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Home–school knowledge exchange in context

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This paper provides an overview of the Home-School Knowledge Exchange Project and an introduction to this special issue on home–school knowledge exchange. The paper starts by situating the project within a number of contexts—those of UK educational research, national and international interest in home–school relationships, national and local priorities around literacy, numeracy and primary/secondary transfer, and theoretical work on 'funds of knowledge'. The paper then goes on to show how these contextual factors influenced the project's aims and design. The paper ends by identifying a number of important themes and issues in the area of home–school knowledge exchange, and shows how these are illuminated by the papers presented in this volume.

Introduction

The Home-School Knowledge Exchange (HSKE) project took place between 2001 and 2005. Its overall aim was 'to develop, understand, measure, evaluate and disseminate ways in which pupil attainment and learning disposition can be enhanced by a process of knowledge exchange and transformation between parents and teachers, which also involves researchers and children themselves'. The project achieved this aim through setting up and evaluating the impact of a programme of action research in the cities of Bristol and Cardiff, in which parents, teachers and children worked together to exchange knowledge between home and school. All the papers in this volume arise directly from the project, and illustrate different aspects of the project's work.

The HSKE project was part of the Economic and Social Research Council's (ESRC's) Teaching and Learning Research Programme (TLRP), a major programme of research on teaching and learning. In the first part of the paper we describe how and why the TLRP was established, and show how the HSKE project was developed to contribute towards TLRP's overall aims and objectives. We also show how the idea of home–school knowledge exchange was developed within the

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context of national and international interest in home–school relationships, drawing in particular on work by Luis Moll and his colleagues on the 'funds of knowledge' possessed by households and communities. In addition, we show how the project's substantive foci on literacy, numeracy and primary/secondary transfer developed through consultation with local education authority (LEA) partners in the two cities of Bristol and Cardiff.

In the second part of the paper we focus on the design of the project. We show how the contextual constraints and affordances described in the first section influenced a number of critical decisions relating to the project's design. As a result, the project combined multi-site action research with a quasi-experimental structure aimed at making quantitative comparisons between children who had or had not taken part in home–school knowledge exchange activities. At the same time the design allowed for more in-depth qualitative work to be carried out with a stratified sample of 'target' and 'case study' children and families.

In the final section of the paper we introduce some of the key themes and issues arising from the work of the HSKE project, and show how these themes and issues are addressed in the papers which make up this special issue of *Educational Review*.

The Teaching and Learning Research Programme (TLRP)

The TLRP is the UK's largest ever investment in educational research. Its overall aim is to support and develop research which leads to improvements in outcomes for learners of all ages and in all sectors of education, training and lifelong learning in the UK. Managed by the UK's ESRC, its total budget is over £30 million, making it the largest of the ESRC's investments in programmatic research. The first projects began work in 2000 and the programme will continue until 2008 at least (see Pollard (2005) for more information about the TLRP and its strategic commitments).

The TLRP was established at a time when educational research in the UK had been subject to a period of sustained critique (e.g. Hillage *et al.*, 1998; Tooley, 1998). The main criticisms were that much educational research was of poor quality and was irrelevant to policy and practice. Typically, research was seen as being small-scale, value driven and with only a modest grip on hard evidence. In response, TLRP sought to combat such criticism by supporting research which:

- engaged with the users of research in order to enhance relevance and quality;
- had a clear focus on learning outcomes and how these might be enhanced;
- generated relevant and usable knowledge through high quality research design and procedures;
- transformed knowledge in order to increase its impact on policy and practice;
- enhanced research capacity by increasing the number of educational researchers, raising skill levels, and developing new research resources and techniques.

The HSKE project was funded under Phase II of TLRP. This phase supported the funding of larger-than-usual studies to enable more sophisticated research designs which could combine qualitative and quantitative data and embrace the study of

both learning processes and learning outcomes. We took advantage of this in the HSKE project with a sampling frame enabling comparisons to be made between action and comparison schools, and distinct research teams which focussed respectively on generating practical action and on monitoring the impact of this action. More details of the research design are provided later.

Phase II of TLRP also encouraged the formation of large, interdisciplinary research teams which could provide multiple perspectives on the issues being addressed. This was reflected within the HSKE project which brought together researchers with backgrounds in psychology, sociology, linguistics and education, as well as specialists in literacy, numeracy, transfer and comparative education. This team soon identified the theme of home–school collaboration as being an important way to address the TLRP's objectives, and then worked closely with LEA partners to develop the more specific foci of the project (more details of this process are provided later).

Being part of a wider research programme conferred significant benefits on the HSKE project. Opportunities to exchange ideas and findings with other TLRP projects were taken up by team members' participation in a range of TLRP events and thematic seminars. TLRP also provided opportunities for increased project impact through showcasing project findings in TLRP presentations and publications (e.g. Pollard & James, 2004; James & Pollard, 2006). Links between the HSKE project and TLRP were further strengthened in March 2002, when Andrew Pollard, one of the original project directors, became director of TLRP: unfortunately this meant that Andrew had to limit his subsequent involvement in the project.

In the next section we locate the HSKE project within the wider field of home–school collaboration, and identify the particular approach taken by the project within this field.

Enhancing learning through home–school collaboration

One method which is frequently proposed for enhancing children's learning is through increased collaboration between home and school—or parental involvement as it is often known. This idea has been promoted by politicians, policy-makers and educationalists for many years both in the UK and internationally. In 1998, for example, the UK Secretary of State for Education, David Blunkett, argued in a speech that:

> The involvement of the family in the learning process and the links between home and school are vital to the success we are seeking in raising standards and providing real equality of opportunity

However, the research evidence that parental involvement can raise standards is equivocal. For example, a review of US studies by Mattingly *et al.* (2002) concluded that few evaluations of parental involvement programmes were sufficiently well designed to allow any conclusions to be drawn from such studies. A similar conclusion was drawn in a review by Desforges (2003) for the Department for Education and Skills (DfES), although he also concluded that there was a clear association between

the nature of 'spontaneous' parental involvement in their children's learning (i.e. what parents do at home) and their children's achievement at school.

In the quotation given earlier, Blunkett argues that parental involvement will not only raise standards but also reduce social inequality. Here again the research evidence provides little support for his aspirations. Indeed it has been argued by Hallgarten (2000) amongst others that parental involvement is more likely to increase rather than decrease the gap between families who are more advantaged and those who are less advantaged. In particular, it has been argued that attempts to increase parental involvement often amount in practice to attempts to impose school-favoured values and behaviour on less advantaged families. For example, a review by Dyson and Robson (1999) argued that many parent involvement projects in the UK operate 'as a form of cultural imperialism, devaluing the practices and values of families who may already be marginalised'. A similar metaphor was used by Edwards and Warin (1999), who referred to the 'colonization' of home by the school and 'the long arm of the school' reaching into homes.

In the HSKE project, we wanted to develop an approach to home–school collaboration which avoided such criticisms. Our intention was to recognize the value of existing home practices and attempt to build on them rather than devalue or attempt to change them. In particular, we drew on the work of Luis Moll and his colleagues which suggested that even apparently disadvantaged families or communities possess important 'funds of knowledge' which can be mobilized and drawn on in school.

Moll's work on 'funds of knowledge'

The notion of 'funds of knowledge' originated in work reported by Moll and his colleagues in the early 1990s (e.g. Moll & Greenberg, 1990; Moll *et al.*, 1992, 1993). This work was carried out with working-class Hispanic (predominantly Mexican) families in Tucson, Arizona. Children from such families are commonly considered to be 'disadvantaged', in that their families are said not to provide an environment as intellectually stimulating or emotionally supportive as that provided by the families of more 'advantaged' children. In contrast, Moll and his colleagues argued that these families and their communities contain rich and extensive 'funds of knowledge', by which they meant 'these historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being' (Moll *et al.*, 1992, p. 133). More specifically they argued that:

> Households in our sample share not only knowledge regarding repair of homes and automobiles, home remedies, planting and gardening, as mentioned, but funds of knowledge specific to urban living, such as access to institutional assistance, school programs, transportation, occupational opportunities and other services. In short, *households' funds of knowledge are wide-ranging and abundant.* (Moll & Greenberg, 1990, p. 323, emphasis in the original)

According to Moll and his colleagues, teachers and schools are for the most part unaware of the funds of knowledge in the communities of their students. However,

they describe a number of ways in which teachers can become aware of and draw on these funds of knowledge. In one study, for example, teachers carried out ethnographic research in the homes of their students, interviewing household members and engaging in participant observation (Moll *et al.*, 1992). In another study, parents and other community members were invited into the classroom to discuss their particular areas of expertise with the class—such as their knowledge of building houses and working in the construction business (Moll & Greenberg, 1990).

From 'funds of knowledge' to home–school knowledge exchange

This work by Moll and his colleagues provided the conceptual starting point for the HSKE project. In particular, we aimed to develop and extend Moll's work in two main ways.

First, we extended the term 'funds of knowledge' so that it applied to teachers as well as to parents and families. That is, we used the term to describe the knowledge, skills and strategies, both implicit and explicit, which teachers draw on in their classroom practice. In this way we were building on the substantial body of existing work on teachers' knowledge bases (e.g. Shulman, 1986; Schon, 1987; Cooper & McIntyre 1996). An example of how we identified and contrasted the funds of knowledge of two teachers in the project can be found in Andrews *et al.* (2005).

Secondly, we anticipated that the funds of knowledge possessed by parents in two large cities in the UK in the early 2000s were likely to be very different from those of parents in working-class Hispanic communities in Arizona in the late 1980s and early 1990s. For example, many of the families studied by Moll and his colleagues had strong links with rural communities in both the US and Mexico, and their funds of knowledge were often based in farming or animal husbandry. We also expected that families in Bristol and Cardiff would be much more heterogeneous in their funds of knowledge than those studied by Moll and his colleagues in Arizona, reflecting the more diverse nature of the communities in these two UK cities.

Bearing these anticipated differences in mind, the HSKE project set out to develop and evaluate a series of knowledge exchange activities between home and school. These activities aimed to draw out and make visible the different funds of knowledge possessed by parents and teachers, and communicate them to the other party. Although focusing primarily on parents and teachers, we anticipated that a key role might be played by the children themselves, as they participate on a daily basis in both home and school practices.

Focusing the project around literacy, numeracy and primary/secondary transfer

As we saw earlier, an important principle of TLRP is that projects should be based on close partnerships between research teams and actual or potential users of the research. In particular, users should be involved as far as possible in determining the focus and design of the research. In developing the HSKE project we built on

existing relationships with senior local education authority (LEA) officers in Bristol and Cardiff. Together we identified three areas which were particular priorities for the LEAs—primary literacy, primary mathematics, and primary/secondary transfer. It was decided that these three areas should form the substantive foci of the research—that is, we would investigate the role which home–school knowledge exchange could play in raising achievement in primary literacy and mathematics, and in supporting children through primary/secondary transfer.

These three areas have very different traditions of involving parents in the UK. In the area of literacy, and particularly reading at Key Stage 1, there is a strong tradition of involving parents (e.g. Tizard *et al.*, 1982; Hannon, 1987; Cairney, 2002). However there are signs that levels of parental involvement declined with the introduction of the National Literacy Strategy (Hughes & Greenhough, 2002). In mathematics, there is some tradition of involving parents, especially with the IMPACT project (e.g. Merttens, 1996) but the evidence of its effect on attainment is limited. In the area of primary/secondary transfer, there is very little tradition of parental involvement to draw on (although see Aypay (2002) as an interesting exception).

Project design and methods

Our involvement in TLRP, our approach to home–school collaboration and the discussions with our user collaborators generated a number of important specifications which the project design had to meet. Specifically we needed a design which would enable us to:

- work closely with teachers, parents and children to develop and implement novel home–school knowledge exchange activities in the areas of primary literacy, primary numeracy and primary/secondary transfer;
- evaluate the impact of these activities using both quantitative and qualitative methods;
- explore systematically the effects of gender, social class, ethnicity and local context (Bristol/Cardiff) on both the nature of home–school knowledge exchange and its impact.

In order to meet these specifications we developed the following design. Overall, the project consisted of three main strands, concerned respectively with

(i) literacy at Key Stage 1;
(ii) numeracy at Key Stage 2;
(iii) transfer from primary to secondary school.

Within each strand, home–school knowledge exchange activities were developed and implemented in four 'action' primary schools. In each strand two of the four schools were located in Bristol and two in Cardiff (schools were involved in a single strand only). Within each city, one school had a higher proportion of children eligible to receive free school meals (HFSM), while the other school had a lower proportion of

eligible children (LFSM). We also tried to ensure that the school intakes reflected the ethnic diversity of the two cities.

A set of 'comparison' schools matched to the action schools was also recruited to the project. These schools did not carry out any action but provided the opportunity for quantitative comparisons to be made of learning outcomes. In the literacy strand only, the two schools (one action, one comparison) in the LFSM cell in Cardiff were Welsh medium schools where the curriculum was delivered wholly in Welsh at Key Stage 1. Advisers from the LEAs of the two cities provided information and advice throughout the school recruitment and selection processes.

In each strand, an experienced teacher was seconded to work part-time on the project. Their role was to develop home–school knowledge exchange activities and to support their implementation. The project felt it was important not to impose ideas for action upon the participants. The first activity, then, was a mapping exercise whereby the current state of home–school interchange and the knowledge exchange needs of those involved were investigated. Headteachers and teachers were interviewed and parents were sent questionnaires and invited to take part in discussion groups.

The teacher–researchers worked with the schools over a period of 2 years. In the transfer strand this also involved working with the main secondary school to which children transferred from the action primary schools. During this period the teacher–researchers worked closely with the class teachers to create a programme of home–school knowledge exchange activities which was appropriate for each school and its community of parents. Periodic meetings were held when all the teachers in each strand met with members of the project team to reflect on progress to date and plan further activities. At the end of the first and second years, large 'summer gatherings' were held where the teachers from all project strands gathered with the project team, LEA advisers and others to celebrate the year's achievements and plan the following year.

The work in schools took a slightly different form in the three strands. In both the literacy and numeracy strands, the project focused on a single cohort of children who were studied for 2 years. The cohort in the literacy strand started in Year 1 while the cohort in the numeracy strand started in Year 4. In the transfer strand, the project focused on two successive cohorts of children who underwent primary/secondary transfer. Each cohort started in Year 6 and were followed through to the end of Year 7.

The impact of the knowledge exchange activities was evaluated in a number of ways. Systematic quantitative comparisons were made at regular intervals between the children in the action classes and their counterparts in the comparison schools. Children were assessed using the Performance Indicators in Primary Schools (PIPS) tests, developed at the University of Durham. Changes to the children's general learning dispositions were assessed in the literacy and numeracy strands using a junior version of the Effective Lifelong Learning Inventory (ELLI) developed at the University of Bristol (Deakin-Crick *et al.*, 2004), with the standard version of ELLI being used in the transfer strand In the literacy and numeracy strands, differences in

the children's subject related self-efficacy were monitored using questionnaires devised by the project. In the transfer strand, the children's adjustment to secondary school was assessed using another questionnaire devised by the project. Altogether, quantitative assessment data were collected from around 270 children in the literacy strand, 330 in the numeracy strand and 270 in the transfer strand (the exact number varied across testing occasions).

In each action class, further data of a mainly qualitative nature were collected around six 'target' children (three girls, three boys; two higher attaining, two medium attaining and two lower attaining children). The target children were selected through stratified random assignment. Their parents were invited to participate, and almost all agreed to take part. The target data collection was aimed at building a picture of the funds of knowledge of the teachers and parents of the target children, accessing the literacy/numeracy practices of the home and school, and monitoring responses to home–school knowledge exchange activities. A mixture of methods was used to collect data. Interviews were conducted with parents, teachers and children, with the final set of interviews including photographs taken during the action to prompt stimulated recall. Families also made videos of literacy/numeracy events taking place at home, and observations were carried out of the target children at school.

In addition, more prolonged and intensive exploration was pursued with a small number of families selected from amongst the targets. These case studies allowed a more detailed investigation of the issues involved. A variety of techniques was used here, including diaries made by the participants (both written and photographic), videos, observation, informal chats, drawing and model making.

The contents of this special issue

The papers in this special issue of *Educational Review* have been selected to illuminate and explore various aspects of the HSKE project and the issues arising from it. Together they make a significant contribution towards increasing our understanding of home–school knowledge exchange and what it means in practice.

The first paper, by Wan Ching Yee and Jane Andrews, focuses on the ethics of researching in the home. At the start of the HSKE project we developed an ethical code of practice which set out the ethical principles and procedures which would underpin our work. It was relatively easy to do this for the school setting, partly because of the availability of existing codes of practices such as the British Educational Research Association's (BERA's) Guidelines for Education Research. In contrast, developing a code of practice for the home setting was much more difficult. Not only was there an absence of existing codes of practice, but the issues we were encountering in the home seemed to be very different from those encountered by researchers in schools. In their paper Yee and Andrews identify and describe a fundamental ethical dilemma faced by researchers in the home—between being a 'professional researcher' and a 'good guest'. They argue that the private nature of the home environment and the relationships it supports present some

important challenges for a researcher who is employed to collect data from children and their families. In their paper Yee and Andrews analyse and illustrate this dilemma, and suggest some ways forward.

The paper by Marilyn Osborn, Elizabeth McNess and Andrew Pollard focuses on transfer from primary to secondary school. As we saw earlier, this is not an area which has previously been prioritized, in the UK at least, by those arguing for greater collaboration between home and school. And yet, as this paper demonstrates, it is an area where home–school knowledge exchange has an important role to play. In the paper, Osborn, McNess and Pollard argue that a key issue at transfer is that of identity. Transfer can pose a threat to previously established identities, while at the same time providing opportunities to develop new ones. Drawing on the case studies of twins from the transfer strand, the paper shows how two children from the same family may experience very different trajectories before, during and after transfer. The paper concludes that parents can play a key role in supporting children through transfer, and that schools need to draw on parents' knowledge of their children outside of school in order to help them successfully negotiate the transfer process.

The paper by Jane Andrews and Wan Ching Yee addresses a core concept in the HSKE project—that of 'funds of knowledge'. As we saw earlier, this concept arose from the work of Luis Moll and his colleagues among Hispanic families in Arizona in the early 1990s. More recently, it has become part of the discourse of educational policy-making in the UK, with schools being advised to 'identify and draw on' the funds of knowledge of minority ethnic children in mainly White schools (DfES, 2004). In their paper, Andrews and Yee use data from two case-study children in the numeracy strand of the HSKE project to explore these issues. They describe some of the funds of knowledge which exist within the children's family, community and culture, looking in particular at the mathematics embodied in real-life out-of-school activities. The paper demonstrates clearly both the non-stereotyped nature of funds of knowledge and the ways in which they change and develop over time.

The paper by Anthony Feiler, Pamela Greenhough and Jan Winter is concerned with issues of diversity across children and their families. As we saw earlier, home–school collaboration has often been promoted on the grounds that it can reduce social inequality, although there is little evidence to support this position. At the same time, it is often claimed that some families are 'hard-to-reach' or 'hard-to-engage' in home–school activities, and that those who might benefit most from home–school collaboration in practice engage in it least. Feiler, Greenhough and Winter address these issues by looking at the engagement of different families with activities in the literacy and numeracy strands of the HSKE project. The paper describes the strategies developed on the project to engage with different groups of parents, and analyses the effectiveness of these strategies. One conclusion drawn by the authors is that 'one size does not fit all'—i.e. that home–school knowledge exchange must be tailored to the characteristics of the particular communities served by individual schools.

The last paper in the issue, by Martin Hughes and Pamela Greenhough, looks at home–school knowledge exchange as a form of communication between home and

school. The paper argues that while most home–school communication takes place in the school-to-home direction, home–school knowledge exchange opens up the possibility of communication in the home-to-school direction. This argument is illustrated by two contrastive activities from the literacy strand of the HSKE project—the video activity and the shoebox activity. At the same time, analysis of these activities shows that home–school knowledge exchange cannot be seen as the simple transmission of depersonalized knowledge from one party to another. Rather, it must be seen as a complex communicative activity involving processes of representation and interpretation on all sides. The paper concludes by discussing the implications of this perspective for home–school knowledge exchange in practice.

Conclusion

Taken together, these papers provide a good illustration of the work of the HSKE project. They show that the project has made a significant contribution within each of the contexts identified at the start of this paper. Within the context of UK educational research, the project has shown that large-scale multi-site research can make an impact on existing practice while carrying out a careful analysis of that impact. Like other TLRP projects, the HSKE project has shown that close collaboration with research users can lead to greater research relevance without the loss of academic rigour. Within the field of home–school collaboration, and within the specific areas of primary literacy, primary numeracy and primary/secondary transfer, the project has shown that home–school knowledge exchange can involve a deeper and more meaningful exchange of knowledge between teachers, parents and children than many existing forms of home–school communication. At the same time, the papers in this issue show that the issues raised by home–school knowledge exchange are not straightforward, and that much further work remains to be done.

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