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HOW DO SECONDARY MATHEMATICS TEACHERS VIEW HOMEWORK?

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ABSTRACT

The recent publication of the guidelines for homework and the development of initiatives such as out of school learning show the government's interest in the area of homework. How do teachers view homework and the role of parents. This paper reports on data gathered from interviews with teachers and discusses the implications.

INTRODUCTION

Recently homework has again come into focus as an issue of debate. The government has issued guidelines for primary and secondary schools stressing the importance of homework, but recent research (e.g. from Durham and Kings College) has indicated that there may be disadvantages to homework, particularly in the primary sector. Homework has a history of being controversial. It has been used as an important tool in supplementing the curriculum since the mid-nineteenth century, but like much in education it has been in and out of fashion.

The National Numeracy Strategy with its emphasis on parental involvement is currently being piloted and trialled in Key Stage 3, which has implications for the role of homework. At secondary level it is often taken for granted that homework is an important part of the curriculum, but as Hallam and Cohen point out: "We know very little about the ways that teachers plan, set and explain homework to their pupils. As this will clearly have a major impact on pupils' ability to undertake homework ..... it is an area where research would seem to be urgently needed."(Hallam and Cohen, 1999, p. 18)

In the UK much of the evidence about homework has come from government sources. The OFSTED report (1995) suggests that homework has the potential to raise standards and extend coverage of the curriculum, but expressed concern that there was little systematic monitoring of homework policies. A study by Barber et al (1997) found that schools which were cited by OFSTED as being particularly successful set more homework than others.

At the IMPACT Project, based at the University of North London, we have been involved for some time with parental involvement in primary mathematics homework, and have recently become increasingly involved in Key Stage 3. The interviews described below were part of our ongoing research in this area.

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TEACHER INTERVIEWS

We interviewed the teachers using semi-structured interviews. We asked them about their classes and the homework set, about the management of homework by the teacher, the department and the school, and about what homework support was available (homework clubs etc); we then asked them whether in an ideal world they would set homework, why, and what homework they would set, and what they thought the role of parents should be.

We deliberately started with their present practices as we were interested in exploring the attitudes that guided these practices, rather than the attitudes they thought we wanted to hear. Likewise we asked them about the ideal world as a way of getting to grips with underlying issues of the purpose of homework.

We didn't ask them how they felt about homework but it arose anyway - they felt homework was a lot of work for them. We asked about support for the children, but some teachers interpreted this as being about how they needed more support in the classroom.

All the teachers wanted to retain homework. Sometimes there was embarrassed laughter when answering - implying they would like to do away with homework, as it is so much work. The main reason they seemed to think it was important was that it gave much needed extra time, or that children needed more individual interaction (though this raised the question of who this would then be with).

> " Yes I would set homework. I enjoy seeing children learn and understand. There is not enough time and you don't get individual interactions... they might need to consolidate in class. They need time on their own. It's a time issue"

Some of them thought it was an opportunity for children to work on their own.

> "Homework is good to set because sometimes some people need to work on their own to find their own methods to understand, but not so much as to prevent them doing other things .....but if classes were smaller they would understand it in the class and you would need less homework"

It was interesting to note that one teacher raised the issue of pressure on parents.

> " I think yes, but I don't like the idea that at the moment I think a lot of parents are being put under pressure to spend an hour or two hours with their kids, but they've got to have a life and the kids have got to have a life as well"

Mostly the teachers wanted to keep the homework they do now.

> "The usual I am giving now .... whatever you teach in the classroom to cover at home... to practise what you've done in the classroom"

The schools in which we interviewed have mixed ability Year 7 and 8 classes doing SMP booklets. Homework is often a continuation of classwork booklets, or sometimes review sheets. The schools sometimes have whole class lessons, and the homework then generally consists of practice sheets. In one school these are centrally organised across

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the mathematics department. Reviewing a variety of research studies, Hallam and Cohen conclude that homework designed to prepare the pupils for the next topic is more effective than practice homework, which in turn is more beneficial than simply working on current topics. One teacher reflected on the complex nature of homework.

> " Very difficult, it's complex .... For example a child might be dyslexic. They need help. This person needs to develop different skills before they can begin to answer the homework. Some might need more concrete help which they might be embarrassed to use in the classroom but which they can use outside.."

One reflected on the possibility of doing more interesting homework.

> "It would probably be less the sort .. "Here's the homework sheet, go away and do twenty of these questions" and more of the sort .. "Go away and think about this" - get them to use their imagination"

None talked in detail of exploiting the home context, considering what learning would be better done at home. However there was some awareness that the home gave possibilities that were not available in school. The comment that children can use apparatus they would be embarrased to use in schools ties in with findings from an earlier study of ours in which children reported that they could discuss mathematics with their parents in ways that they would have been embarrased to do in school.

Most of the teachers felt that parents should take a monitoring role with their children.

> " I think parents should check when the children have homework. That's why we have the homework diary. The teachers write in the diary and the parents don't check, don't sign .....Parents' role is important with their child's homework, helping them, but sometimes I find they teach them different methods ... the way they do times tables. One child, her grandfather helped her ..... it was such a different way, I tried to understand but ....but at least they know where their children are. Other parents do not have a clue what their children know. For example a parent came in. Her child is very weak. She turned to her child and said "I thought you liked maths. I thought you were good in maths". The mother doesn't have a clue. If they get involved with homework they understand what their children know and they are more realistic"

There were various references to the homework diary. This ties in with the emphasis on monitoring in the government's guidelines on homework, but most of them seem to think it should go further than this, and it is desirable that parents should actively help their children. One was very aware of the pressures on parents. Several were aware of the real advantages of parents helping their children, developing knowledge of their children's understanding of maths, and furthering parent - child relations. They were also aware of the difficulties for parents in helping their children, but felt how positive it would be if parents could "relearn with their children".

> " A good parent is going to take an interest in what their child is doing .....but I think parents are under pressure as well..... the vast majority of children don't do homework. Their parents are not interested"

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> "What I've come to realise doing home tuition is that the child reaches home with this homework and needs support and ... for the parents it's been a long time since some of them have done any form of mathematics, and they can't help the child, and that's the most frustrating thing for their child... searching for some help .... and there's really no one there to help them. If the parents are learning as well, relearning gives the opportunity to build up good relationships, parents' and children's relationships, they can learn from each other. Children do need support at home"

CONCLUSION

All the teachers felt homework was important but they varied as to what they would ideally set as homework. All of the teachers saw the parents as having an important role in homework, and most saw this as being more than just monitoring homework. However none of them specifically mentioned the learning possibilities of the home context.

These findings contrast with those of MacBeath and Turner (1990) who found that teachers at secondary level tended not to consider the role of parents. This change may be due to recent government initiatives such as the home school agreement which have highlighted the role of parents.

The teachers were mostly aware of the complexity of the situation, the need for support for the children and the difficulties some parents might have in supporting their children.

We intend to compare these findings with interviews with parents and children from the same schools in order to get a fuller picture.

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