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ABSTRACT

This study aimed to gain a greater understanding of the mentoring process in pre-service teacher training in Great Britain where recent restructuring has called for more field experience training of preservice teachers. In particular, the study examined the perspectives of, and the dialogues between, student-teachers, mentors, and supervisors. A comparative case study approach was adopted. Four schools accepting fourth-year undergraduates students in their final, 10-week teaching practice were chosen to participate. Within each school data were collected on the dialogues undertaken by mentors (class teacher, co-tutor, and supervisor) with one student teacher. Thus, in each school, data on processes included 5 annotated agendas, 5 recordings of class teacher discussions, 5 recordings of conferences, and 10 student evaluations of discussions or conferences. General findings indicated that the differentiated role structure demanded by the mentoring model was being enacted successfully. Students perceived that teachers, co-tutors, and supervisors were focusing on the content areas consistent with their role, a perception supported by analysis of the data. Class teachers focused largely on craft knowledge whereas co-tutors and supervisors emphasized different areas of the instructional design model. Co-tutors concentrated on areas such as curriculum knowledge, subject matter knowledge, and classroom events; and supervisors related more to children's learning and theories and research on teaching processes. (Contains 28 references.) (JB)

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# THE IMPACT OF TRAINING AND ROLE DIFFERENTIATION ON THE NATURE AND QUALITY OF MENTORING PROCESSES

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ED 383 667

## Introduction

The nature and quality of teacher education is the subject of concern internationally, concerns which have spawned major proposals for the reform and restructuring of the training of teachers. The recent DFE draft circular on the training of primary teachers (1993) for example asserts that schools are best placed to help student teachers develop and apply practical teaching skills, and prescribes school based training incorporating partnerships between training institutions and schools. The lynch pins of these partnerships are the cooperating teachers, acting as mentors, guiding the 'seeing' of student teachers (Schon, 1991). Unfortunately what little research has been undertaken at the pre-service level would indicate major problems in the conceptualisation, enactment, and outcomes of the mentoring process.

## Review of Research

Bennett and Carre (1993) present findings pertinent to these issues. They report that the two factors which are crucial in mediating the quality of teaching practices are the quality of the relationship between the student and the cooperating teacher, and the classroom context in which they work (Dunne & Dunne, 1993). Yet the quality of support is extremely variable, as is the quality of supervision, both being characterised by lack of training, unclear role perceptions and lack of a commonly agreed mission. These findings support other recent studies. Elliot and Calderhead (1993), report that mentors perceive their role more in terms of nurture and support. Very few challenge the student's ideas and images of teaching, or provoke them to reflect. They also claim that mentors have a simplistic, uni-dimensional view of student-teacher learning.

HMI (1993) came to similar conclusions reporting that many cooperating teachers are unclear as to how they should help student teachers, and thus act intuitively rather than according to clear training objectives. Many are unfamiliar with the content of the student's courses in the

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training institution. They concluded that institutions have not considered the implications of school-based approaches sufficiently in such areas as the training of mentors.

These findings accord largely with American studies, although these have tended to focus on the induction rather than the pre-service phase. Here the cooperating teacher is commonly cited as influential, important and essential to the teaching experience of students (Glickman and Bey, 1990; Kagan, 1992). Yet most empirical studies find much to be desired in the mentoring dyad or triad. For example, Guyton & McIntyre (1990) report continuing problems concerning lack of agreement about roles, responsibilities and expectations among the supervisory triad.

The quality of mentor-student dialogues or conferences has also been criticised. O'Neal & Edwards (1983) concluded that 'there was no evidence of an articulated knowledge base regarding either the context or process of teaching, or the content or process of training the student-teacher'. Koehler (1986) also reported that dialogues focused on non-instructional tasks and classroom occurrences rather than analysis of the student-teacher's teaching. Further, the feedback provided was linked neither to research nor theory nor agreed aims of teaching. Overall, Warren-Little (1990) characterised mentor-mentee interactions as brief, often unrelated to actual classroom work, and as stressing matters of comfort over issues of competence.

Feiman-Nemser & Parker (1990) raise the important issue of subject-matter knowledge in the mentoring process. They found striking differences in how the mentor teachers treated four aspects of knowledge - deepening subject matter understanding, learning to think about subject matter from a pupil's perspective, learning to represent and present academic content, and learning to organise pupils for the teaching and learning of subject matter- differences which they believe affect beginning teachers opportunities to learn. This issue is of particular concern and salience in the school-based training of primary teachers since there is increasing evidence that both novice and experienced teachers lack the appropriate subject expertise (Kruger & Summers, 1989; Ball, 1990; McDiarmid, 1990; Bennett, Wragg, Carre & Carter, 1992; Bennett & Carre, 1993).

The ills of the mentoring process are often laid at the door of training. Warren-Little (1990) argues that where training is offered, process takes considerable precedence over substance i.e. training is heavily weighted toward ensuring smooth interpersonal relations. Further, she argues that there are virtually no studies that link training to the subsequent performance of mentors. One difficulty here is that there is no one accepted model of mentoring. Several different models or perspectives on mentoring have been posited (eg. Feiman-Nemser & Parker, 1990; Kagan, 1992; Cotton & Sparkes-Langer, 1992; Maynard & Furlong, 1993; McIntyre & Hagger, 1993; Elliot & Calderhead, 1993) each with different implications for the content of training and for subsequent mentoring strategies and actions.

A second difficulty is the accessibility of mentor-teachers' knowledge. To use one's own expert knowledge in the day-to-day enactments of teaching is a different matter intellectually and interpersonally from articulating that knowledge for the benefit of another's understanding and practice. Brown & McIntyre (1993) demonstrate the complex nature of teachers' craft knowledge, and argue that this knowledge will have to be given greater weight in school-based training. But they conclude that 'we have only just begun to explore how this might be done'(p114).

There is also much evidence on both sides of the Atlantic to show how the contextual and organisational circumstances in which mentors work more often constrain rather than enable that work (Feiman-Nemser & Parker 1990; Back & Booth, 1992; Hill, Jennings and Madgwick, 1992). These include such aspects as mentor selection, support (including resources), ascribed status, time available, working conditions, school policies, and links between schools and training institutions.

Finally, several commentators lament the lack of research on mentoring at the pre-service level. Glickman and Bey (1990) record the almost total lack of observations, and analysis of interactions, of mentors' work in context, and urge that the focus of future research should be on the interactions, and consequent actions, of the cooperative dyad or triad. McIntyre, Hagger and Wilkin (1993) argue similarly stating that there is little basis for knowing what is possible for mentors to do, what conditions are necessary to make different things possible, or what effects mentors' activities have on beginning teachers' learning.

## **Summary**

It is clear that the role of the cooperating teacher, acting as mentor, is very influential, but poorly conceived and prepared for. Dialogues are characterised by a lack of challenge and reflection, and knowledge bases for teaching, even if considered, are treated in very different ways, both of which have important implications for learning to teach. Training too is diverse, but research to date has provided inadequate data on the impact of different models on practice, and of that practice on student actions and outcomes.

## **The Study**

The issue of mentoring is high on the educational agenda in Britain as a consequence of the government decision to implement a school-based model of teacher training. This requires that a greater proportion of student-teachers' time is spent in schools working under the direction of a cooperating teacher than previously. These teachers are, in turn, to be trained by the partner higher education institution. School-based teacher training for primary teachers will be progressively implemented from 1995/6. However since there is no agreed model of mentoring, or of mentor training, HE institutions are planning and enacting different models, at different speeds to different populations of teachers. Currently there is thus a medley of mentoring provision with no planned comparative evaluations in place.

Against this background the major aim of this study is to gain a greater understanding of the mentoring process in pre-service teacher training, and the role of training in the quality of those processes, through analyses of the perspectives of, and the dialogues between, student-teachers, mentors and supervisors.

## **The Exeter Monitoring Model**

The theoretical underpinnings of the model of school-based work at the University of Exeter has been set out by Harvard and Dunne (1992) and Dunne and Harvard (1993). Basically the model is based on three components - a psychological model developed largely on post-Vygotskian perspectives; a pedagogical model, derived from the above perspective and from

notions of teaching as text; and a methodological model which sets out the roles of the participants in the teacher-learning process. These considerations resulted in a student learning framework requiring distinct, yet complementary, roles for three tutors - the class teacher with whom the student works; the co-tutor - a teacher in the school not directly involved with the student in classroom teaching; and the university supervisor. These roles are presented below:

*The class-teacher*

Class-teachers are specialists in the craft of the classroom. They are responsible for inducting student-teachers into classroom life and developing the student-teacher's teaching skills. They assist student-teachers by demonstrating teaching for students to model, jointly planning and preparing teaching episodes, carrying out focused observation of the student teaching and discussing the student's performance in the classroom.

*The co-tutor*

Co-tutors are specialists in the craft of the classroom and the context of the school. They are responsible for inducting the student into the school and spending time with the student in helping them to evaluate their work and experiences, both individually and in groups. They are not expected to observe the student in the classroom but to work with the student in developing critical thinking and practical reasoning about teaching through supervisory conferences.

*The university supervisor*

University supervisors are specialists in the wider context of education and are responsible for providing student-teachers with appropriate introductory courses in preparation for the school-based work. At school the university supervisor is responsible for providing support for the student-teachers in conducting supervisory conferences by analysing their experience and examining theoretical perspectives to teaching ie making the link between the school and university.

The process, and progress, of student-teacher development is guided by nine broad dimensions of teaching, shown below, each of which contain several levels of performance.

Ethos

Teaching (1): direct instruction

**Management of materials**

**Teaching (2): guided practice**

**Teaching (3): structured conversation**

**Monitoring**

**Management of order**

**Planning and preparation**

**Written evaluation**

The levels exemplify how progression can range from relatively simple levels of performance to more complex expressions of achievement in classroom work. The levels of the monitoring dimension show this clearly.

1. Check children can follow and understand instructions just given; check children can follow and complete the work set; give appropriate feedback.
2. Check recall and understanding of previous work through questioning and feedback which confirms/extends understanding; simple diagnosis.
3. Use monitoring to create hypotheses about children's difficulties; attempt to analyse and test hunches; use monitoring to inform adjustments of teaching.
4. Create time for and attempt deeper diagnosis of children's responses to tasks.

Judgements about progress in the attainment of teaching skills are achieved via the writing of an agenda of a teaching episode by the student and the subsequent annotation of it by the class teacher. The agenda consists of a brief written outline of the content and sequence of a proposed teaching episode, focusing on one of the teaching dimensions. The class teacher annotates this agenda whilst observing the student-teacher enacting it, annotations concentrating on observable features rather than evaluative statements. An example of a completed agenda is presented in appendix 1. The annotated agenda provides the basis of a post-episode discussion between the student and teacher, and is later used as the basis for supervisory conferences with co-tutors and supervisors.

In both discussions and conferences on selected episodes the teachers, tutors and supervisors are asked to frame the dialogues in terms of an instructional design model - a heuristic which

identifies inter-related domains of knowledge that student-teacher learners need to draw on, (see figure 1). This heuristic is also built into university courses, so that students are familiar with it.

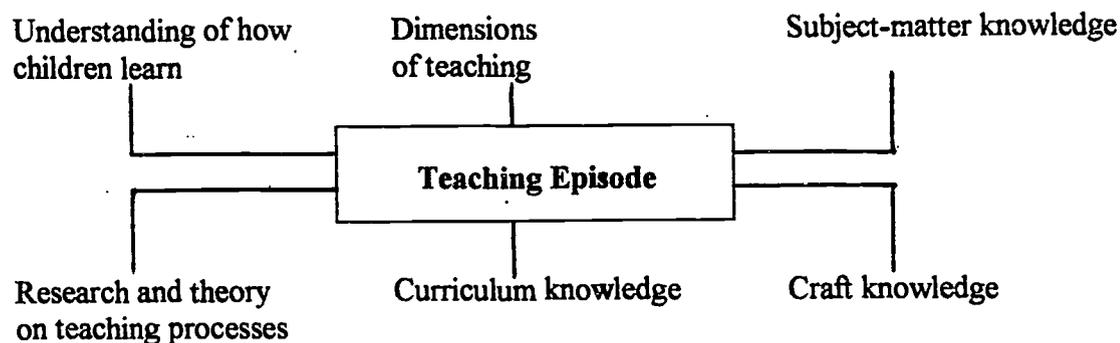


Fig 1 Instructional design model

It is recognised that the extent of the use of the model for framing dialogues will depend on the different roles of tutors and the differing purposes of their input. Dialogues with the class teacher are expected to be based on the observations of practice and to provide access to the craft knowledge of teaching, whereas the conferences with co-tutors and supervisors are not based on observation. Their purpose is to extend students practical reasoning about teaching via principled examination of selected agenda utilising description, explanation, justification and reformulation. In order to achieve this, each conference is in three phases - what?, so what?, and now what? This short-hand reflects the requirement for the student: (i) to describe, by reference to the agenda, what happened in the episode; (ii) to locate the several events during the episode in the levels of the nominated teaching dimension; and then to explore how the same event can be located in other dimensions; (iii) to suggest, describe and agree what kinds of performance would be necessary to justify description in a higher-level statement, or in yet another dimension. The outcome of the conference is an agreed, written statement that outlines the student's intentions in future, observed episodes.

In a typical 10 week practice, two to three agendas per week are required, each followed by a discussion with the class teacher. In addition a minimum of five conferences are undertaken, usually three with the co-tutor, and two with the university supervisor.

## Training

Because the scheme is in its initial stages only a few teachers are considered fully trained, ie have followed a 30 hour course incorporating both theoretical and practical aspects of mentoring. Another group of teachers has received an introductory two day course, and the majority of teachers in partnership schools have yet to be trained. This context provides an ideal opportunity to investigate the impact of training on the quality of mentoring processes whilst, at the same time, allowing insights into the impact of our training and supervisory practices. Thus, within the over-arching aim of achieving a better understanding of mentoring processes, the following questions were posed.

- i) What are the understandings of class teachers, co-tutors, supervisors and students about their own, and others', roles?
- ii) What is the nature and content of the interaction in discussions and conferences. Are they congruent with the mentoring model?
- iii) What is the effect of training on the nature and quality of interactions in discussions and conferences?
- iv) To what extent are the participants satisfied with the mentoring scheme?
- v) What appear to be the effects on student learning?

## Design

A comparative case study approach was adopted to provide rich descriptions of participants perspectives and their interactions. Among the schools which had agreed to accept fourth year BA(Ed) students on their final, 10 week teaching practice, four were chosen to reflect differences in the extent to which the participating teachers had been trained. Within each school the following data were collected on the dialogues undertaken by mentors ie class teacher, co-tutor and supervisor, with one student.

- i) On commencement of the 10 week practice the cooperating teachers, co-tutors and supervisors completed an open-ended questionnaire which established their conceptions of their roles and responsibilities, their ability to fulfil these in both theoretical and practical aspects of teaching, and their training.

- ii) Data on the nature, quality and effects of the post-agenda discussions with class teachers, and conferences with co-tutors and supervisors, were collected as follows. Every two weeks ie five times in total, the post-agenda discussion between the class teacher and student was audio-recorded. In that same week the conference with a co-tutor or supervisor, based on the same agenda, was also audio-recorded. Following each of these discussions and conferences the student completed an evaluation sheet on their perceptions of the content areas covered, and usefulness of the session, their learning, and implications for future action.

Thus, in each school, data on processes included:

5 annotated agendas.

5 recordings of class teacher discussions.

5 recordings of conferences.

10 student evaluations of discussions/conferences.

- iii) At the end of the 10 week practice informal interviews were carried out with all the participants to gain their perspectives on the mentoring process, its strengths and weaknesses.

All questionnaire data were collated, and audio-recordings transcribed, for subsequent analysis.

## **Results**

Data analysis is continuing. This paper therefore focuses on three questions:

- 1) What, from the students' perspectives, differentiated the nature and content of discussions and conferences?
- 2) To what extent does training appear to effect the agenda annotations and discussions of class teachers?
- 3) What differences in context and quality, if any, characterised the conferences held by co-tutors and supervisors?

## **Student Perspectives**

In their evaluations, students responded in six pre-arranged categories, determined on the basis of earlier pilot studies. These categories are listed in table 1, and are defined below.

**Practical tips** - included a wide range of advice relating to all aspects of classroom practice - from planning progression to the use of resources: from appropriateness of clothing and behaviour to the phrasing of questions: from alternative representations of tasks to how to deal with children who have finished their work.

**Encouragement** - consisted of praise or positive feedback on successful aspects of lessons - eg how class discussion was handled, how children were settled down, how the student had dealt well with a specific incident eg broken glass, and how nice the classroom looked. One particularly important piece of encouragement was from a co-tutor who supported the student in re-arranging the furniture in order to change pupil behaviour.

**Things right and wrong** - embraced a large range of classroom aspects that were felt to have been done well. Conversely there was an equally extensive list of things that could have been improved, (except at one school which appeared to have a policy of not indicating to students what had not gone so well). These included attention to behaviour, lack of clear aims, phrasing of questions, sequencing work for low attainers and improvements in task representations.

**Theoretical issues** - comprised largely drawing on established theory to inform classroom practice. These included references to - the instructional design model, constructivist notions of empowering children, zones of proximal development, subject knowledge, the ways children learn and assessment/evaluation.

**Intellectual challenge** - largely included demands for justification - of planning, activities, lesson formats; alternative modes of fulfilling aims eg peer teaching; issues relating to children's progression - of learning and behaviour, such as independence; and self evaluation/reflection.

Table 1 presents the frequencies with which students claimed these categories appeared in discussions and conferences. The table presents two sets of findings. The first two columns compare the extent to which class teacher discussions and co-tutor/supervisor conferences included the six categories. The third and fourth columns compare within - conference differences when run by co-tutors and by supervisors.

	Class teachers	Co-Tutors and Supervisors	Co-Tutors	Supervision
1. Practical Tips	93	69	88	40
2. Encouragement	93	100	100	100
3. Things Right	93	92	88	100
4. Things Wrong	73	62	75	40
5. Theoretical Issues	33	69	63	80
6. Intellectual Challenge	67	85	88	80

**Table 1 Student evaluations of areas covered in discussions and conferences (%)**

It is apparent that class teachers stress considerably more the practical issues, and rights and wrongs of practice than co-tutors and supervisors, with correspondingly less emphasis on theoretical issues and intellectual challenge. This ties in very clearly with the enactment of different roles embodied in the mentoring model. That model also specifies a somewhat different role for co-tutor and university supervisor and it is of interest to ascertain whether this was perceived by students in reality. In comparing co-tutors and supervisors in columns 3 and 4 the former stress far more practical issues, particularly tips, and areas of teaching that needed improvement. Supervisors, on the other hand, tend to raise more theoretical issues. This pattern, too, is in line with the mentoring model. In other words, from student evaluations, the three roles are, as envisaged, distinct yet complementary in practice.

### **The Role of Class Teachers**

The concern here is the extent to which training appears to have affected the content and quality of the class teacher role. There are two distinct aspects of this role. The first is the annotation of the agenda during observations, and the second the discussion on completion of the observation.

The agenda, as shown in Appendix 1, is an exposition in detail of the students intended acts of teaching. This is usually set out for about a 15 minutes segment, although this segment is likely to be part of a larger teaching segment. The teacher annotates the agenda with descriptive rather than evaluative comments. These comments relate to those things that appear significant in relation to the teachers' knowledge of the class and the interactions of the lesson.

The analysis of the quality of agenda annotation presented here is based on four agendas which are representative of those annotated by: teachers with no mentor training; those with short ie 2 day, mentor training; and those with full training. In each case the beginning of the agenda is presented, and the quality of annotation commented on.

### Agenda A

History: Gunpowder Plot

Dimension: structured conversation

Teacher: short training

AGENDA	ANNOTATION
<p>Get children to move to position where they can see picture. Explain - hand it round 2/3 times so they'll all be able to see it.</p> <p>Teacher-led discussion on this picture. See Lesson Plan for questions? Still in little parts of the story as they guess them.</p>	<p>Children gather round.            Querying whether children can see.            Praise gathering. Someone said 'Tudor' - worked on that (emphasised hands up).            Drew out why Tudor? Clothes (emphasise one speak at once).            Fashion and practical reasons. Fashion - keep warm. Colours. Furniture.            "Unless in grand house wouldn't have furniture"            "Writing something important".            "Picture threatening".            Are they in a court or a man prisoner?            "Is he a prisoner because he hasn't been to church".            "Is he writing a letter to prove he's done something"?            "Person in white is telling him something"</p>

Annotations are factual - "Children gather round" - describing the activities of both student teacher and pupils. Many annotations provide a record of pupil responses to questions, serving as indicators of the effectiveness of the structured conversation, but not at this stage providing any form of evaluation. Overall, a brief summary of interaction is gained. This can then be informally discussed with the class-teacher, especially to ensure it is comprehensible to the student before discussion in conference with the co-tutor or supervisor.

**Agenda B**

Science: Sound

Dimension: Management of order

Teacher: short training

AGENDA	ANNOTATION
<p>Children sitting around the black board.</p> <p>Praise- excellent behaviour last time sat like that etc.</p>	<p>Children are arriving from lunch break. Most just sitting down others playing with model musical instruments..</p> <p>You shut the door 'o.k listen please'. Not all children with you, so you add 'who can I see ready to sit and learn ?</p> <p>Do the children normally return from lunch in this way?</p> <p>You make the sound 'sh' fairly frequently. They obviously respond to that. Is this a strategy that Ann uses for quiet?.</p>
<p>Introduce focus of lesson ....</p>	<p>You then say ' I'm going to let you in on a little secret.....etc.' All the children are quiet now-it worked! What was your reasoning for saying something like this?</p> <p>You begin to take the register. The children are sitting quiet. Is this something you demand all the time?</p> <p>Noticed 3 isolated tables. Are the children put here for a reason?</p> <p>Praise for the children 'nice manners'. Complimenting the children on how they replied to the register.</p> <p>Order was maintained while class teacher interrupted.</p>

This teacher also maintains the descriptive element in annotations, focusing in particular on student-teacher talk and action which reflect 'management of order' - "You then talked about

the previous lesson, how the children's seating was arranged ....". In order to maintain in mind the questions which seem important for the student-teacher to answer in conference latter in relation to explaining and justifying her behaviour, the teacher includes some questions in her annotations. This would seem to be a good strategy, especially for someone who is not used to working in this kind of way and wants to ensure that specific issues are not lost - "They obviously find this a struggle to do. What do you think the reason for this would be?"

### Agenda C

Maths: Assessing Understanding

Dimension: monitoring

Teacher: untrained

AGENDA	ANNOTATION
At end of explanation ask if there are any problems - respond at appropriate level to clarify	Clear explanation. Ascertained children's understanding through questioning and answered queries from children checking they were doing the right thing. Gave short summary.
Walk around classroom observing the children working - pick up on any problems by working with individuals	Initial walk around to check that children who often feel insecure with new material were able to proceed.
Ask appropriate questions to children as working to assess the understanding	Dealt appropriately with individual problems and queries as they arose. When working with individual children, asked questions - first, to assess current understanding and then, in order to lead them gradually towards understanding (rather than telling them the process and answer).  Looked around classroom on a regular basis to check that children were on task and to see those who needed help.
Stop and recap if necessary, if similar problems arise or to move on to next activity.	Short recap, as several children had a similar problem.



This teacher also tends to evaluate and to tell the student what he ought to have done, rather than keeping a more extensive record of what did happen - "It was hard work getting the grass wearing away idea out of them - if you reminded them about pollution being the opposite of conservation, they might have got it". From such annotations, it is difficult to build up the "robust description" of an episode which is the starting point for the student entering a conference.

Agendas A and B were annotated by 2 teachers in the same school wherein objective appraisal sessions were part of the school policy and had previously been practised by all members of staff. They therefore understood the process of keeping an ongoing record of action and interaction through observation and, perhaps more importantly, understood the consequence of a more subjective record and the need for open interpretation.

It is not surprising that a non-trained teacher provides an evaluative record of practice, since in the long run it is the class teacher's annotation that is central to student assessment. However, there is evidence both in this study and elsewhere that class teachers unconsciously impose their own views and interpretations - which may be important in understanding classroom life - but which also cut across the student working over events and taking responsibility for self-evaluation and for future planning.

### Post-agenda discussion

So what is the quality of the discussion between class teacher and student, following the annotation of the agenda? Two analyses are being carried out. The first is an analysis of all transcripts to establish commonalities across teachers, and the second, based on the instructional design model, an analysis of transcripts representative of trained, short trained and untrained teachers

The transcripts analysed so far for establishing commonalities have indicated similarities in the approaches used by all teachers, and are highlighted in the following discussion topics.

- (i) Summarising parts of the lesson (often by referring to the agenda - to prompt their memory for sequence or for exact quotes of pupils responses etc).
- (ii) Sharing discussions and evaluation of pupils' responses in general; sharing discussions and evaluation in individual, or small groups, responses.
- (iii) Checking that students had noticed specific features, both positive and negative, that teachers considered important.
- (iv) Developing awareness of things that could be done better.
- (v) Reminding students of something they had learned in a previous lesson, or had planned for previously.
- (vi) Referring to aspects of the dimensions to suggest how what the student has done fits in.
- (vii) Making links between the dimensions.
- (viii) Taking a shared responsibility for how the lesson went.
- (ix) Incorporating the way this lesson went into planning for the next lesson/for the future.
- (x) Praising, building confidence, encouraging the student.

The analysis of transcripts utilising the instructional design model is still in its early stages. One transcript from each of the same four teachers as the earlier analysis on annotation has so far been carried out. This type of analysis provides greater detail of the kinds of attention given to the discussion, as well as highlighting aspects of teacher beliefs about how to manage learning.

The outcomes of these analyses are shown in figure 2. This figure has been constructed to show the patterns of conversation across the six knowledge areas of the instructional design model in relation to three teaching episodes A, B and C.

How children learn		
	ST	T
A	2	2
B	0	0
C	1	3

Teaching Dimensions		
	ST	T
A	0	0
B	0	3
C	0	2

Subject Matter Knowledge		
	ST	T
A	0	0
B	0	3
C	3	0

Teaching Episodes	
A	Dance: guided practice
B	Guy Fawkes: structured conversation
C	Tudor life: direct instruction

Theory and research		
	ST	T
A	0	0
B	0	0
C	0	0

Curriculum knowledge		
	ST	T
A	0	0
B	0	0
C	0	0

Craft knowledge		
	ST	T
A	3	5
B	4	16
C	8	9

It shows very clearly the major focus on craft knowledge. There is no mention by student or teacher on theory and research or curriculum knowledge. This latter is surprising given the influence of the National Curriculum on primary education in Britain. There is also only brief mention of the three areas of children's learning, subject knowledge and the teaching dimensions. This pattern would indicate that the requirements of the Exeter mentoring model are being fulfilled, ie providing a robust description of what actually happened in the context of their knowledge of the class, of the children and of the students intentions. It is of interest to note that there is a difference between students in the extent to which they initiate comment, but it is too early at this stage to consider this in relation to such aspects as teacher dominance or teacher training.

There are, nevertheless, some indications of differences in approach which may be linked to

differential training. For example the untrained teachers consistently seem to find it more difficult to comment.

*"Well, this is going to be really difficult Amanda, because it was an excellent lesson. I haven't really got very much that I feel we need to look at, nothing in fact"*.

Part of the difficulty may lie in not knowing a clear understanding of the purposes of the agenda; for example she says:

*"And I don't think there's any need to go through the things I've put down on the agenda really. Very, very good."*

This is in marked contrast to the other two teachers who deliberately make use of their annotations and the students agenda to review and summarise the teaching episode.

The untrained teachers seem also to have more difficulty in drawing attention to problem areas:

*"As I've just said before, you are managing them so well that I'm picking up on things that I wouldn't normally pick up on, I wondered whether in future to try and let the children the themselves manage"*.

This may, of course, have been a personal difficulty, and a real sensitivity to not upsetting the student; yet the trained class teachers are more direct in their approach; for example:

*"I'd like you to think about what you said here. You had your picture in front of you (and you asked) which is Guy Fawkes". And the children in the front leapt up and pointed to it and you said. "Did I ask you to jump up"?"*

The untrained teachers also have a tendency to interpret the student's thoughts and actions:

*"You were also very careful about where you put the mats... you were insistent on their being ... away from the edge of the wall, so I thought you were really thinking about that". This was again in contrast to the trained teachers who were more direct in asking students about their actions:*

*T: There was lots of evidence ... of you pulling the children, pulling the class back in - sit up and look this way! The use of silence, that was wonderful. Do you remember that?"*

*S: "Just waiting"*.

*T: "Just waiting. You said, 'all right, put everything down now and listen to me', and you had the confidence to keep waiting". This example demonstrates the shared nature of building up descriptions, and although this feature was present in the untrained teacher conversations, there was also a tendency to ignore the student's talk.*

*S: I'm trying to be positive about their movements and to say that some children are working quite hard and achieving their movements"*.

*T: And the next part was when, instead of you observing the children..."*.

### **Conferences with co-tutors and supervisors.**

It will be recalled that the suggested strategy for directing these conferences is characterised by three phases - what? so what? and now what? The aim underpinning this strategy is the elicitation and development of students practical reasoning and argument (cf Fenstermacher and Richardson 1993) through a constant demand for description, explanation, justification and reformulation. Reformulation consists of more elaborate descriptions, extended explanations and the provision of reasons, often in relation to new or different teaching

contexts and dimensions (see the analytic scheme in Appendix 2). It is assumed that reformulation of this kind is a key learning process in developing students' understandings, by indicating, for example, the extent to which they are able to move from situated knowledge to more generic ways of representing knowledge.

To what extent, then, are co-tutors and supervisors able to sustain this strategy? And what are the similarities and differences apparent in their conference dialogues? A start has been made on analysing the transcripts of conferences utilising the practical reasoning framework as set out above.

### General Features

These analyses show a number of similarities and differences in tutors' ability to link descriptive accounts of teaching to more causal, explanatory discourse. They differ, too, in judging when to intervene and decide whether students require direct pedagogical instruction, support or challenge. Challenges, either in the form of objections or asking for more robust descriptions, comparing examples, or extended explanation, are sometimes premature. But irrespective of the amount or type of guidance given, both sets of tutors manage discussion so that it relates to the students' pedagogical thinking. What is also apparent is how both sets of tutors attempt to take the thinking of the students beyond simple descriptions of tasks.

The co-tutors tend to concentrate on detailed description of examples of teaching episodes, making comparisons and identifying what the examples illustrate and exemplify. The supervisors relate teaching to more abstract ideas or principles derived from readings and aspects of students' university courses. It is thus tempting to characterise the co-tutors' strategy in general, as episode-orientated, and the supervisors' strategy, in general as principle-orientated. Although too simple a distinction, it is, nevertheless, true to say that supervisors create a more principle-orientated discussion using abstract ideas by drawing on different kinds of appropriate evidence derived from the instructional design model. These principles are used to interpret specific situations.

### Episode and principle orientated strategies

Presented below are two examples of excerpts from a supervisor and a co-tutor conference to show how the forms of mentoring are predominantly but not exclusively focused on either describing and interpreting teaching episodes or exploring teaching on a more principled basis. In each conference the tutors select and analyse specific kinds of evidence to assist student teachers in their practical reasoning. This varies from the situated knowledge of particular episodes to the context-free knowledge of underlying principles. Both sets of tutors elicit different kinds of analysis, ranging from robust descriptions of teaching episodes to more tentative explanatory and justifiable analyses.

In the co-tutor conferences this usually involves making simple and multiple comparisons, either for the purpose of generating alternative approaches or provoking student teachers' further explanations. In the supervisor conferences discussion focuses upon the decisions underlying the choices made from those available, and the beliefs and values that govern them.

Supervisors assist students in a strategic reformulation of their knowledge and understanding of principles of teaching, (i) by re-visiting earlier interpretations of teaching episodes with the co-tutor, (ii) re-examining how they might do it differently, and (iii) following the implications for future planning. Co-tutors rehearse how to analyse specific teaching episodes so that student teachers can stand back in order to anticipate future teaching events on an informed basis and not merely repeat or partially modify what has gone on before.

What follows is an example of how the supervisor invites a student teacher to re-interpret previous discussions and teaching events in terms of self-evaluation. It should be remembered that this is a second layer of interpretation that started with the class teachers' annotations, and discussion. This sequence begins with the supervisor briefly summarising the student's extended descriptions and explanations of the lesson. The sequence has been broken into five segments, A to E, for the purposes of analysis, and the description of the analysis is presented in Table 2.

A	<p><i>Sup: What you're asking them to do is to listen to discussion, participate in discussion and then to write. In terms of children's learning what are each of those things promoting?</i></p> <p><i>Student: The writing promotes individual thinking. They've had an opportunity to work as a group and contribute as much as they feel they want to and are happy to, but getting them to actually write it down makes them have to think for themselves. And I told them before I read the story that they were going to have to do some writing on it, so that might be why there are so many nice details about names and stuff, because they remembered them. Having to take the information and be able to write it down again in a way they understand makes them be more independent. Whereas the discussion is a good opportunity for them to learn each other's opinions and ideas and share them.</i></p>
B	<p><i>Sup: Just as a matter of interest, do you think there are some children who don't participate a great deal in discussion generally or even in their groups, but actually produce excellent written work?</i></p> <p><i>Student: Yes. The couple of boys that I mentioned earlier, they were very quiet throughout the whole discussion, but they must have been taking stuff in all the time, it wasn't that they were sitting there switched off. They were sitting there and taking information in rather than giving it out.</i></p>
C	<p><i>Sup: So in assessment terms the writing actually proves quite interesting there.</i></p> <p><i>Student: It's backed up what went on in the discussion. If I'd have just worked on the discussion I could have put that Gavin and Ben's understanding was limited simply because they didn't say anything, but because I've got evidence of their written work I know that that's not the case. So it's the two things working together in order to make quite a justified judgement.</i></p>
D	<p><i>Supervisor: A lot of the research suggests that teachers dominate discussion, that was again part of the Edwards and Mercer reading. Do you think you've dominated this?</i></p> <p><i>Student: I don't think I did and yesterday, talking to Ann, she didn't think that I did either. She was pleased with the way that I stepped back sometimes and let them do things. Everything wasn't teacher-pupil. There was sometimes pupil to pupil, so that was nice to see that happening and nice to know that I can still manage the class when there's that kind of situation going on.</i></p>
E	<p><i>Sup: I don't know if you can tell me, but is there something special about your technique of talking to them that enables you to achieve that?</i></p> <p><i>Student: I'm quite fair with them and I do emphasise manners a lot. It could be that. I said at the beginning that that's how we're going to work. If I'm talking or one of you is talking it's only polite to listen to them because you might learn something. I can't stand bad manners basically. And also if you treat them responsibly, assume that they are responsible and they can do it, then there's every chance they will do that.</i></p>

	<b>Form of mentoring strategy</b>	<b>Features of argument</b>
<b>A</b>	Begins with supervisor formulating principles pedagogical thinking.	Requires student to analyse and integrate parts of her teaching, to explain and justify. Students' practical reasoning is made up of a series of principled statement about pupils' learning.
<b>B</b>	Supervisor responds by offering a counter-argument, creating dissonance to provoke students' principled thinking.	Student responds to challenge by offering conditional thinking involving further events and examples. Justifies by adapting and accommodating elements of her original proposition.
<b>C</b>	Supervisor offers another proposition	Student offers extended explanation in further justification; offering reasons.
<b>D</b>	Supervisor broadens scope for discussion by invoking evidence from another source.	Reformulation of incident in terms of principled idea of reconciling different demands.
<b>E</b>	Supervisor asks for further explanation and reasons.	Explanation relates to ethos and rules for talk and expectations.

**Table 2**      Analysis of supervisor's principle-oriented discussion

This extract is an example of how principled discussion is sustained and how the links between specific situations and events and underlying reasons or principles are explored. The pattern of discourse includes elements of principled argument in that the exchanges alternate between -

Original proposition ---- requires justification ---- alternative explanation ---- conditional thinking --- separate elements of original proposition are examined --- reflects on further underlying theme of ethos and order --- relates to the context and purpose for talk.

An interesting feature in this excerpt is how the student draws upon evidence and qualifies it to support, explain, and justify what she is doing by examining the underlying reasons for doing so.

The second example shows how a student teacher and co-tutor corroborate evidence of progress so that they can interpret what is being constructed from a series of events, alongside a re-examination of student teachers' beliefs.

The co-tutor conference fulfils an important purpose: examining evidence of particular teaching episodes requires a high degree of situational appreciation since in identifying the salient features of a teaching episode needs to be accurate, otherwise what follows will be misguided or inappropriate action, no matter how internally coherent the student teacher's argument is in support of what was done. Through the elicitation of reasoning from the student, the co-tutor begins to identify the salient features of a case which extends and elaborates what has already been provided in the class teachers' annotations.

The student has provided a clear and sufficient rendering of the situation which he was working. This excerpt comes from a later part of the conference reasons that will frame the basis for future actions. Although the example is taken from history, the central theme of the relationships between information and understanding applies to other aspects of teaching. The tutor allows the student teacher to select and use evidence of particular events to construct a practical argument but takes the opportunity to confirm what the precise nature of the problem is.

A	<p><i>Tutor: Okay. I'm just going to reiterate what we've done. We've covered in a supervisory conference the programme that we should go through. As you're having quite a success with the dance and you're a specialist in that subject the action plan really is to consult with another specialist and also just to review your planning. Which you're doing anyway and you picked that up even before you came to this conference, which is good. What I want to ask you about now, as this is the first time I've seen you, is about generally looking at the last five weeks, which is a huge thing. But is there one area you would home in on, or highlight, that you feel you could improve in, or would like to improve in? And it could be anything from the nine dimensions of teaching or the instructional design model, or it could be simply a subject that you feel you're not good at?</i></p> <p><i>Student: What I do find difficult sometimes is ... for example, we're doing ships and seafarers, that's our term topic. And sometimes when we're doing things about history - because my subject knowledge isn't good in history - I have to go back and check on my facts and make sure that I'm spot on. Sometimes I think the children can lose out if you haven't got good knowledge and experience of covering the topic over quite a few years. I'm constantly learning as a teacher about things, and I think sometimes children come out with questions and you think 'I've answered that, but have I answered it in great detail, and confidently?'</i></p>
---	---

B

*Tutor: I think it comes over a period of time, though. Obviously we have our specialism, where we're more happy and confident, and I think every teacher has areas they feel they could improve in, and it's really pulling on the expertise of the people around you and, yes, you do have to carry out some research yourself, which becomes easier. You pick up so much as you teach.*

*Student: I think that's the thing, that I'm lucky with the year's experience of teaching. It's a building block, if you like. The lessons I've done now, in the class with the children, I can look back and say 'it was a good lesson, there was nothing wrong with the lesson, the children learnt what I was trying to put across', but when I reflect on my teaching I think 'if I was to do this lesson again I would change this, this and this'. They're just minor points, but will make a difference to the way the lesson is directed. For example, there was one lesson where we were putting something into an order.*

*We were going over facts - it was a piece of English or History that they were doing. And it was the questions I was asking the children about. I was asking them questions to get the answers to work on the structure that we were doing. And I realised at the end that there was a lot of information thrown at the children, a lot of questions were coming back, and we were gaining a lot of information. And it would have been better to stop at one point and put the information ... it was all on the blackboard ... but to get the children to write down the information. (12 lines more on how this lesson could have been done better)*

C

*Tutor: So you felt, in retrospect, that you'd overloaded them? That there was too much going on, too much knowledge, and you needed to stop, slow down, say 'let's just look at what we've got here and consolidate it 'before moving on?'*

*Student: Yes*

*Tutor: I think that can be a common problem sometimes. You bombard them with stuff and suddenly by the end of the lesson you realise that they've lost that first bit of the lesson.*

*Student: It wasn't quite giving them lots of information, they were giving me lots of information. I was directing the discussion, but they were giving me information. I sometimes think that by the time they came to write their whole letter they weren't quite as with it. And I think just getting them to jot down and decide who they're writing it for, that sort of thing, they could have scribbled that down so that they had it there, so that when they came to writing the letter they could say 'I've already decided that I'm doing this, this and this'.*

	<b>Form of mentoring strategy</b>	<b>Features of argument</b>
<b>A</b>	Episodic to principled by re-interpreting teaching events. context-bound	Identifies and cites appropriate points for explanation.  Orientates the tutor to an appropriate basis for explanation

<b>B</b>	Summarises previous contributions.	Makes relevant claims for the significance of selected items in extended explanation. Practises and tests explanation by relating it to other examples.
<b>C</b>	Tutor summarises in terms of purposes	Confirmation by examining purposes.  Reformulates as a principle, distinguishing means and ends

**Table 3** Analysis of co-tutors episode-related discussion

Summary

From the transcripts analysed so far, considerable and understandable differences do appear in conferences conducted by the co-tutor and the university supervisor supervisor. Overall however there is evidence that in the supervisor conferences students are more encouraged to:

- (a) assert their own expertise, as dialogues become more evenly balanced
- (b) use evidence to extrapolate and hypothesise,
- (c) offer timely interruptions to summarise, confirm and reformulate previous explanations,
- (d) request evidence from tutors of alternative perspectives and to justify them
- (e) use theoretical principles of teaching and learning to interpret actual and hypothetical situations.

Conclusion

Data analysis is insufficiently complete to hazard any firm conclusions at this stage. Nevertheless they are sufficiently advanced to begin to answer the questions posed. These referred to the students' perspective on differences between discussions and conferences; the impact of training on class teachers performances; and differences in context and quality of co-tutor and supervisor conferences.

In general the findings so far indicate that the differentiated role structure demanded by the mentoring model are being enacted successfully. Students perceived that teachers, co-tutors and supervisors were focusing on those content areas consistent with their role, and this was

supported by analyses of transcripts of discussions and conferences. Class teachers focus largely on craft knowledge whereas co-tutors and supervisors emphasise different areas of the instructional design model. In stressing episode-related features, co-tutors concentrate on areas such as the nine dimensions, curriculum knowledge and subject matter knowledge, whereas supervisors, in seeking principle-oriented outcomes, relate more to children's learning and theories and research on teaching processes.

Notwithstanding the above it is also apparent that there is considerable variation in the nature and quality of contributions within roles. This is shown clearly in the analyses of agenda annotation where, despite clear training, some teachers provided descriptive, and others, evaluative comments.

Further analyses over the coming months should serve to clarify and extend these nascent patterns such that we gain enhanced understandings of the model and its impact on practice, as well as on the effects of training on participants' performance.

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**What did the royal Tudor family tree look like?**

**AIMS:** To describe the royal family tree of Tudor times (people/dates)  
To represent their family tree using portraits

AGENDA	ANNOTATION
<p><u>Direct Instruction</u></p> <p>Flipchart presentation. "If I say Tudor times to you can anyone tell me when this period in history occurred?"</p> <p>Add dates and label to top of chart: TUDORS 1485-1603</p> <p>Explain: "The Tudor royal family reigned for 118 years through 3 generations. I would like to create their family tree using their portraits."</p> <p>"Does anyone know who the first Tudor monarch was?"</p> <p>Wait for suggestions; show portrait of Henry vii and describe how he became king and significance of marriage to Elizabeth of York.</p> <p>Add portraits, labels and dates. Reminder that this is a brief story and that lots of other things happened!</p> <p>"When Henry vii died in 1509 who then ruled the country?"</p> <p>Wait for suggestions.</p> <p>"What do you know about Henry viii?" C: "lots of wives!" Teach the rhyme: divorced, beheaded, died, divorced, beheaded, survived. Repeat using portraits of Henry viii's 6 wives.</p> <p>Continue with rest of family tree finding out how much is known about each monarch.</p>	<p>Class sitting round chart - all a-see.</p> <p>C: "sixteen hundred and something?"</p> <p>Explanation of 16<sup>th</sup> Century as fifteen hundreds.</p> <p>explains use of portraits</p> <p>No suggestions</p> <p>Showed Henry vii portrait and told story about the end of the wars.</p> <p>Use of family tree explained - "like branches"</p> <p>Discussed relationships. #vii / #viii father / son.</p> <p>"who was #viii's mother?" points to chart. Explain further the branches.</p> <p>Told class rhyme for repeating and remembering</p>

<p><b>Description</b></p> <p>1) Provide an account which contains sufficient points to represent the work accurately.</p> <p>2) Provide an account framed in own words and using verbatim quotations for specific illustration.</p> <p>3) Reorganise the sequence to improve coherence and make connections with supportive items from other pieces of work.</p>	<p><b>Reformulation</b></p> <p>1) Specify similar examples.</p>
<p><b>Explanation</b></p> <p>1) Identify and cite appropriate points for explanation.</p> <p>2) Orientate the reader to an appropriate basis for the explanation and explain succinctly.</p> <p>3) Support the explanation by applying it to other relevant evidence.</p>	<p>2) Identify similarities and differences across several examples.</p>
<p><b>Justification</b></p> <p>1) Make relevant claims for the significance of selected items.</p> <p>2) Relate claims to establish concepts and empirical data.</p> <p>3) Challenge established concepts or empirical data.</p>	<p>3) Examine purposes and principles.</p>

Appendix 2: The Criteria for argument