1

Why we studied children learning

> 'One of the most crucial ways in which a culture provides aid in intellectual growth is through a dialogue between the more experienced and the less experienced.'
>
> J. S. Bruner, in *The Relevance of Education*.

The group of children who make up the main characters of this book can indeed be described, in Bruner's terms, as among the 'less experienced' members of our culture. At the time our study was carried out they were close to their fourth birthday, still a year short of the age when they would start compulsory schooling, and their experience of life was inevitably of a limited nature. This lack of experience could be seen in the often touchingly naive questions which they asked. It could also be seen in the large gaps which were frequently revealed in their knowledge, and in the many assumptions about the world, and the way people behave in it, which adults take for granted but which they were still in the process of discovering. And yet, despite their limited years, we found ourselves continually being surprised and impressed by these young children. As we studied their conversations we were forced to admire their curiosity, their open, questioning minds, and, above all, the persistent and logical manner in which they struggled to make sense of their world.

In the course of the book, we will see these children engage in two very different kinds of dialogue with the 'more experienced' members of our culture. First, we will be looking at them at home, as they talk to the person who is usually of central importance in their lives: their

mother. Nowadays, about a third of mothers with children under five work outside the home, generally part-time, leaving their children in someone else's care. In addition, fathers are more involved than previously in their children's upbringing. Yet, despite these changes, it is still true that most preschool children, like those in this book, spend a large part of their waking hours at home with their mothers. Inevitably, mothers and children spend a good deal of their time talking to each other: about what each of them is doing, about events in the past or plans for the future, about the unexpected events that crop up during the day, or about the ideas and thoughts that occur to them in the course of whatever they are doing. Unplanned and frequently haphazard, these conversations between mother and child provide, as we shall see, a surprisingly rich source of 'aid for the child's intellectual growth'.

As well as looking at these children at home, we will also see them in a very different context, that of their nursery school. Like many British preschool children, the children in this book all attended a daily two-and-a-half-hour session at their local nursery class or school. These nurseries are happy and relaxed places, which provide children with a gentle introduction to the kinds of demands they will later experience in primary school. In particular, they encounter a relationship with an adult which is very different from the one they have experienced with their mothers. For the first time they will be interacting with someone who is trained and employed by our society for the sole purpose of 'aiding their intellectual growth'. Their conversations, as we will see, are of a very different nature from those taking place in the children's homes. Comparison between the home and nursery conversations reveals how differently children can behave in two settings – in some cases it is hard to believe it is the same child who is talking. In addition, the school conversations show how full of traps the deliberate process of aiding intellectual growth can actually be, and how this process can indeed even be counter-productive.

The conversations in which the children were involved provide a fascinating insight into their lives and concerns. They also provide material with which to answer some fundamental questions about the way in which young children think and learn, and the role which adults can play in this process. In the rest of this chapter we will outline the main questions which we asked, and explain why we thought these questions important. In the following chapters, we will present the (often unexpected) answers which we found, and show how these answers led

us to question many prevailing assumptions, both about nursery education and about the way young children think.

What do young children learn at home?

The central interest of our study was to describe the educational contexts of the home. What do preschool children learn from their mothers, and how does this learning take place? An immense amount of learning certainly occurs in the early years. By the age of five many of the major intellectual competencies have been acquired – for example, an understanding of space and time dimensions, concepts of causality, of object constancy, and even a good knowledge of age and sex roles. On average, five-year-olds have a vocabulary of over two thousand words, and they can understand and use most types of complex sentence. But little is known about how this learning takes place, or the role that adults play in the process.

Psychologists currently advocate that parents should help their children learn by playing with them and reading to them. We wanted to see whether these were in fact the most fruitful learning contexts, or whether joint activity of other kinds, for example, doing housework together, or watching TV, or simply talking together at mealtimes, might be just as important. We also wanted to see if we could identify anything distinctive about the learning that takes place at home which might be different from the kind of learning that happens at school.

In view of the obvious interest and importance of these questions, it would be reasonable to assume that they had already been thoroughly investigated. But, in fact, the opposite is true. At the time that we started our study we could find little previous research on the topic. There was quite a body of research concerned with the way in which the language of very young children develops through interaction with their mothers. Most of this research involved intensive investigation of a few children, although one large-scale study of language development by Wells and his associates, which we shall refer to again, was already under way.[1] Little could be found, however, that was concerned with the broader educational questions in which we were interested.

Why has this topic been so neglected? We believe there are two likely explanations. The first is primarily practical. To discover what and how children are learning at home requires that the researcher must actually go into a child's home and observe what is happening there. This not

only means an intrusion into the privacy of other people's home lives, but raises the question of whether the very presence of the researcher in the home will have a seriously distorting effect on what is going on. Added to this is the problem of accurately recording – and then analysing – all the unpredictable and sometimes chaotic events that occur. Tape-recorders and video cameras certainly make recording easier, but they also add to the unnaturalness of the situation. In addition, the subsequent analysis of these tapes is a laborious and time-consuming business, particularly if more than a small number of children is studied.

Faced with these problems, those psychologists who have been interested in how mothers teach have almost always brought them to a laboratory, and asked them to teach or explain some task to their children, or play with them using a 'standard' set of toys. The most famous of these studies was carried out by two American psychologists, Hess and Shipman.[2] They asked working-class and middle-class mothers to teach their child how to use a complex toy, such as 'Etchasketch', and compared the teaching strategies of the two social class groups. They found that the middle-class mothers taught their children more effectively, and used more explicit verbal instructions. However, one must inevitably have reservations about the interpretation of the results. Working-class mothers may well have felt less at ease in a laboratory setting than middle-class mothers. They may also have interpreted what was expected of them differently. More important is the fact that experiments of this kind cannot tell us what mothers choose to teach their children at home, or how they set about it, especially since teaching a specific task is a relatively rare event at home.

At the time that our study began a number of researchers, besides ourselves, were concluding that recording in private homes was the only way in which certain questions about the family could be answered.[3] The way in which we ourselves tried to overcome the difficulties we have outlined is described in Chapter 2.

A second reason why so little research has been done on what children learn at home is of a very different kind. The obstacle here is not so much the problem of obtaining information, but the belief in some quarters that there is not much to be gained from attempting to do so. In other words, the reluctance has been due to the general belief that mothers, as educators, have very little to offer.

This attitude may be partly due to the lowly, non-professional status which parenting is frequently given. Educational theorists, in fact, usually define education as a process entrusted by society to a specialist

system involving teachers and schools. Hence what a teacher does in the classroom is, *ipso facto*, educational, while what a mother does is only 'upbringing' or childrearing. Parents themselves often accept this view, believing that education starts at primary school and is concerned with school 'subjects' This leads them to devalue their own contribution, even though it constitutes an essential underpinning of the school system.

It is true that upbringing in the early years, even if it has not been accorded the status of education, has recently attracted a good deal of professional attention. This attention has, however, almost all been critical, and has been concerned with improving, rather than studying, parenting. Psychologists in particular have argued that training for parenthood should begin in school, and be continued by adult education courses and by classes in antenatal and child health clinics. Hardly anyone has pointed out that this movement to educate parents has developed in the absence of any real knowledge on which it could be based. That is, there are remarkably few parental activities which we can predict with any confidence will lead to specific consequences for children.

We knew from our own previous research, and our experience in schools, that this tendency to disparage the parental contribution to education was shared by many teachers, and that teachers are often sceptical about how much children learn at home. One of us (BT), in a previous study, had asked nursery school teachers their opinion of the contribution that parents made to their child's education.[4] Nearly half the teachers, while stressing the parents' concern and affection for the children, thought that they made no positive contribution to their education at all. Typical comments were: 'In an enabling middle-class home, yes, but not round here'; 'To be frank, the children are better off in school'. In a current, as yet unpublished study, we asked reception class teachers in primary schools whether they would like to know more about their pupils' out-of-school lives and interests. Nearly half answered that such knowledge is not important, usually adding that there was very little to know. We suspected that the tendency to devalue, or even to write off, the children's home lives led teachers to underestimate the skills and interests that the children brought to school.

Do working-class children suffer from verbal deprivation?

As some of the above comments suggest, a tendency to devalue children's home lives is most evident in working-class areas. There is a widespread belief among educationalists that working-class parents do not stimulate their children adequately, and in particular do not develop their language. The most recent government report on the teaching of reading, *A Language for Life*, stated that 'an important contributory factor to reading difficulties is that many young children do not have the opportunity to develop at home the more complex forms of language which school demands'.[5] To remedy this situation, the report advocated that parents should be helped to understand the process of language development, and their role in it, while children should be encouraged to attend nursery school so that the nursery teacher can assist by 'measured attention to the child's language needs'. The parents, too, should be encouraged to spend time at school, watching the nursery teachers. This would lead to their altering the experiences they provide for their children at home and the kinds of conversation they hold with them. As one concerned teacher put it to us, 'If only parents understood what we are trying to do at school, it could be "nursery" for children all day at home.'

Surprisingly, these beliefs about the inadequate language used in working-class homes are not based on studies of how language is actually used at home. In general, psychologists have simply inferred from the poorer performance of working-class children on tests of spoken and written language that they have been linguistically deprived at home. Another aim of our study was therefore to observe in both middle- and working-class homes, to see whether there was evidence of working-class language deprivation, or whether this was an unsubstantiated myth. Again, our findings might alter teachers' expectations of children. They might also affect the nature of parent education offered in schools and clinics.

How competent are children as thinkers?

A further reason for observing young children at home was our suspicion that such observation might reveal them to be intellectually more

competent than many psychologists and teachers have believed. Our suspicions were based on recent research within developmental psychology, which has cast a new light on young children's abilities. Much of this research, including work in which one of us (MH) was involved, has been critical of the ideas of the great Swiss psychologist, Piaget.

Piaget's theories have had a tremendous influence on primary education over the last thirty years. Some of his ideas have had a very liberalizing effect on schools. This is especially true of his theory that intelligence develops as a result of children's own actions on the physical world – they must discover for themselves, and explore, rather than be taught. However, Piaget also believed that young children think in a different way from adults. In particular, he claimed that until about the age of seven they are incapable of logical thought, and only able to see things from their own perspective.

It is certainly true that young children do not think as effectively as adults, and cannot solve problems which older children find easy. However, there is increasing evidence that their mistakes in reasoning may not be due to any essential illogicality. Recently, some developmental psychologists, notably Bryant[6] and Donaldson,[7] have devised experiments to show that children's apparent failures in thinking are due to failures of memory, or to misunderstanding what the adult wants them to do, especially in the social context of an experiment. Margaret Donaldson has pointed out that in everyday life one can see instances of children thinking in ways that do not fit easily into Piaget's theories.

Donaldson's own theories suggest that if one wants to see children at their most competent, one should not look at how they attempt tasks or questions set them by psychologists, but at how they attempt tasks which they have set themselves, in an environment which is meaningful and supportive to them. If Donaldson's views are correct, it seemed highly likely that by observing children going about their ordinary lives at home we would see examples of intellectual competence – such as logical reasoning or taking another's point of view – which might not be revealed elsewhere. At the same time, we would gain further insight into the kinds of topics which the children themselves were interested in. We might also shed light on how adults help children achieve their self-selected intellectual tasks.

How different are home and nursery school?

There were a number of reasons why we wanted to look at the children at nursery school as well as at home.

First, it seemed important to compare what children were learning from their mothers at home with what they were learning from their teachers at school. As we pointed out earlier, we thought it likely that mothers and teachers would be quite different in the ways in which they saw and approached the task of 'aiding children's intellectual growth'. The most widely held view within the educational world seems to be that such a comparison would demonstrate the superior techniques and skills of the trained nursery teacher. But it seemed to us possible that the mother might, in her own way, prove to be just as effective, if not more effective, as an educational agent.

We were also interested in seeing what effect the move from one context to another had on the children. Most people never see children in more than one context – parents have little idea of how their children behave at school, while teachers rarely see their pupils in an out-of-school setting. Often both teachers and parents suspect that the other knows a different child. Nevertheless, assessments of children's behaviour and abilides are made by psychologists on the basis of seeing children in the restricted setling of a classroom or test situation. It seemed to us important for both theoretical and practical reasons to see in what ways children's behaviour differed in the two very different settings of home and school. Were the abilities and interests they showed in one setting also revealed in the other? If this was not the case, psychologists would need to reconsider whether they were justified in assessing children in one setting only, while teachers or parents might have to consider how to tap the potential which children displayed in one setting, but not the other.

In addition to studying the effect of context on the children's behaviour, we were also interested in how far the children themselves made connections between their lives at home and at school. Did they link up what they were doing and experiencing in each location? Or did they appear to be moving between two distinct and unconnected worlds?

Our study: choices and decisions

We have outlined above the four main questions we were interested in: what the children were learning at home; what differences in learning at home were associated with social class differences; what skills and competencies they were displaying at home; and what the main differences were between the teaching of mothers and nursery teachers. In order to answer these questions, we decided to obtain a complete record of the children's interactions with adults during one afternoon at home, and two mornings at nursery school. We kept only a brief record of what the children did when they were alone or playing with other children – activities which occupied the majority of their time at school. The reader will note, therefore, that we did not make an overall comparison of the children's lives at home and at school. This was because the focus of our study was on the mother's – and, for comparison, the teacher's – educational role.

Any research project involves choices. By focusing on one issue, others are neglected. Some psychologists might argue with our decision to study adult–child conversations, on the grounds that the primary way in which young children learn is through exploring the physical world, and observing the effect of their actions on it. While we do not deny the importance of this form of learning, we were addressing a different question, one concerned with the role of the adult in giving meaning to the child's experiences.

From a different perspective, others might argue that by focusing on adult–child conversations we failed to take into account what children learn from other children. Again, we do not wish to deny the reality of such learning. Older children often deliberately teach their younger brothers and sisters, and younger children learn much from them by imitation. Some aspects of social understanding and social skills may indeed only be learned from interaction with other children.[8] However, there is a good deal of evidence to suggest that, at least in Western societies, parents are the major influence in the acquisition of knowledge and language. For example, we know that young children who spend most of their time with other children rather than adults – twins, children in large families, and children in institutions – are relatively slow in developing language, compared with first-born and only children. Further, we know that children's talk to adults tends to be made up of longer, more complex sentences, with a larger vocabulary, than their talk to other

children.[9] Given limited resources, we therefore decided to focus on the person with primary educational responsibility for the young child, the mother. (We were well aware of the important role of the father in the child's life, but in most English families, including those we studied, mothers spend much more time with their children than do fathers.)

A further decision which we made was to study only girls. There would have been obvious advantages in studying both boys and girls, but in order to make statistically valid comparisons between them we would have needed a much larger number of children. Our main reason for choosing girls was that, in the preschool years, they are likely to talk more, and more clearly, than boys. In addition, we felt that in a society still dominated by men, there was some merit in focusing on girls, and on mother–daughter interactions.

Finally, then, we decided to observe thirty girls, fifteen from middle-class families and fifteen from working-class families, talking to their mothers at home and to their teachers at nursery school. In the next chapter we describe how we selected the children and how we carried out the study.

How we present our material

Our study was initially conceived in the traditional psychological format. That is, we made quantitative comparisons between different groups of children and mothers. We looked, for example, at how many questions of different kinds were asked, and at how many conversations on various topics were held. We also interviewed all the mothers after the observations were finished. This approach yielded very useful findings; the detailed results are presented in an appendix to this book, and have been published in scientific articles (listed in the appendix).

This format left us, however, dissatisfied. We felt a need to go beyond the tables, to look in detail at what was happening when individual children talked to their mothers and teachers. This was not simply a desire to give life to statistical tables by presenting illustrative examples. It was also because we thought that a study of specific conversations in depth would provide insights not obtainable from statistical analysis, and would generate new ideas about the issues with which we are concerned. This book, therefore, includes not only a discussion of our quantitative data, but also detailed discussions of individual conversations, and a study of one particular girl at home and at nursery school.