporting the development of a specific skill

Following up a former professional development activity

Working towards a school or department development priority or performance management target

Judging the quality of practice and seeking or giving feedback

None of the above

4. Please indicate what the specific focus of your coaching was. You can select as many responses as are appropriate.

Teaching thinking

Classroom talk (including questions and answers)

Starters or plenaries

Student group work

Student engagement and motivation

Teacher explanation

Behaviour for learning

Assessment for learning

Use of ICT for learning

None of the above (please add a comment below)



5. Please indicate what your coaching involved. You can select as many responses as are appropriate.

A single coaching discussion not focused on a specific lesson

A single post lesson coaching discussion

Pre- and post-lesson discussion cycle

Joint planning of lesson

Coach observing lesson

Use of video to record lesson for use in coaching discussion

Coach writing observation notes

Discussing targets, goals or areas for improvement

Providing a written review of the coaching discussion for the coach co-ordinator or SLT

None of the above

If your coaching involved a practice not in the list above please note it here.



6. If you have made use of video to support your coaching please describe what this has involved and what difference you think it has made to the process.

**7. In what ways would you describe the outcomes of your coaching experience?
Please select as many responses as are appropriate.**

It helped me/us to reflect on and analyse my/our practice in some detail

It caused some disturbance in my/our thinking about my/our practice

It challenged me/us to justify existing practice

It helped me/us to make sense of what was going on in my classroom

It helped me/us to make sense of a theory or policy

It provided a solution to a problem I/we were experiencing

It gave me/us permission to experiment with and refine practice

It allowed me/us to explore my/our beliefs about teaching, learning and/or education more widely



8. If you have been coached, please comment on the impact you think it has had on your planning, your teaching or your students' learning.

	I have not developed an awareness of this feature	I am aware of this feature, but am not working to improve it in my coaching	I am working to improve this feature of my coaching	I have worked successfully to improve this feature of my coaching
Who initiates lines of discussion				
Use of stimulus, e.g. video, observation, pupil work, to prompt thinking				
The scale of discussion, e.g. critical incident, episode, whole lesson, theme				
The tone of the conversation; positive, neutral or negative				
The time reference, e.g. prior planning, the lesson, future lessons				
The interaction function, e.g. question, explanation, evaluation, challenge, hypothesising				



9. If you have been a coach please consider which of the following you think could substantially improve your coaching.

More time to practice the skills of coaching

More general support from the SLT

More time made available for coaching

A more open minded culture in school

Better management of the fine detail of coaching logistics

More training

More opportunity to reflect upon and analyse coaching practice

Better listening skills

More knowledge of specific areas of teaching and learning

Is there something else that you feel would improve your coaching?



Appendix 4

The Coaching Dimensions

Eight coaching dimensions

Subject matter

- The theme and focus for discussion; frequently a specific pedagogic approach

Initiation

- Which participant takes responsibility for each new element of the conversation
- *This is significant in developing a sense of 'ownership' within the coaching conversation*

Stimulus

- How stimuli are used to support the conversation, such as video extracts, lesson plans, recall, pupils' work
- *The use of stimuli helps to root the conversation in practice evidence, and can help to challenge assumptions and perceptions*

Tone

- The tone of voice used. This can vary from point scale from very negative through neutral to very positive, it is coded on a 5point scale: ++, +, =, -, --
- *The tone adopted can suggest a hidden agenda, an emotional state or a learned behaviour*

Scale

- The specific scale in focus. In order these are critical moments, episodes, the lesson as a whole, generalised themes such as pedagogic principles and the school or societal issues. There are 5 scales 1 = Critical incident, 2 = Episode (typically lasting several minutes upwards), 3 = Whole lesson, 4 = Theme - relating to pupils, class, subject, teachers etc., 5 = School or society
- *The use of scale determines the scope of the discussion, and where participants make links across the scales indicates enhanced reflection*



Time

- The time-frames referred to. These are planning of the lesson or previous lessons (past), the lesson itself, future specific lessons or no specific time-frame. These have been coded respectively
- *The reference to time-frames is indicative of the way participants seek links between experiences and planning, and suggest the potential of coaching for future practice*

Interaction function

- Each 'turn' in the conversation serves a function. We identified a range of functions, including question, explanation, evaluation, challenge, and suggestion
- *The functions are significant because they indicate the purposes, processes and outcomes of interaction. Patterns of interaction tend to exist*

Interaction Functions

Question

Evaluation

Summary

Acceptance

Challenge

Context

Generalisation

Clarification

New Idea

Justification

Explanation

Continuity

Dissonance

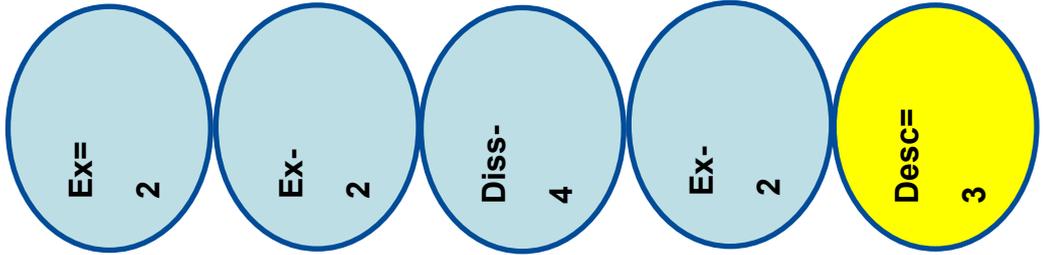
Appendix 5

An Example of a 'Visual' Transcript Analysis Used with Teachers

Coach speaks

We said that we would focus on planning in this observation and particularly pupils evaluating their own learning. And this particular strategy you have tried it already with another group. What happened with that one?

Coding



Teacher Speaks

I devised the cards slightly differently. I had, I did it as a class activity and gave out each of the girls one card with a question on one side and the answer on the other side. And the idea was for it to roll round the whole class, so one girl would read out the question and then whoever had the answer on their card would respond.

It was a bit slow and there were a few interruptions and basically the girls who knew the answers would put their hands up regardless or not as to whether they had the answer on their card.

And it seemed a bit wrong really it didn't seem ideal that I was having to say yes that is the right answer but is it the one on your card?

So then had to wait for the girls to look at their cards it was something new that they hadn't done before so it was slow, it took longer than it should have done really. Given that each pupil only had one slot to read out their question and answer they weren't actively involved.

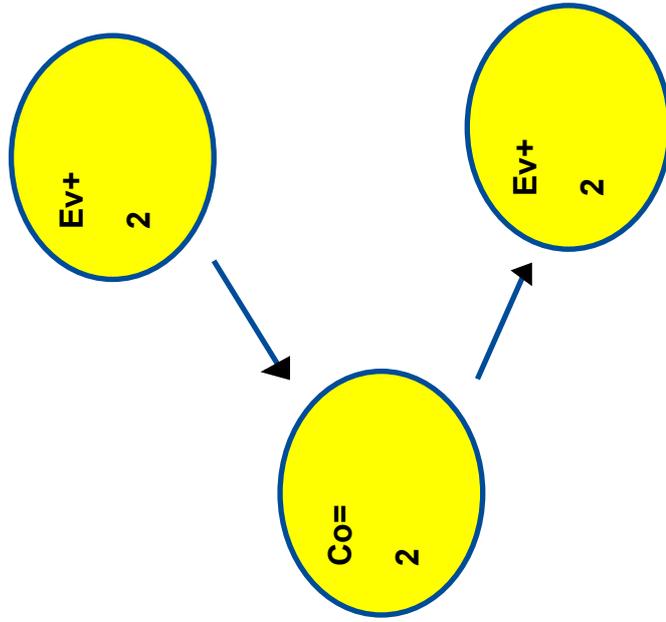
So I decided to change it and do it the way I did it in the lesson today. Separating the question and answer so they were on different cards and working in groups rather than the whole class.



Coach

Coding

Teacher

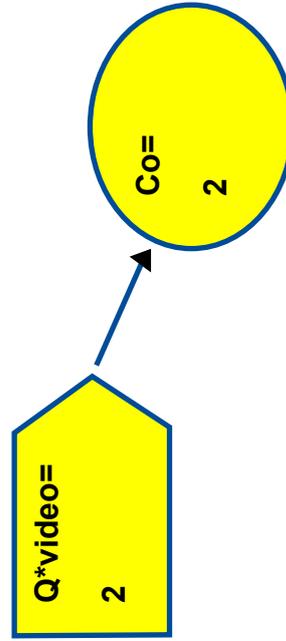


So they were all actively involved and it was livelier, it was quicker and I could move around and talk to the groups and sort of work out which ones they were having problems with and I could actually talk with them and maybe give them a bit more information. You know why is that the correct answer and why have you matched that one? And also got them to think about it a bit more.

Yes. It was quicker, it was livelier and they enjoyed it. I asked them at the end of the session if it was better and they seemed to enjoy this format better.

Also to explain a bit more.

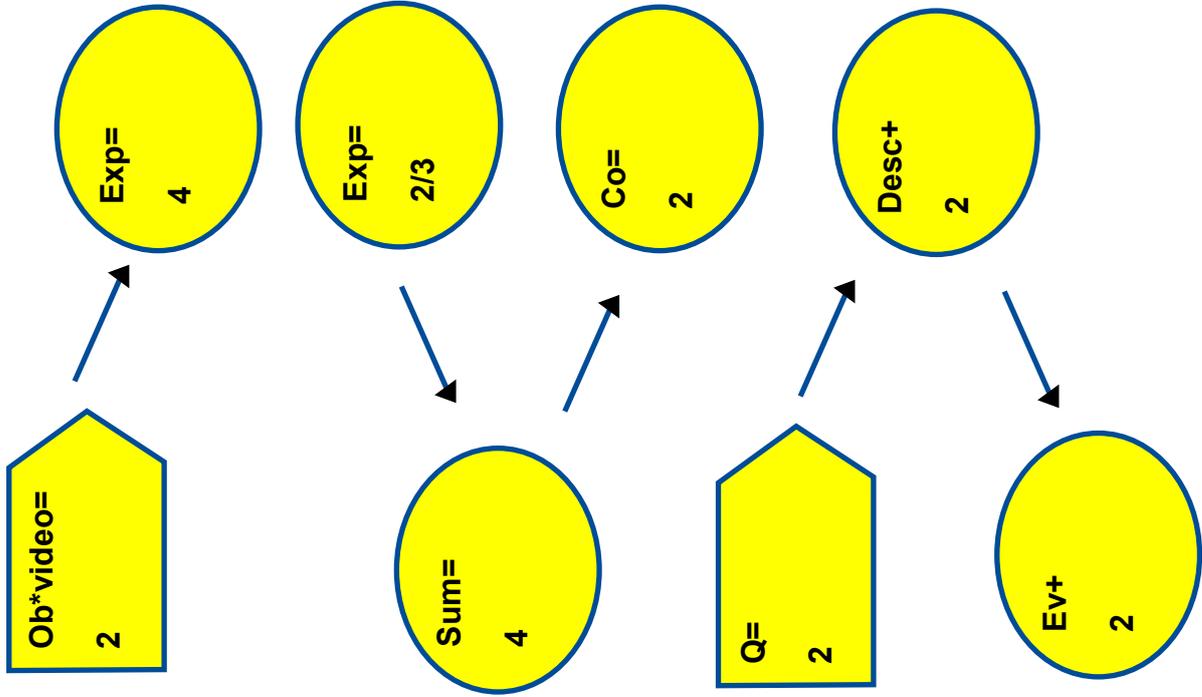
Right shall we have a look at the beginning of the lesson?



Ok

watch in silence for several minutes

I like the way you reinforced the collaborative work and how useful that can be.



I thought that it was interesting how you opened up the lesson, saying about problems helping us with our learning.

Well because they can quite easily have a negative feeling if things are going wrong they feel like they are not achieving anything. I wanted really to bring out the fact that that is how we learn. There will be lots of problems because what they were doing is quite sophisticated.

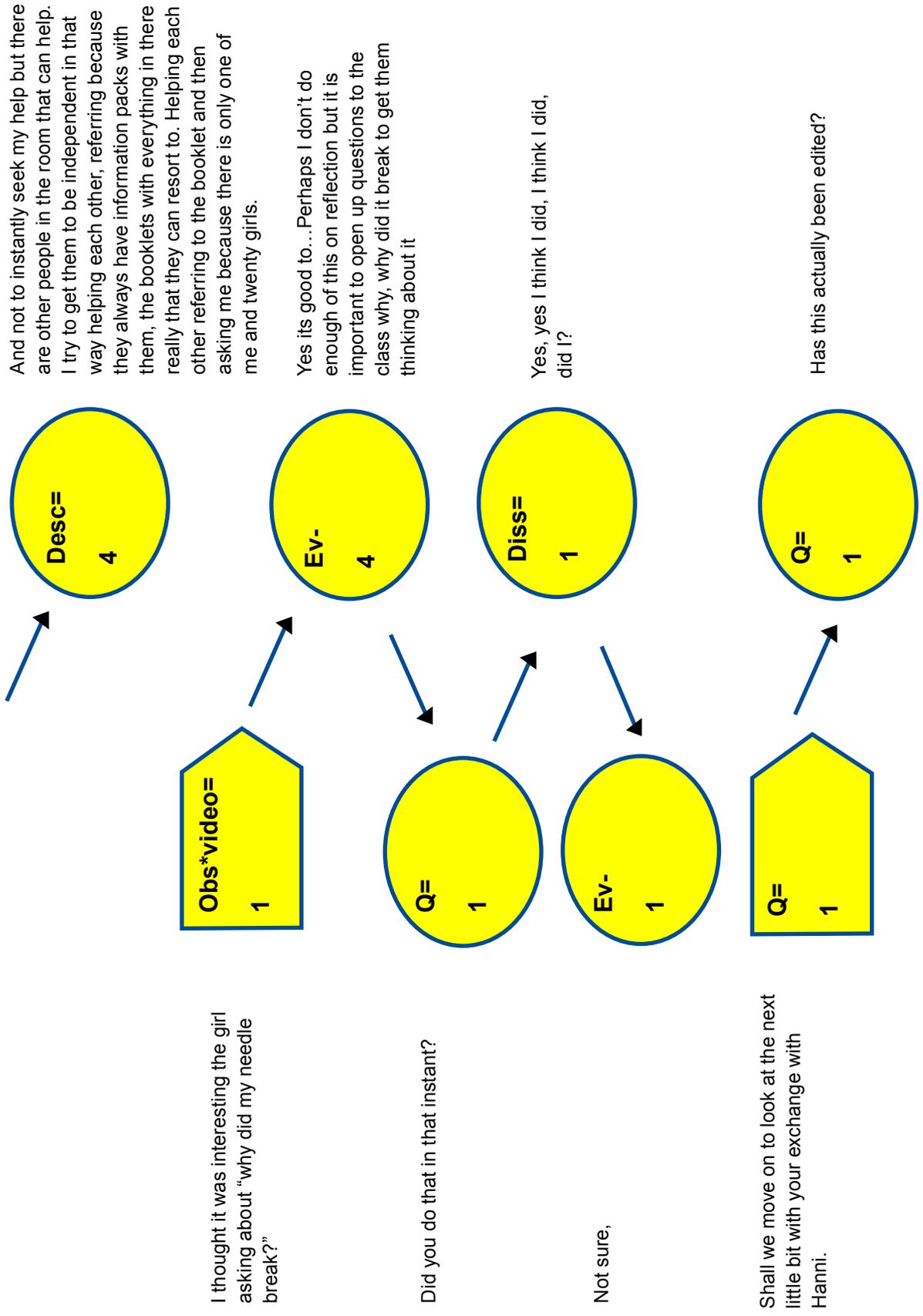
There is a lot of things to understand in terms of the different stitch settings on the machine and different controls they have to move the length control the width control. Different combination different things happen. I wanted them to feel good and to share things and not to think oh its gone wrong "I'm going to keep quiet about it"

Yes that is right, sharing and learning from the things that go wrong.

Just because that had a positive effect in making them feel less.

Any comments about some of the responses there by the pupils?

Well they remembered the problems they had had and often others had been aware of it so it was good for them to talk and to be helping each other. I made the point of checking with each other that the health and safety point about two people not able to control one machine. One person needs to be responsible and needs to understand what is going on.



Shall we move onto the next bit with, with Hanni.

watch in silence for several minutes

Pause it there and we will just talk about it. (teacher stops tape) right tell me a bit about this pupil?

Tabir- well she is the brightest girl in the group and she was talking about having problems making the machine going backwards and but she also had another problem because she had used the wrong stitch for a seam. And she should know we have gone over it in the past, I talked about it last week that you use a straight stitch for a seam and it was one of the things on the question and answer cards. I tried to steer it round to talk about the stitch that she did it, I tried to make that the teaching point because I think she knows how to go backwards and I'm not really sure why she was making an issue about of that she was being a bit difficult. I tried to bring it round to talk about seams and the fact that she had used the wrong stitch for the seam so that we made that the teaching and learning point.

yes

So you focused clearly right back onto the teaching again rather than sort of allowing that to get in the way.



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