Background

The conceptual basis for this study is outlined by Wood and Bennett (1999) (Appendix 1) who argue that despite the centrality of progression and continuity in educational policy, theory and practice, they are disputed and under-conceptualised. In explicating conceptions of progression and continuity Wood and Bennett outline the distinctions between Piagetian and socio-cultural theories which present different emphases on the roles of the learner and teacher, and the influence of social and cultural contexts. On the basis of these considerations a socio-cultural framework was adopted for this pilot study, which proposes that progression in learning is not linked to ages and stages, but is dependent on wider factors. Learning implies a process of change, based on the relationships between an individual and the environment that result in the acquisition of new understandings and capacities (Schoenfeld, 1999). Thus progression in learning implies qualitative and quantitative changes across the cognitive, socio-affective and psycho-motor domains. Learning is socially centred and contextually situated, involving dynamic interrelationships through social co-participation and cultural production, with notions of identity and membership closely linked to agency and motivation (Lave and Wenger, 1991). The tutor's implicit theory of the learner is crucial in providing appropriate teaching strategies for connecting children with culturally determined tools and symbol systems (Hennessy, 1993). Of equal importance is children's awareness of their own learning in terms of what they experience when they learn, and how this learning comes about (Pramling, 1996).

Socio-cultural theories integrate the cognitive and social domains because progression is related to the child's existing capacities, the nature of the task or context, the quality of interactions between novices and experts, and the construction of identity and self-esteem. These theories propose that schools and classrooms are pivotal sites where children and adults collaborate to produce, through specific practices and discourses, a variety of meanings and relationships that have implications for academic achievement (Skinner et al, 1998). Those implications include the achievement of effective patterns of progression and continuity. In addition, teachers can be seen as pivotal agents in integrating curriculum and pedagogical processes, as demonstrated in the theoretical model (Figure 1) that informed the study, which links what is to be taught with who is doing the learning.

A number of tensions arise in relating this theoretical model to the early years policy framework that was in place during the study. This framework included the Desirable Learning Outcomes
(DLOs) (SCAA 1996), the National Curriculum for Key Stage 1 (NC) (DfEE, 1995) and the National Literacy (NLS) and Numeracy (NNS) Strategies (DfEE, 1998, 1999). Policy definitions of progression and continuity were curriculum-specific, based on assumptions about the structures of the subjects, and an appropriate order in which curriculum content should be presented. Indicators of progression were stated in the DLOs, and the NC programmes of study and level descriptions, and continuity was assumed within these structures. Progression in learning was conceptualised as linear and hierarchical, and was specified by outcomes, as reflected in the Baseline Assessment Scheme at age 5 and Standard Attainment Tasks at age 7.

This model was reinforced by the Literacy and Numeracy strategies which provide prescriptive frameworks for teaching. As Wood and Bennett (1999) argue, these present inconsistencies with current understanding about early learning. There were several discontinuities in national curriculum policies. Personal and social education (PSE) is one of the six areas of learning in the DLO’s, but does not appear as a curriculum area at Key Stage 1. Curriculum content becomes denser at Key Stage 1 and, with the Literacy and Numeracy strategies, the pacing and sequencing of teaching is intensified. Such policies are problematic in light of research that indicates the gradual development of young children’s understanding and the amount of practice, repetition and consolidation they require (Munn, 1995; Munn and Schaffer, 1993; 1998). These considerations indicated tensions between how progression and continuity are conceptualised at the policy level, teachers’ conceptions and how these influence classroom practice, and the actual progression achieved by children. These three areas were addressed by the study.

Aims and Methods
The original research aims were:
1. To explicate conceptions of progression and continuity
2. To test the appropriateness/utility of a theoretical model of curriculum and pedagogical processes.
3. To ascertain the relationship between
   i) teachers’ theories and beliefs about progression and continuity
   ii) teachers’ planned progression and continuity
   iii) teachers’ implemented progression and continuity
   iv) the progression and continuity actually achieved by the children
4. To identify patterns of progression in children’s work.
5. To enable the development of a full research proposal on this topic.

Research Methods and Data Analyses
Nursery, Reception and Year 1 teachers in five schools participated in the study, including one nursery school (age 3/4) and four first schools (age 3/4-8), three of which had nursery classes. The teachers participated with the agreement of headteachers and their peers. The research design was cross-sectional and longitudinal, over a period of nine months. Two cohorts of children were studied during the Summer and Autumn terms, 1999:

Cohort 1:  
Last term of Nursery and transition to the first term of Reception.  
Four N and R classes with one boy and one girl in each class.

Cohort 2:  
Last term of Reception and transition to the first term of Year 1.  
Three R and Y1 classes with one boy and one girl in each class.  
(Total: 13 teachers, 14 children, and 5 schools)

The stages of data collection included:

1. Teachers' narrative accounts of progression and continuity.
2. Semi-structured teacher interviews (transcripts were returned to teachers for correction and comment).
3. Two sets of classroom observations for each cohort in each term (four altogether).
4. Two sets of pre- and post-observation interviews with teachers.
5. Teachers' analyses of annotated portfolios of children's work in Literacy and Numeracy.
6. Teacher group interviews to discuss and validate data analyses (Spring, 2000)

Two additional data sets provided further insight. First, semi-structured interviews with headteachers ascertained how national policies are mediated by school policies for progression and continuity. Second, two sets of post-observation discussions with the target children in each term elicited children's conceptions of their own learning and progression.

Teachers were asked to write narrative accounts about the two concepts and their importance in relation to their practice, specifically in Literacy, Numeracy and PSE, and to illustrate their theories with reference to specific teaching episodes and/or accounts of children's learning. PSE was included as an additional focus in order to capture the socio-affective domain in teaching and learning. These initial reflections informed a semi-structured interview schedule, with each interview lasting approximately one hour. All interviews were recorded, transcribed and returned to the teachers for comment and correction. Classroom observations focused on teaching episodes of Literacy, Numeracy and, where possible, PSE. Prior to each observation, teachers' described their broad intentions for the lesson, and specific intentions for each target child in relation to their progression, and to continuity with previous and subsequent lessons.

The teachers' verbal analyses of annotated portfolios of work were prompted by a semi-structured interview schedule, and were audio-recorded and transcribed. These data provided a detailed picture of each child's progression over two terms. The involvement of teachers as co-participants was essential to the study. However, it was sometimes difficult for them to find sufficient time for interviews and analyses of children's work, which necessitated additional field
visits by the Research Fellow. Where collaborative research approaches are used, supply cover is essential to do justice to teachers' participation.

Interviews with the children were shaped by a set of questions and prompts, which were adapted according to the context of the interview and the children's responses. This aspect of the study is described more fully under Aim 3(iv) below. The semi-structured headteacher interviews were audiotaped and transcribed, and focused on:

1. school policies for Literacy, Numeracy and PSE,
2. how these were formulated, implemented and monitored,
3. what local adaptations had been made,
4. the nature of discussions between pre-school, Reception and Year 1 regarding transitions and continuity,
5. and the role of target setting for the school and for children.

At each stage data analysis utilised a grounded theory approach (Glaser and Strauss, 1967) in order to 'reveal categories...explore the diversity of experience within categories, and to identify links across categories'. This allowed for systematic organisation and interpretation of the data. Based on Miles and Huberman's (1992) constant comparative technique, and their three-stage process of data analysis: data reduction, data display, and conclusion drawing and verification.

The categories for the teacher and headteacher interviews were defined by the model, which required data on curriculum and pedagogical processes. Key questions guided analyses of the data at three interrelated levels:

- presage (school policies, teachers' planning for progression and continuity),
- process (the tasks set, teaching routines and sequences of activities),
- product (actual progression over time as evidenced by teachers' interpretations of work portfolios, and children's ideas about their own progression).

Thus analyses were based on a cumulative and iterative process, which revealed similarities and differences across the schools, teachers, and children. The data support our proposal that a range of factors would mediate progression and continuity at three interrelated levels:

Level 1: National and school policies

National curriculum policies determine curriculum and assessment practices and, increasingly with the Literacy and Numeracy Strategies, pedagogy. It was hypothesised that school policies would mediate between national policies and practice, which was confirmed by the additional data set from the headteachers' interviews. Level 1 was defined as a curriculum-centred model of progression and continuity.

Level 2: Teachers' theories and classroom practice
Progression and continuity need to be understood within a framework that includes thinking and acting in context in order to demonstrate how teachers utilised and modified national and school policies. Thus the study specified aspects of teachers' thinking that related to progression and continuity, and ascertained the relationship between thinking and practice via planning, implementation and assessment. These processes emerged as pivotal in mediating a curriculum centred-model with learner-centred models (level 3).

Level 3: Actual progression achieved by children
Level 1 and 2 factors, as well as within-child factors influence children's actual progression, which we have termed a learner-centred model of progression and continuity. The findings indicate that the extent to which a learner-centred model can be sustained varies significantly across the three year groups. In addition to tracking actual progression through teacher-annotated portfolios of children’s work and classroom observation, children were interviewed in order to ascertain their own ideas about progression and learning. These interviews were exploratory and experimental but yielded some important insights, which subsequently informed a full proposal to ESRC (Appendix 3).

Results
The first aim was fulfilled in Wood and Bennett (1999). The remaining four are now discussed, in order to demonstrate how each was addressed and met successfully.

Aim 2.
The original model of teaching that underpins the study was informed by our earlier research (Bennett, Wood and Rogers, 1997) which demonstrated that teachers' theories, beliefs and knowledge determine largely what happens in classrooms, and are influenced, and sometimes constrained by a range of mediating factors. This model was combined with a model of learning (Pollard and Filer, 1996) which represents the personal and interpersonal dimensions. The combined model indicates that progression and continuity can be understood through the impact of teaching on learning. Through an iterative process of data collection and analysis, the model was developed to take into account the influence of national and school policies on teacher's thinking and classroom practice, and on patterns of progression. The new planning model (figure 2) is based on consistent evidence that such policies dictate not just what is to be taught, but increasingly how teaching is carried out, and demonstrates a gradual shift from a learner-centred model of planning in Nursery, to a curriculum-centred model in Year 1. The arrows on the planning model represent these differential influences on the nature of progression and continuity actually achieved by the children.
Aim 3.
i) A full analysis of teachers' theories of progression and continuity is presented in Wood, Bennett and Carré (2000) (Appendix 2). The inter-woven nature of the two concepts made clear definitions difficult, and some teachers commented on the impossibility of separating them discretely. Their shared ideas centred on their professional understanding of children as individuals. Progression was essentially about children's learning over time, in a sequential manner, but taking into account individual differences within broad patterns. This consensus included building on what has gone before, and knowing what children need next, taking into account the idiosyncratic, haphazard, non-linear nature of progression. Children might progress slowly or quickly, with periods of change interspersed with periods of rest and consolidation. Thus there are different rates, sequences and patterns of progression across the cognitive, behavioural and social domains. The teachers espoused consistently learner-centred conceptions, and emphasised the importance of planning and teaching responsively.

Another area of agreement was enabling children to develop their social skills, confidence and self-esteem, and to feel safe and secure. These attributes were considered to be essential foundations for successful learning, to the extent that their absence would hinder progression. The emphasis on PSE was particularly strong in the Nursery settings and continued in Reception classes as children settled into new school routines and demands, but decreased in Year 1 as the pace and content of the curriculum increased.

Continuity was linked closely with progression and was conceptualised at two interrelated levels. First, schools tried to achieve smooth transitions between age phases and settings through whole school approaches to home-school liaison, curriculum and behaviour policies, and rules and routines. Second, the teachers aimed to maintain similar pedagogical approaches across curriculum areas and activities, and over time. A multi-layered conceptualisation of progression and continuity can thus be inferred, including national policy frameworks; the school ethos and policy framework; the nature of learning activities and experiences; home-school links, and 'within-child' factors. These factors included the child's attitudes and dispositions towards learning, prior knowledge and experiences, responses to the curriculum, and social skills.

In discussing the significance of continuity from home to school, the issue of discontinuities was addressed. Discontinuities could arise in the transition from home to school because of different values, practices, and cultures. Discontinuities could be general, for example one school emphasised home-school liaison policies and PSE in an area where 'there hasn't generally been a positive attitude towards school'. Discontinuities could also arise in the transition between N-R-Y1 and were influenced substantially by the changes in the pacing of curriculum content.
Discontinuities could also be specific to the individual child, again reflecting wider social and cultural factors. For example, one Nursery child who had an unsettled home background was subsequently taken into care, but nevertheless maintained good academic progress in Reception. Both general and specific discontinuities influenced whole school policies and classroom practice. All the schools had policies for PSE, behaviour, assessment, home-school transitions, and parental involvement. At the level of practice, a strong element of caring was evident across all the teachers, and was manifested in the fine-tuning of curriculum policies and interpersonal relationships with children, particularly in Nursery classes.

Within these broad agreements, a key difference across the three age groups was the extent to which a learner-centred model of progression could be sustained because of the increase in curriculum content and pace of work at both transition points. These differences are evident in how teachers planned for progression and continuity across the three year groups.

ii) Data from the planning documentation indicated that a cycle of planning, teaching and assessment was vital for progression and continuity. Within this cycle, differentiation, target setting and transfer of learning between contexts emerged as crucial. Four areas of teacher knowledge were significant: knowledge of children as individuals, knowledge of the policy frameworks, subject matter knowledge, and knowledge of appropriate teaching strategies and contexts. All the teachers made detailed comments about the children, including their attitudes and dispositions, social skills, home backgrounds, capabilities and limitations, and how these influenced planning and target setting. Their knowledge of the policy frameworks influenced their planning through sequences of learning intentions and relationships with other areas of the curriculum. In all cases, this was backed up by teachers' more detailed subject matter knowledge, and how that should be represented to children. Their knowledge of strategies and contexts enabled them to design activities to fulfill their intentions, with appropriate resources, and organisation of children, adults and time.

Teachers 'transformed', 'modified', 'translated' and 'adapted' school and national policies in the design of tasks. However, there were a number of key differences in teachers' planning which demonstrate the extent to which such transformations were carried out. Long- and medium-term planning related specifically to the policy frameworks (DLOs, NC, NLS and NNS) with differences evident in short-term (daily/weekly) planning. In Nursery classes, planning was holistic and integrated, allowing children time to follow their own needs and interests supported by teacher-directed group activities, and free and structured play. Opportunities were provided for a great deal of practice and repetition (a 'small steps approach') which was facilitated by the adult:child ratio (1:13) and greater flexibility in the DLOs. There was considerable resistance among the
nursery teachers to the policy directives, because they were considered to be inappropriate or inadequate for this age group.

Planning in Reception and Year 1 focused on the subject areas of the NC, with planning sequences often extracted verbatim from the NLS and NNS documents which influenced the content, structure, pacing, and sequencing of individual lessons. Planning in these two subjects was informed less directly by the wide range of abilities in the class, and more by the demands of the curriculum. There was little time for repetition and practice, but long-term planning allowed for revisiting topics at a more complex level. In Reception, planning reflected the need for children to learn routines, particularly in the Literacy and Numeracy strategies. There was some resistance to these strategies. As one teacher remarked ‘we’ll do it our own way’. However, they adapted to the demands of national policies and were conscious of both the need to prepare children for the next stage, and to meet Y1 teachers’ expectations. In both Reception and Year 1 there was less emphasis on planning for individuals, with fewer open-ended tasks. Year 1 teachers were also conscious of Year 2 expectations, particularly regarding SATs.

The influence of both strategies was sufficiently great for Reception and Year 1 teachers to structure progression differently from how they had done traditionally, even where this ran counter to their professional knowledge and experience. Teachers moved through topics in line with the NNS and NLS, sometimes regardless of the level of children’s understanding, or their attainments. These frameworks influenced, indeed dictated, progression and continuity and sometimes ran counter to teachers' professional judgements about their appropriateness and their theories about progression. This created a dilemma for some teachers. Our analyses demonstrate that the cumulative demands of the NC and the Literacy and Numeracy strategies strongly influenced the transition from a learner-centred model to a curriculum-centred model (Figure 2).

There were different emphases on the importance of PSE, and how it was taught. In Nursery PSE was thought to be vital in promoting social skills, self-esteem, and developing an ethos in which children would feel safe and secure. It was taught explicitly in daily sessions. This emphasis lessened in Reception and Year 1. In the latter it was taught once a week, or more incidentally in response to classroom/playground issues.

At all levels planning included a transfer of skills and knowledge learnt in one context, into other contexts. Transfer was considered to be difficult to achieve, but a 'small steps' approach was adopted in Nursery and Reception classes. Teachers planned for representing ideas in a variety of ways to help children progress from concrete/iconic/verbal learning, to recording and using
symbols, which assisted transfer. Their planning consistently linked subject matter knowledge with the associated modes of thinking, procedures, and strategies in order to assist both ‘near’ transfer and ‘far’ transfer, as shown in Figure 3. Teaching for ‘near’ transfer occurs when new learning acquired in one setting is applied in a similar setting. ‘Far’ transfer involves helping a child to learn something in one setting, and apply that to another that is very different.

iii) Progression and continuity were facilitated by transition arrangements, the ways in which children were grouped, the range of teaching/learning contexts provided, and differentiation, assessment and target setting. Each of these areas is now discussed.

The headteachers’ interviews reveal a consistent picture of coherent policies to achieve progression and continuity through ‘smooth transitions’ between and within schools. Transition policies included home visits, liaison between teachers, visits by teachers and children to the next setting, transfer of records and portfolios, parent-teacher meetings. However, progression and continuity were hindered by the logistics of transition in two ways. First, there was insufficient liaison between Nursery/Reception and Reception/Year 1 teachers. When it did happen, vital information was late in arriving and/or sometimes relied on informal arrangements without written records. In one school, which admitted children from different pre-school settings, continuity was more difficult because of the absence of records and significant differences in previous expectations and curriculum experiences. Second, there was insufficient understanding by Reception teachers of what Nursery teachers described as ‘changes in social environment’, sometimes resulting in activities with needlessly low expectations of some children, and repetition of work carried out previously. Children had to adapt to significant changes in teaching styles and curriculum demands in Reception and Year 1, and some demonstrated regression in their previous knowledge and understanding.

Data from the teacher interviews on transition arrangements indicated that where detailed records were passed on, they were not always consulted immediately. Reading detailed reports was considered to be time consuming, and teachers reported that they liked to get to know the children and make up their own minds. These practices had a direct impact on progression and continuity because work could be poorly matched in the initial weeks of transition. The most useful information was considered to be about how children might be or had been grouped.

In Nursery, children were placed in mixed ability groups for common teaching inputs. Differentiation occurred mainly in the way children engaged with play-based and teacher-directed tasks, which in turn informed the nature of support offered by adults. Thus progression and continuity were predominantly learner-centred, with activities structured to ensure coverage of
the DLOs, and with consistent emphasis on social and emotional learning. In Reception and Year 1 classes children were grouped according to ability in Literacy and Numeracy, which facilitated differentiated inputs to groups and individuals.

Teaching strategies and contexts also differed across the three year groups. The influence of the NLS and NNS was greatest in Year 1, with modified approaches in Reception and Nursery classes. This pattern was evident in teachers' planning for differentiation. In Reception differentiation was commonly planned for in pairs or small groups, and in Year 1 for ability groups, but with much more teacher-directed inputs. The range of contexts and activities observed indicated that, to varying degrees, teachers implemented their theories by providing 'more of the same', or challenges and extensions. This was more problematic by Year 1 as the NLS and NNS influenced teaching strategies and progression. One teacher described these strategies as 'less continuous' because of reduced opportunities to plan for individual needs.

Play was seen as providing valuable contexts to assist progression through transfer of learning between contexts, and providing opportunities for challenges, practice and repetition. However, a key difference between the year groups was the amount of time devoted to play. In Nursery, planning included ‘free’ play, which allowed children to follow their needs and interests, and structured play where academic work was reinforced or consolidated (for example practising emergent writing in role play). Substantial amounts of time were allowed for play (up to 80 minutes per session in the Nurseries) with teachers supporting children's learning and carrying out observations to inform further planning. The balance between play and teacher-directed work subsequently changed significantly, with little time for play in Reception classes, and almost none in Year 1. Some of the activities provided were classed as ‘playful’, but these were predominantly teacher-directed to achieve specific learning outcomes, with little choice and control by the children. Thus the demise of play can be seen as a discontinuity because there was little progression in children's skills as players, and little continuity in play-based activities and teaching approaches.

All teachers assessed performance by outcome and tracked progression by recording observations on children. These strategies informed planning, target setting, and agreement across teams about continuity. How the targets were set varied across the year groups. In Nursery, targets were related to individual children’s progression, using the ‘small steps’ approach. The targets and activities chosen were informed by 'where children are', the teachers' knowledge of the next appropriate steps, and the loose framework of the DLOs. By Reception and Year 1 target setting adopted a more curriculum-centred focus. Target setting has emerged as a key influence on progression, and in all schools the targets were shared with the children.
and parents. This finding has been incorporated into the full proposal to ESRC because it indicates the importance of ascertaining parents' roles in assisting progression and continuity.

iv) Data on the progression and continuity actually achieved by the children was obtained through the pre-and post-observation interviews, the observation schedule, teachers' analyses of work portfolios, and the additional interviews with children to ascertain their understanding of their own learning and progression. The major influence of national curriculum policies is to cover specified content in a particular sequence, and with specified outcomes. This influence is evident in the planning and implementation stages, and in the progressions actually achieved by the children. The data were content analysed to show the language teachers used to describe progression. In all cases, their language reflected the statements in the relevant policy frameworks but at the same time conveyed a deep understanding of the progressions of individual children in Literacy, Numeracy and PSE. The teachers' analyses of the portfolios centred on children's competencies, and what they were in the process of coming to know, do and understand. The data also demonstrate how teachers managed the dilemmas posed by juxtaposing their learner-centred conceptions with an increasingly curriculum-centred model of progression and continuity.

The teachers' comments about progression in PSE reveal common categories including behaviour, self-confidence, attitudes and dispositions towards learning, relationships with peers and adults, play skills, and their personalities. Across the two transition points, the teachers' descriptions centred on most children becoming more competent, better or more mature in these areas. There were noticeable gender differences in the teachers' descriptions of progression in PSE, with more comments about boys relating to their behaviour, and more comments about girls relating to their dispositions and personalities.

Changes in expectations, and in the social context and organisation of Reception and Year 1 classes proved to be problematic for some children. Learning loss and regression were evident in some children as a result of discontinuities between year groups. The teachers' reasons for this include: poor retention of work covered in the summer term; young children's limited capacities for retaining information; the effects of a long summer holiday; and children orientating to new demands and expectations.

The interviews with children on their ideas about their progression and learning were exploratory and experimental. On the first visit, the questions elicited children's thoughts about the nature of the activity the teacher had given them, and how they had interpreted it. On the second visit, the questions elicited the nature and extent of children's understanding of their own learning and
progression. The data yielded valuable insights first into methodological considerations and second into children's ideas. Methodological issues included creating a suitable environment, informing the child about the purpose of the interview, and adopting an informal discursive style. The same open-ended questions were posed to each child, but were adapted to suit individual's capabilities and linguistic competence. Praise was given during discussion, as well as verbal prompts to assist recall of past events. The context of the interview differed according to the child's age, and/or confidence. Some Nursery children were interviewed with a parent alongside, but with the proviso that no help or interruptions were allowed. In some cases the teacher assisted with the interview but this was not always successful as some prompted the children's replies in line with their own perceptions.

To elicit children's ideas about progression, it was important to establish the degree to which they could recall previous events and the ways in which they used language to describe how they thought they had 'got better'. Most of the children recognised their work from the portfolios, and these proved to be valuable in providing the motivation to talk and triggering memory. There were significant differences in their recall strategies and language abilities, which were not defined by age. One Nursery child provided a striking example of long-term memory, accurate recall and reporting of events from several weeks earlier, and competence in language to describe her learning and progression. More confident children provided a running commentary, whilst less confident children provided short, and sometimes idiosyncratic, answers. Not all children understood the concept of learning or what they had 'got better at'. In spite of these reservations, there is evidence to indicate that there is progression in children's ideas about their own learning and progression, which have implications for further research. Given the increasing use of collaborative target setting, young children are likely to be participating frequently in discussions about their learning. This was considered to be a fruitful and under-researched area for development in the full proposal (Appendix 3).

Aim 4
Overall the findings indicate that the achievement of effective patterns of progression and continuity is crucially dependent on teachers' abilities to mediate curriculum-centred and learner-centred models. It is teachers who link what is to be learnt with who is doing the learning, according to their theories and professional knowledge. However, there are differential effects of national policies on practice, and a number of constraints on this relationship from Nursery into Year 1. Our analyses indicate that teachers have models of competence in the curriculum areas, which include knowledge about each subject and its associated modes of thinking, procedures, strategies and intellectual practices. The teachers' models are much more refined than those presented in national policy documents, and are firmly grounded in their professional knowledge
about how young children learn. Progression is not just multi-layered, it is also multi-dimensional, and includes:

- the incremental acquisition of subject matter content knowledge
- enculturation and participation in the discourses and practices of Literacy and Numeracy
- the development of children's self-esteem and self-perceptions as readers, writers and mathematicians
- the development of the socio-affective domain
- children's ideas about what learning involves, and their own progression
- interpersonal and intrapersonal factors

The study raised issues about the nature of linearity and patterns of progression. Although children are seen as individuals, learning at their own pace and in unique ways, the teachers also saw patterns of sequential development and generic aspects of progression. So within unpredictable, non-linear patterns, the overall pattern of progression was linear, that is, most children would achieve similar outcomes but at different rates, and in different ways. Socio-affective factors, teaching-learning contexts, transitions, and home/family factors influence progression and continuity. It is teachers' knowledge of learning that substantially informs their practice, particularly regarding the progression of individual children, and enables them to modify national policies. However, by Year 1 their knowledge is being short-circuited and possibly undermined by the highly prescriptive Literacy and Numeracy Strategies.

Conclusion

Whilst it is not possible to make generalisations from this small-scale pilot study, the data were of sufficient depth to illuminate the tensions and contradictions in theory, policy and practice identified by Wood and Bennett (1999). Theoretically, the outcomes demonstrate how progression and continuity are determined by social, cultural and pedagogical practices, based on dynamic interrelationships between teachers and learners. Progression is multi-layered and multi-dimensional, and involves both inter- and intra-personal factors across home and school settings. Although progression and continuity are increasingly influenced by national curriculum policies, there remain tensions between progression in learning, and in curriculum content.

Teachers draw extensively on their pedagogical epistemologies to address these tensions, even where national policies are at odds with their professional knowledge. The findings have substantially informed the development of a full proposal on this topic (Aim 5) which was submitted to ESRC in June 2000 (Appendix 3).

Our original model of curriculum and pedagogical processes was developed to include a model of planning which demonstrates how the emphasis changes from a learner-centred model to a
curriculum-centred model across the year groups. On the basis of the pilot study, key areas for further research include the impact of the new policy frameworks from September 2000 and how these are managed; the role of parents, teachers and children in the collaborative setting and achievement of targets, and the effects on progression; the effects of transitions on progression and continuity; the role of play, and progression in children's ideas about their learning. The methods trialled in the pilot study for tracking progression through work portfolios, and eliciting children's conceptions of learning and progression, are developed in the full proposal.

DfEE (1995) Key Stages 1 and 2 of the National Curriculum, London, HMSO
Miles, M.B. and Huberman, A.M. (1992) Qualitative Data Analysis, California, Sage
Munn, P. (1995) Progression in Learning Literacy and Numeracy in the Preschool, in Hughes, M. Progression in Learning, BERA Dialogues 11, Clevedon, Multi-Lingual Matters
SCAA (1996) Desirable Outcomes for Children's Learning, UK, SCAA
Figure 1: An integrated model of pedagogical processes

LEARNING PROCESSES

- "Who" is learning?
- What are the learning outcomes?
- How supportive is the learning context?

CURRICULUM AND PEDAGOGICAL PROCESSES

- Enactment: i) presentation, ii) classroom organisation, iii) discourse
- Task Planning: i) transformation, ii) representation, iii) differentiation

Outcomes
- i) Assessment

School Policy

Teachers' Theories, Beliefs and Knowledge
- Curriculum Planning: i) conceptual, ii) developmental, iii) cognitive
Policy to Practice: Teachers’ Dilemmas

Desirable Outcomes

Numeracy Strategy

Literacy Strategy

Key Stage 1

School Policies

Nursery

Reception

Year 1

Teachers’ theories of progression and continuity influence planning

Learner-centred approaches

Social development

Figure 2
**Figure 3** A variety of teaching strategies as described by teachers

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<th>Near transfer</th>
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<td>Show and Tell</td>
<td>Modelling and Demonstration (How to do things - procedures)</td>
<td>Practice and rehearse the rules - even if little understanding</td>
<td>Problems and challenges with provision of many different contexts</td>
<td>Think about learning - what you've just done and how you can get better</td>
</tr>
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**Directive** Facilitative