

HOMEWORK AND ITS CONTRIBUTION TO LEARNING

Full Report of Research Activities and Results

1. Background

(a) Policy context

The research took place during a period of considerable interest in homework among educational policymakers and politicians. Since coming into office in 1997, the Labour Government has placed considerable emphasis on raising standards of attainment in schools, particularly in literacy and numeracy, and homework has been seen as an essential part of this drive to raise standards. In 1998 the Department for Education and Employment issued Homework Guidelines which specified how much time should be spent on homework at different ages, and placed much greater emphasis than before on the importance of homework in primary schools (DfEE, 1998a). At the same time, the DfEE encouraged after-school homework clubs and other forms of study support (DfEE, 1988b), while OFSTED published the findings of research it had sponsored on good homework practice (Weston, 1999). These developments were accompanied by regular statements from ministers that homework was a good thing (eg Blunkett, 1997), combined with public criticism of researchers who suggested that the evidence in favour of such claims might be less than conclusive (eg Blunkett, 1999).

(b) Previous research

The research evidence concerning homework is in fact somewhat equivocal. While there has been a number of studies showing an association between time spent on homework in secondary schools and attainment (eg Barber et al, 1997; Tymms and Fitz-Gibbon 1992) there is much less evidence of a similar association at primary level (eg Farrow, Tymms and Henderson, 1999; Muhlenbruck et al, 2000). In addition, more detailed studies of actual homework practice suggest that it often falls short of what is considered desirable (eg Warrington and Younger, 1996). These conclusions are supported by two major reviews of the research literature which appeared during the course of the project (Cowan and Hallam, 1999; Sharp, Keys and Benefield, 2001). Both reviews also indicated the need for research which looked closely at how homework actually contributes to learning, particularly in the UK context.

(c) Theoretical perspectives

The present research therefore attempted to fill this gap by studying in some detail the contribution which homework makes to actual student learning. The project adopted a broad socio-cultural approach, drawing on the work of theorists such as Wertsch (1991), Daniels (1993, 2001) and Pollard and Filer (1996). This approach emphasises the need to understand learning within the social and cultural contexts in which it takes place, and led to the development of a conceptual framework (see Appendix 1) which was used to structure both data collection and data analysis. The socio-cultural perspective adopted by the project was enhanced by its transfer to Bristol in 1999, and the opportunity to locate the work within the ongoing CLIO (Cultures and Learning in Organisations) initiative. The project also benefited theoretically from its involvement in the ESRC seminar series 'Socio-Cultural Theory and Learning Contexts'

2. Aims and Objectives

The overall aims of the research were **to examine the contribution which homework makes to pupil learning at Key Stages Two and Three and to identify some of the conditions under which this contribution is enhanced or reduced**. These aims have been met by addressing the specific objectives as follows:

Objective 1: To further refine methodology for studying homework

During the course of the project the methodology developed in the pilot study was further refined and put into practice. The methodology involved a two-stage data collection process, with the first stage focusing on homework in general, and the second stage focusing on particular homework assignments (see section 3 below). The techniques developed for the second stage, in which homework assignments are 'tracked through', have not, to the best of our knowledge, been used in previous research. Nevertheless, they are not unproblematic: for example, there is only a small 'window of opportunity' after a homework has been completed when it is possible to question students and teachers about it before it becomes overtaken by further classwork and homework.

Objective 2: To use this methodology to collect detailed data on specific homework assignments, looking in particular at (a) tasks (b) pupil engagement (c) contexts (d) support (e) pupil characteristics and (f) learning outcomes.

The methodology described in section 3 below was used to collect extensive data on homework in all of the above areas. The data collection was carried out meticulously by the Research Fellow and has resulted in a high quality and possibly unique data-set which can be revisited from several different perspectives.

Objective 3: To develop and test a conceptual framework of possible influences on homework and learning outcomes

The conceptual framework developed during the pilot stages of the research was refined further and used to structure both data collection and data analysis (see for example the 'Circles' case study in Nominated Publication 2, Appendix 1). One limitation of the framework which emerged during the present research was that it did not give sufficient weight to the importance of the 'subject' context: there were clear differences between subject areas, particularly at KS3, in the approaches adopted to homework.

Objective 4: To contribute to wider theoretical understanding of the ways in which tasks, contexts and learner characteristics interact to generate learning outcomes

Data from the homework project has been used to inform and extend wider theoretical debate in a number of ways. For example, we have used project data to develop thinking with colleagues in the GSoE about 'learning at the interface of two cultures' (see Nominated Publication 1). We have also attempted to develop Sfard's (1998) theoretical distinction between two metaphors of learning – *learning as acquisition* and *learning as participation* – and followed her proposal that we use these metaphors simultaneously rather than embrace one at the expense of the other. Project data was used to illustrate and develop this argument in a paper at the BERA Conference 2001 and a seminar at the University of Birmingham.

Objective 5: To contribute to current national interest in homework by bringing the research to the attention of policy-makers, practitioners, parents and the public.

At an early stage in the project we set up a project Advisory Group, which contained representatives from DfES and OFSTED, a primary and secondary headteacher, an independent homework consultant, and two academics. The Group met three times during the lifetime of the project and was extremely valuable in establishing a multi-directional dialogue between the project team, policy-makers, practitioners and academics. A dissemination strategy for the project was developed in consultation with the Advisory Group, including a verification seminar held at the DfES in March 2002, and further dissemination activities are planned (see section 7 below).

3. Methods

(a) Sample

The sample was based around four secondary schools and four primary schools in the South West of England. The secondary schools served very contrasting catchment areas. Two schools had a high proportion of students eligible for free school meals, with most of the students in one of these schools coming from ethnic minority groups. A third school was a city based church school, which drew students from all over the city, while the fourth served a large rural area. The catchment areas for the primary schools were very similar to the secondary schools, as each primary school was a 'feeder' school for one of the secondary schools.

In each secondary school we focused on Year 8, and selected six students (three boys, three girls; two high attainers, two medium and two low) for more intensive study. Data was actually collected on a larger number of students, as additional students were included either as back-up or in order to comply with requests from the participating schools. In the primary schools we focused on Year 5 and again selected six students for intensive study. We also interviewed at least one of the parents of each of these students.

At Key Stage 3, a total of 64 teachers from the five subject areas of English, maths, science, modern languages and humanities were involved in the study. This number was larger than anticipated, mainly due to the widespread setting of students across all subject areas. Four class teachers were also interviewed. At Key Stage 2, seven teachers were involved. In addition, we interviewed the headteacher of each participating school.

(b) Data collected

A range of different kinds of data was collected:

(i) Interviews

Each student was interviewed twice, usually at home. The first interview was about homework in general, and the second related to a specific piece of homework the student had been set. Each teacher was also interviewed twice, with the first interview again being about homework in general and the second about the specific piece of homework the student had been set. Each parent was interviewed once, covering areas such as their perceptions of homework in general, their aspirations for their child, and their own role in homework. A few parents also commented on the specific homework after the second interview with the student. The headteachers each received a single interview focusing on overall school homework policy and practices.

All interviews were tape-recorded and transcribed. Each transcript was then checked by the Research Fellow against the original tape-recording – a labour-intensive process but one which was necessary to identify small but potentially significant errors in transcribing.

(ii) Field notes

These were wide-ranging. Notes were made in schools, homes and communities about a range of factors which might have a bearing on homework in each of these contexts. In addition, observations were made of lessons in which homework was set, in order to relate the content of the homework to the work covered in the lesson. Overall, data was collected on 65 different homework assignments at Key Stage 3, and 15 at Key Stage 2.

(iii) Documentation

A wide range of documentation was collected, including copies of homework policies and students' homework planners. In addition, photocopies were made of all the work produced by the students in response to the specific homework which was set.

4. Results

This section summarises the main findings emerging from the research. Both quantitative and qualitative techniques have been used. The findings are presented as answers to our seven research questions, drawing on data from KS3. This is followed by a section describing how homework at KS2 differs from that at KS3. Throughout, we refer to illustrative examples and more extended discussion in Nominated Publications 1 and (especially) 2. These are referred to as NP1 and NP2 in the text.

RQ1: What kinds of task are set for homework?

(a) Taxonomy of tasks

A taxonomy was developed from an analysis of the homework tasks observed at KS3 (see NP2, p18). Applying this taxonomy to the data showed that *practice and reinforcement* homeworks were the most common in all subjects except English (see NP1, p4). In English, the most common form of homework was *production or creation in a particular form or genre* (eg 'Write a news item for the front page of a newspaper on the death of Julius Ceasar'). This type of homework was occasionally seen in other subjects (eg in humanities when students were required to write a diary of a slave). *Research* homeworks were not common but were observed in all subjects except languages. *Revision* homeworks seemed to cause particular difficulties for some students. These difficulties seemed to arise because no one had explicitly taught them what was involved in revising a topic for homework (see extract from HG student, NP2, p18). Finally, we should note that we rarely observed homework being used simply to *finish off classwork*.

(b) Relation to life outside school

The vast majority of homework tasks were closely related to the school curriculum, and required few, if any, connections to be made with life outside school. There were however some exceptions to this general pattern, and these homeworks were reported by the students to be more engaging and enjoyable than normal homeworks (see NP2, p19 for examples of these).

Some of the students were asked whether there was anything in their life outside school which had helped them with particular homeworks. The great majority said that they couldn't think of anything. The same group of students were also asked whether they could see ways in which their homework might help them with (or be relevant to) life outside school. Again, almost all the students replied 'no' or answered in a rather general and hypothetical fashion (e.g. their science homework might help them if they were later to become a scientist).

(c) Position in the flow of work

Although homework has sometimes been referred to as 'prep', very few of the tasks we observed were preparatory to a lesson. Instead, the majority of homeworks in all subjects were related to and built on the work of the preceding lesson. It may be that there are risks associated with setting preparatory homework, in that non-completion may

mean that students are unable to participate fully in the subsequent lesson (see the Circles case study in NP2, Appendix 1, for a good example of this).

Although homework mostly arose from a previous lesson, it was unusual for it to feed into future lessons. In most cases, the homework task was the final element in the work flow. One rare exception was when students watched a video of Cromwell in a humanities lesson and then had to identify 5 good and 5 bad points about him for homework: this was to prepare them for a question about him in later coursework.

The content of a small number of homeworks was unrelated to the previous lesson. This occurred most often where a homework booklet had been prepared that the students worked through each week. In one school, both the maths and English departments used booklets of this kind with the lower sets. Some of the teachers were unhappy with this as they wanted to relate the homework more to classwork. In addition, some of the students using the maths booklets had difficulty completing all the questions - and their parents were constrained in their ability to help - since each paper included a variety of topics none of which was easily accessible in the students' immediately previous work.

RQ2: To what extent and in what ways do students engage with these tasks?

(a) Completion of homework

One way of looking at student engagement with homework tasks is whether the homework is actually completed or not. At KS3 just under a quarter of 'homework-instances'¹ were not set or not completed. 7% of homework-instances were not completed because of absence, while 11% were not completed for reasons other than absence. The proportions for non-completion for reasons other than absence were compared according to gender, attainment level, school and subject but there were no differences, although it should be noted that the numbers involved are small.

There appeared to be three main reasons for non-completion of homework (other than absence). First, students felt that there was little to be gained from doing the homework. Secondly, students were unable to cope with the content of the homework, although they didn't always express their reasons in such terms. The third reason given for non-completion was time pressure. In addition, students sometimes said they had not completed homeworks which looked 'boring' (see NP2, pp24-5).

(b) Effort put into homework

Another way of looking at engagement is to look at the amount of 'effort' which students put into particular homework tasks. At KS3, we found there was a great deal of variation both within and across students and tasks in this respect. In particular, we were struck by the extent to which students appeared to *operate strategically* in deciding which homeworks to put a lot of effort into and which to put in minimal effort. We were also surprised by the extent to which students at this stage were motivated by external factors, such as rewards or stars (see NP2, p12 for a table summarising students' reasons for putting more or less effort into homework).

RQ3: What are the main contexts in which homework originates and is carried out, and how is homework perceived and valued within those contexts?

(a) Setting homework

Homework was set by the teachers during lessons in the classroom. The majority of homeworks were set at the end of the lesson, but there were clear differences across subjects on this. Almost all maths, language and humanities homeworks were set at the end of the lesson, possibly reflecting the predominance of practice and reinforcement homeworks in these subjects. In contrast, science and English homeworks tended to be set earlier in the lesson. In some cases this allowed the students to start work on the homework during the lesson itself.

In many cases, the setting of homework and the request to 'get your planners out' effectively signalled the end of the lesson. The students would rapidly go off task and transfer attention to bags, coats etc. This meant that the homework assignment was not always communicated as clearly or effectively as it might be. In some of the parent interviews it was commented that the students did not always manage to get the homework down fully.

(b) Carrying out homework

¹ The same tasks was often set for more than one student. In some cases it was completed and in others it was not. 'Homework-instance' is used as the unit to represent each individual student's response to the homework task.

Perhaps not surprisingly, the great majority of homeworks were carried out at home. There were, however, some exceptions to this. Some students tried to get as much homework as possible done while they were still at school – for example, at lunchtime, in the breaks between lessons or even during the lessons themselves. Other students needed to use school resources – such as the library or computer room – or found working at school less distracting than working at home.

When homework was done at home, it was more likely to be done in the students' bedrooms than in the more public 'family' rooms. One implication of this is that it is more difficult for parents to know what is being done for homework and how much time is spent on it when it takes place outside of the public rooms. Those students who carried out their homework in public rooms often managed to combine their homework with other activities, such as watching TV. Indeed, several students said music or TV helped them get through the homework, especially if it was boring.

There seemed to be different expectations across the four schools as to where homework was done. In the two schools with a low proportion of free school meals, teachers were more likely to expect homework to be done at home. In the other two schools, teachers were more accepting of homework being done at school, as long as it was not done during lessons.

(c) Students' perspectives on homework

The KS3 students fell into three roughly equal groups – those who were positive about homework, those who were negative, and those who had mixed feelings. The main positive reasons given for homework were that it helped in some way with their learning, and that it gave them something to do at home. The main negative reason given was that homework encroached on what they saw as their own time (see NP2, p11).

Most students saw the purpose of homework as helping them understand or remember work they had covered in class, although some were quite sceptical about whether homework actually served these purposes. Very few students thought that homework was about independent learning or about helping them take responsibility for or organise their own learning.

Most of the students felt that the amount of time they spent on homework was about right, with some suggesting there was too much. Two students felt there was not enough homework.

(d) Parents' perspectives on homework

At KS3, the great majority of parents were in favour of homework, and were concerned or alarmed at the thought that it might be abolished. They saw homework as serving two main purposes, which in fact were somewhat in conflict. The first was that homework was essentially an extension of school: it could provide extra time to get schoolwork done and/or to reflect on lessons. The second was that homework offered something essentially different from school: in particular, an opportunity for students to develop study skills and work independently. Where parents expressed negative views about homework it was because they saw it as encroaching on students' out-of-school lives (see NP2, pp12-13)

The parents were much less satisfied than the students with the amount of time being spent on homework, with nearly half the parents thinking there should be more time spent on homework.

Most parents said that they were prepared to help their children with homework if asked and/or they were able to. Parents cited difficulties with particular subjects and difficulties understanding the requirements of the task as causing problems. The subject most commonly mentioned in this connection, especially by mothers, was maths.

Parents held different views on whether they should check their child's work or not. Some monitored their children's work quite closely, while others thought such a practice undesirable (see NP2, pp13-14)

(e) Teachers' perspectives on homework

The teachers were much more ambivalent about homework than the parents. On the positive side, many teachers felt homework allowed them to extend their teaching beyond the classroom, and provided an opportunity for students to practice procedures learnt in class, to consolidate or build on classwork. Some teachers said they simply couldn't get through the curriculum without it.

At the same time, many teachers felt under pressure to set homework whether they felt it was appropriate or not. They saw this pressure coming from a range of sources, including government policy, school policy and parents. A common perception was that the teachers felt locked into a school homework timetable which meant they had to set homework at certain times in the week, whether or not this fitted with their teaching requirements. Several teachers summed up this situation with the phrase '*I don't like homework for homework's sake*':

Some teachers were sensitive to the diverse circumstances in which students carried out homework: for example, they were aware that some students had fewer resources in the home than others. In some cases this sensitivity could lead to teachers setting less challenging 'can do' homeworks (see NP2, pp14-15).

(f) Headteachers' perspectives on homework

The four headteachers at KS3 were all positive about homework. They saw homework as serving a range of purposes, of which the most important was its capacity to encourage independent learning. Two headteachers explicitly referred to the *symbolic value of homework* - i.e. it was often associated with a 'good' school, much as uniform was.

Particular issues for the headteachers were that of developing and implementing homework policies, and dealing with variation between subject departments and between individual teachers. The headteachers also saw their role as balancing and managing parental expectations about homework (see NP2, pp15-17).

RQ4: What kinds of support are provided for homework within these contexts?

(a) Support at school

(i) When homework was set

In about half the homeworks, the teacher gave some additional explanation when setting the task. This was usually extra information about the task and how to complete it. It was rare, however, for the teachers to make it explicit what they would be looking for in a homework.

Some teachers directed the students to sources of information and resources when setting the homework, particularly if it was a research homework. For example, when setting the 'Cromwell' homework referred to earlier, the teacher checked which students had access to Encarta or the Internet at home and which ones could access them at school. She also promised to be available one lunchtime if anyone had any difficulties with the work. This kind of support was however rare.

(ii) Feedback on completed homework

The great majority of written feedback provided by teachers on written homework could be seen as summative assessment. That is, the teachers were primarily concerned with whether the homework had been completed properly, whether the students had produced correct or appropriate responses, with pointing out errors and with providing an overall score, grade or comment which summarised how well the student had performed. In only a minority of cases could the feedback be seen as providing some formative information for the student. When this occurred, however, it was likely to be appreciated by the students (see NP2, pp 22-23)

(iii) Rewards and punishment

All four schools in the project used some kind of merit or reward system, such as stars, stamps or stickers. It was noticeable that among the sample of marked homework such rewards were awarded only to low-attaining students. This might be a statistical quirk but it may reflect a tendency for low attaining students to be more readily rewarded. It was also noticeable that negative feedback was rare.

(b) Support at home

About a fifth of the students at KS3 said they had received help from family members, usually their parents, when completing their specific homeworks. Within the families, there seemed to be some clear 'specialisation' along gender lines: mothers were much more likely to help with English, languages and humanities, while fathers, brothers, and uncles were more likely to help with science and maths.

Most teachers thought that parents should play a 'managing' role in students' homework, for example by ensuring suitable circumstances for doing homework (place, time, quiet etc), being aware of what homework was set, and ensuring it was completed. However, teachers were divided as to whether parents should be involved beyond this. Some teachers felt that students shouldn't need help with homework, while others thought parental help was acceptable 'as long as they didn't do the work for the student'. Teachers were also strongly divided over whether parents should check completed homework. In practice, it seems that the teachers seriously underestimated the extent to which the students were getting help with their homework at home.

(c) Support from peers

About a fifth of the KS3 students said they had discussed their homework with other students. However this figure included fairly minor interaction as when students checked their work against that of other students just before handing it in. In about only one tenth of instances had students worked together on their homework, usually over the phone (see NP2, p21)

There were no differences between male and female students in this respect. However, high attaining students were twice as likely as middle and low attaining students to have worked with other students. While the numbers are too small to carry much weight, it is worth noting that friends may be less able to act as a resource for each other in the lower sets.

RQ5: What effects do pupil characteristics (such as age, gender and learning identity) have on the way homework is perceived and carried out?

(i) Age

(See discussion below of Homework at Key Stage 2)

(ii) Gender

Somewhat surprisingly, gender did not feature as a prominent issue in the research. For example, we found no gender differences at KS3 in students' feelings about homework, in their completion of homework, in the extent to which they worked with other students on homework, or in the amount they thought they had gained from homework. When asked directly about gender, students and teachers responded either by saying there were no differences between boys and girls, or that girls were more likely to put more effort in and take greater care over presentation. Parents were unlikely to say much about gender unless they themselves had experience of both sexes.

(iii) Learning identity

At the start of the research we predicted that 'learning identity', which we defined as 'how students see themselves as learners within the various contexts in which they are participating' would be an important factor in homework. In practice, it was not easy to operationalise this concept. One way we attempted to do so was by asking students to compare themselves with other students in terms of the amount of effort they put into homework. However, this did not lead to much differentiation among the students. All the KS3 students thought there were students who put *less* effort in than them, and almost all (88%) thought there were students who put *more* effort in.

When asked what they thought about students who put in more effort, the students' answers tended to play down their relevance: phrases like 'I don't mind', and 'it doesn't bother me really' were common. In contrast, when the students were asked what they thought about students who put in less effort, more than 80% were critical: they suggested these students 'were a bit lazy' or 'acted stupid'. Two students said that those students who put in less effort 'thought they were cool' (as opposed to actually being cool). Clearly this is an important dimension for the students, although more detailed analysis of individual cases suggests that there is no simple relationship with either attitudes to homework or actual homework behaviour

There was some evidence that a student's 'homework identity' could be different from their 'classroom identity'. For example, one low-attaining boy was frequently in trouble at school. He said that if his friends at school were 'mucking about' he would join in, as he didn't want to be seen as a 'keener' (a local defamatory term for someone who takes their work seriously). However, he was very positive about homework and put a lot of effort into it. A high attaining Moslem girl from the same school had a similar profile: at school she was outgoing and got into trouble, whereas at home she was extremely studious.

(iv) Attainment

There was some evidence that students' homework practice was related to their level of attainment. For example, it was noted above that high attaining students were more likely to have worked with other students than middle or low attaining students. In addition, high attaining students were less likely to say that they had gained 'nothing' or 'not much' from the specific homeworks (see below). One reason for this may be that high attaining students were sometimes observed to rework the homework task to make it more interesting or more challenging for themselves (see for example the science homework described in NP2, p26). Middle and low attaining students did not seem to create their own differentiated task in this way.

RQ6: What are the learning outcomes arising from particular homework tasks?

Despite careful and detailed scrutiny of the data, it often proved very difficult to identify unambiguously any learning outcomes which might have resulted from particular homeworks. Indeed, it was often easier to identify where for one reason or another learning had *not* taken place.

Having said that, there were a number of instances where the students were clearly aware of what they had gained from the homework and where their views accorded with those of the teachers. This was particularly the case where the teacher set out objectives for the homework as part of the homework setting (see NP2, p29). In addition, there were a small number of occasions where students reported a dramatic shift in their thinking as the result of a homework assignment. (see NP2, p32).

In contrast, there were a substantial number of occasions where the learning outcomes seemed to be small or non-existent. As we saw earlier, just under a quarter of homework-instances were not set or not completed. in addition, the students themselves felt they had gained ‘nothing’ or ‘not much’ from over a quarter of completed homework tasks. For the most part this was because the students already knew – or thought they knew – what they were supposed to learn from the homework. This applied particularly to languages homeworks (see NP2, p26).

Students also reported that they had been faced with some sort of difficulty in over half the completed homeworks. Sometimes they handled the difficulty as they worked through the homework, while in other cases they sought help from family or peers (see above). Despite this, in many cases students were unable to complete the homework successfully. Moreover, when we conducted the second interview with the students, we found many instances of students continuing to have difficulty with the homework content, despite the homework having been marked and feedback given (see NP2, pp27-8).

The majority of students reported no change to their enthusiasm or confidence as a result of completing homeworks. An increase in enthusiasm was reported after 20 percent of homeworks, with the figure for growth in confidence being very slightly higher. No increase in enthusiasm was reported after language homeworks (see NP2, p31).

RQ7: How do tasks, contexts and pupil characteristics interact with each other to enhance or reduce learning outcomes?

The data suggest that there are no simple relationships between tasks, contexts, student characteristics and learning outcomes. For example, as we saw earlier, students act strategically: the same student will put in a lot of effort for one homework assignment but relatively little on another. In addition, the same task can produce very different responses from different students (see the Circles case study, NP2 Appendix 1). Diversity is particularly noticeable among the parents. For example, one parent may be opposed to homework but will support their child to a successful learning outcome, while another may be in favour of homework but either cannot or will not provide help on a given occasion.

Despite this complexity, we were able to identify two factors which seemed to influence learning outcomes in a persistent manner. First, it was clear that some kinds of homework task were regarded more positively by the students, were likely to lead to greater student engagement, and were associated with positive outcomes such as increased enthusiasm and confidence. Homeworks which required students to relate to the world outside school, as well as other ‘research’ homeworks, were particularly likely to fall into this category (see NP2, p31-32).

Secondly, there was evidence that positive learning outcomes were more likely when the teacher made the homework and its learning objectives *more salient and explicit*. Students were more likely to engage positively and enthusiastically if the homework was discussed with the class beforehand, and if the task requirements and consequences of non-completion were clearly stated – preferably in writing. Similarly, there was evidence that student learning was enhanced when teachers provided explicit feedback on the completed homework to the whole class, although this did not happen very often. When the teachers worked through the homework again in ways that allowed the students to contribute and feel involved, it appeared to increase student understanding and engagement (see NP2, pp29-30). From a socio-cultural perspective, this could be seen as strengthening the shared social culture of the classroom.

5. Homework at KS2

The data collection at KS2 took place in the period shortly after the introduction of the DfEE Homework Guidelines and the Literacy and Numeracy Hours. There was clear evidence that these initiatives were changing the nature of homework at KS2. In particular, there was evidence across all four schools that homework tasks were becoming more ‘formalised’, and starting to resemble those found at KS3. There was also evidence that systems for encouraging and supporting parental involvement in children’s reading (eg home-school reading diaries) had declined in the project schools (NP2, pp32-34)

In the KS2 schools, teachers and headteachers raised issues about the resourcing of homework. Teachers felt they were being asked to do more work – i.e. in setting and marking homework – but were being given no extra time or pay for this. There was also some confusion about whether homework was compulsory at this stage. Schools were interpreting the guidelines as making the *setting* of homework compulsory, but not the *completion* of it. Some students – and especially low achieving boys - appeared to be taking advantage of this and avoiding doing homework. In general, students at KS2 appeared much less clear about the purposes of homework (NP2, pp34-36)

There was more diversity in parents' attitudes towards homework at KS2 than at KS3. Amongst parents who were in favour of homework, there was a particularly high proportion of parents from ethnic minorities. There was however a sizeable proportion of parents who were not in favour of homework, feeling that it was not appropriate for children at this age (NP2, 36-37).

6. Conclusions

The main conclusions to be drawn so far are as follows:

- (a) Homework is a practice which has considerable 'symbolic value'. It is often promoted as a 'good thing' and regarded as a sign of a 'good school', particularly by those who are less engaged in its day-to-day implementation – such as politicians, headteachers and parents. At the same time, there is some confusion as to its purposes, and these are sometimes in conflict: for example, if homework is intended to create links between home and school, then promoting after-school homework clubs will not achieve this end.
- (b) In contrast, those who are most involved in the day-to-day implementation of homework – teachers and students – feel much more ambivalent about it. Teachers can see its potential to enhance classroom learning but often feel pressured into setting homework whether it is appropriate or not. Students also see that it can help their learning but resent its intrusion into their out-of-school lives. Both teachers and students would welcome attempts to improve the quality of homework at the expense of its quantity.
- (c) A recurring theme in our research is that of diversity and heterogeneity, both within and between schools and (particularly) between families. This diversity makes it hard to locate simple relationships between the many factors involved. In addition, some teachers respond to this diversity by setting less challenging homeworks, thereby opening themselves to criticisms of 'dumbing down' the curriculum. The difficult issues raised by this diversity require more public discussion (eg Hallgarten, 2000)
- (d) Homework has the potential to make an important contribution to classroom learning, and we saw several examples of this in our research. In practice this potential is not always realised. Homeworks are not completed, or are not seen as valuable by students when they are completed. Difficulties and misunderstandings are often left unresolved. Feedback from teachers is usually summative and not seen as helpful. Part of the problem may lie in the nature of homework as a series of tasks to be completed away from the classroom. Attention therefore tends to focus on whether the tasks have been completed successfully or not. But completing a task does not necessarily imply that any learning has occurred, as our detailed analysis of specific homeworks shows.
- (e) Homework also has the potential to make links between school and students' out-of-school lives. In our research, this rarely happened. This is primarily because most homework assignments are basically elements of the school curriculum, and are not seen by students as being relevant to their out-of-school lives. In addition, although homework is done at home, it is usually an individual activity carried out in isolation from other family members or friends. In our research, the few homework assignments which did require students to make connections with out-of-school life were received with interest and enthusiasm by the students.
- (f) Our research also suggests there is a strong case for making homework more visible and for engaging students in more explicit discussion of its purposes. We saw several cases where difficulties arose because the nature of what students were doing, and why, had not been made explicit. Equally, there were several occasions when students were helped by clear and explicit explanations of what was required and what they needed to do to be successful. More generally, it was clear that students would benefit from a more explicit discussion of notions such as 'revision' and 'learning'.
- (g) Finally, our research suggests that implementing the Homework Guidelines at KS2 is raising significant issues. Although there is some evidence of changes in practice, there is also some evidence of resistance from teachers

and parents to the introduction of more formal versions of homework. Given the concerns our research has raised about homework at KS3, it is important that secondary practices are not simply introduced into primary schools in an unthinking way.

7. Activities

(a) Advisory Group

The project was extremely well served by its Advisory Group (for membership see section 2 above). The Group met three times during the lifetime of the project and was invaluable in providing an up-to-date policy briefings from DfES and OFSTED, giving critical feedback on research methods and findings, and jointly developing a dissemination strategy. Members of the Advisory Group also provided informal individual advice to the project team outside of these meetings. In many ways the Advisory Group provided a model example of how 'researchers' and 'users' can collaborate on a research project, particularly one which is likely to produce findings critical of government policy.

(b) Verification seminar

The DfES representatives on the Advisory Group were instrumental in setting up a verification seminar at the DfES in March 2002. Among the 25 participants were representatives from OFSTED and DfES (including those with responsibilities for the Literacy Strategy, Numeracy Strategy and Study Support), primary and secondary headteachers, and other researchers on homework. The research team prepared a full report on the research (Nominated Publication 2) and this was discussed in detail at the seminar. In general, the feedback on the research was extremely positive, with many participants saying it provided a recognisable and authentic account of current homework practices and the issues surrounding them. Further dissemination opportunities arose directly from the seminar.

8. Outputs

(a) Presentations

- Paper presented at BERA conference, Belfast, August 1998
- Staff/student seminar at Graduate School of Education, University of Bristol, October 1999
- Paper presented at conference on 'Cultures of Learning', University of Bristol, April 2001
- Drever Memorial Lecture, University of Edinburgh, May 2001
- Research seminar at School of Education, University of Exeter, June 2001
- Plenary address at the International Psychology of Mathematics Education Conference, Utrecht, July 2001.
- Presentation at BERA conference, Leeds, September 2001
- Seminar at School of Education, University of Birmingham, November 2001

(b) Publications

- Chapter entitled 'Homework: learning at the interface between home and school cultures' in Claxton, G., Pollard, A., and Sutherland, R. (eds.) 'Teaching and Learning where Worldviews Meet', Trentham Books, 2002, in press.

(For future plans – see main End of Award Report)

8. Impacts

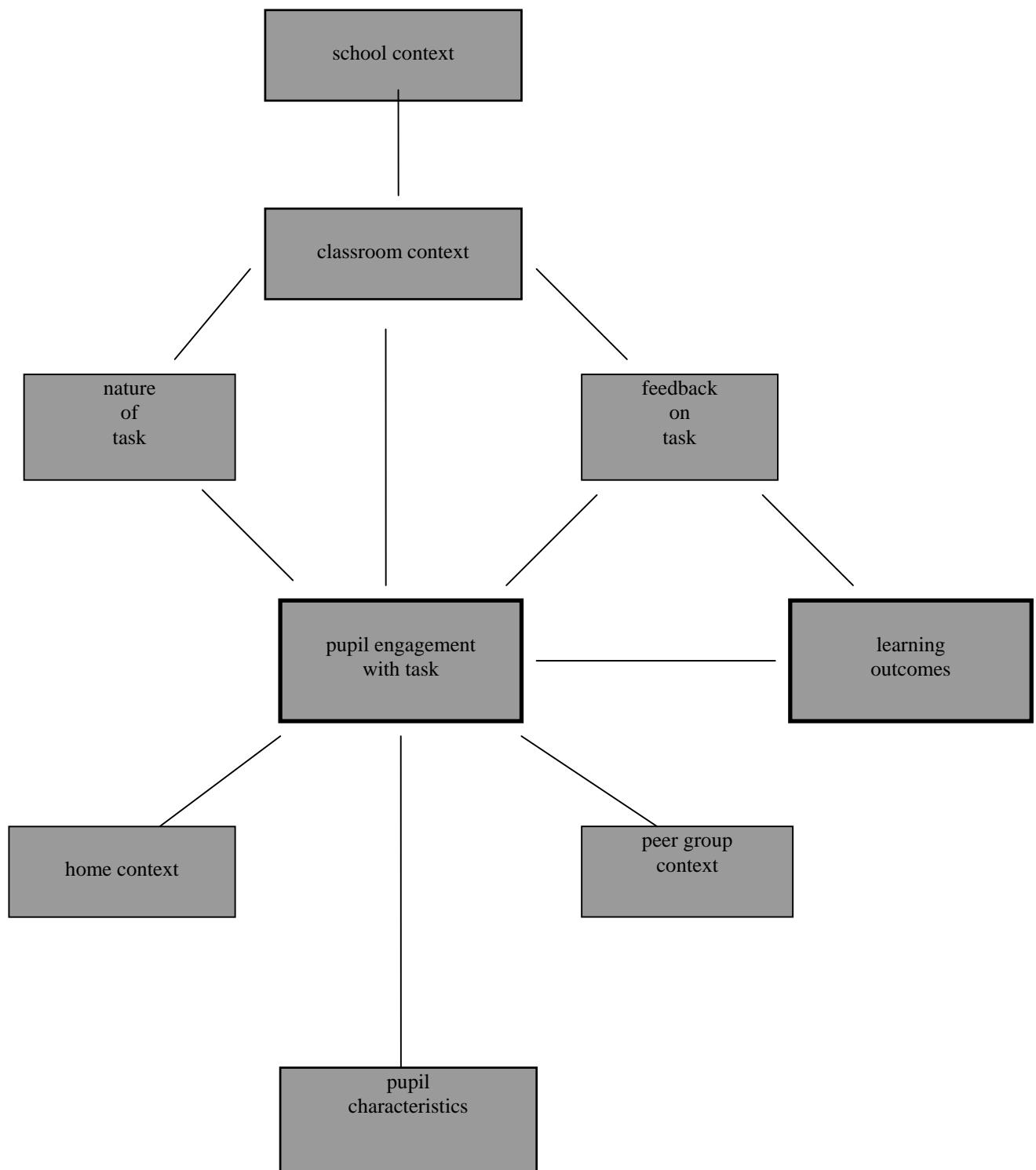
The Advisory Group provided ongoing contact with policy-makers and practitioners throughout the project, and the project findings were well received at the verification seminar (see Section 6 above). In particular, it was agreed that project findings would be incorporated into the Literacy Strategy web-site and taken account of in the imminent revision of the DfES Homework Guidelines. The project has also aroused considerable interest through presentations to academics, and further impact is anticipated through the planned dissemination activities. However, it is still relatively early to assess the project's full impact.

9. Future research priorities

We have identified the following areas where further research is needed:

- (a) An action-research project aimed at improving homework practice in a number of contrasting schools and contrasting communities
- (b) A study of the potential of using ICT to link home and school learning
- (c) Investigation of the issues surrounding homework at transfer from Key Stage 2 to 3. This is currently being examined as one strand of the ESRC project 'Home School Knowledge Exchange' funded under Phase II of the Teaching and Learning Research Programme, and which had its origins in the present study
- (d) A study of the way in which homework is covered in Initial Teacher Training and how this might be improved
- (e) Theoretically, further application of 'participation' models of learning to the study of learning in school: for example, a study of how students are 'apprenticed' into school practices such as homework.

Appendix 1: Conceptual framework



Appendix 2: References

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