Focusing on one aspect of a school-based project that examined the development of young children's communication skills, this study investigated variations in the balance and type of questions found in dialogues between preschool children interacting together and interacting with an adult. Subjects were 60 children, ages 4 to 5 years, who were tested on the Preschool Language Assessment Instrument and divided into groups containing 1 child with high language level scores, 2 children with moderate scores, and 1 child with poor scores. Each group was presented with a set of objects which the children explored by themselves for several minutes. Then an adult researcher participated in the dialogue. All sessions were tape recorded. Analysis revealed that with no adult present, children asked many questions that demanded and received complex answers. Findings suggested that this way of working allows children to exchange views and ideas with their peers, asking each other questions which they may not feel confident enough to ask their teacher. The study highlights the value of providing an interactive context where children can communicate with each other with or without a teacher, and illustrates the skill with which children use questions to maintain, gain, and extend knowledge. (MM)
THE ROLE OF QUESTIONS IN SMALL GROUP DISCUSSIONS

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Research and observations in projects such as Clark, Barr and Dewhirst (1985) and Tizard and Hughes (1984) has led to the recognition of the significance of talk between children in classrooms as a central element in their learning. Until recently the curriculum offered to children encouraged them to adopt a passive role; the listener rather than the communicator; the follower rather than the initiator (Tann, 1991). The study discussed in this paper arose from my interest in developing young children’s language skills and the knowledge that some do find difficulty interacting with their peers or relating to their teachers in their first months at school. This seeming inability to communicate is often, Meadows (1986) suggests, seen as a sign that these children have not yet developed the linguistic skills necessary to function competently in the classroom situation. It is true that the amount of conversation directed towards any child, its format and context and the cognitive demands made all put emphasis on his/her level of understanding and mastery of the basic language skills. However my observations of children operating in situations with their peers or families outside the classroom reveal that in most cases they can and do use language capably. Whitehead (1990) feels that one of the main concerns of the early years teacher should be the development of activities which make real demands on the children. Involvement in such activities would stimulate and support linguistic and cognitive development, extending the children’s interests and understanding. The large numbers within most classrooms and the, therefore, inevitable brevity of teacher/child contact makes it difficult for the teacher to comprehend fully each child’s particular problems. Indeed, Meadows and
Cashdan (1988) found that many teacher/child conversations were artificial, mundane and fragmentary suggesting that the teacher's main skill lies in providing appropriate materials for learning. The situations that teachers provide need to allow children to work together in a way that offers the less confident support. Sylva, Roy and Painter's (1980) suggestion that young children do not find it difficult to adjust to other children's level of understanding is supported by Edwards (1983) who indicates the value of encouraging children to work together in pairs or small groups developing collaborative learning strategies. The spirit of co-operation which seems to develop through activities which involve exploration and problem-solving provides opportunities for talk, helping children to understand more clearly what they are doing, extending their powers of imagination and reasoning. In such a setting children may feel confident enough to ask questions and volunteer the type of information which the presence of an adult inhibits.

The research discussed in this paper represents one aspect of a school-based project examining the development of young children's communication skills. It focuses upon variations in the balance and type of questions found in dialogues between groups of young children and between these children and an adult. The data collected shows that in a peer group setting the children asked a great number of questions either to specific others perceived as 'experts' or to the group in general.

**Method**

The decision to examine the nature of language within groups led to the design of an investigation which allowed comparisons to be made between children interacting together and children interacting with an adult. Sixty children, from five schools and aged
between four years and five years nine months, took part. All had been tested on the Preschool Language Assessment Instrument (Blank, Rose and Berlin, 1978a and b) which was designed to provide a profile of children’s discourse skills. The children were divided into groups containing as far as possible one child with high language level scores on the test, two with moderate and one with poor.

Each group of four children took part in a separate research session. The children were all presented with the same set of objects. These were concealed by a cloth and the children were left to uncover and explore these by themselves. A radio microphone was used to record the verbal interaction whilst I sat quietly in the background making observation notes to assist in the identification of individual children’s utterances when transcribing the audiotapes. It proved possible to be a non-participant as there were very few attempts by the children to draw me into the discussion at this early stage. After a certain length of time (usually between five and ten minutes) depending on the involvement of the children, I participated in the dialogue. It was considered more important to allow the children to carry on with an exploration which was obviously engrossing them than to adhere rigidly to a time schedule.

The choice of objects was carefully considered in order to provide rich stimulation as a basis for the sharing of ideas. It was thought that a torch in working order, a torch complete but in pieces, a set of colour paddles and a colour pyramid would allow for a variety of reactions.

FINDINGS

Exploration of the type offered by these objects provides a scenario for group interaction. At the initial stage when the children are collaborating in the absence of an adult, the collaboration is centred largely on non-verbal actions as the essence of the task is problem-solving in a physical sense; the putting
together, the comparison and the discovery forming a concrete basis for discussion.

In this study such collaboration was accompanied by constant dialogue as children tested out ideas:

Heidi: I can mend that.

    That goes on there. I think that can go on there, think that go on there.

or offered explanations:

Patrick: Look.
Natasha: How do you do it?
Patrick: You push that button, I think. Look this is how you do it. That’s turned off here. You press it in. Then press the button like that.

In the first extract Heidi has been watching another child trying unsuccessfully to put the dismantled torch together. She moves across and takes the pieces from Mayso, talking to herself as she attempts the task although Mayso stays close by. In this instance it seems as though Heidi is engaged in a cognitive process trying to work out how the parts assemble rather than participating in interaction with her peer.

In the second Patrick shines the torch at Natasha reinforcing his action with the command "look" directing her attention towards his discovery. Her question is in direct response to this forcing him to attempt an explanation. The first part of his reply is tentative, the "I think" suggesting that at this point Patrick is still formulating his answer, seeking appropriate words and actions contrasting with the confidence and fluency of the second part.

Requests for information or explanation form a sizeable proportion of the questions recorded in this stage of the study. Although these did not always require more than one word answers or the simple identification of objects,
they were frequently given the respondor's full attention and many carefully considered replies were noted. In the absence of an adult to offer guidance the groups themselves appeared to work together, to find out, offer support and facilitate understanding. In some instances certain children emerged as leaders either through familiarity with the type of objects or through greater linguistic and social confidence. This, however, was not always the case for some groups collaborated on an equal footing.

It is clear from Table One that the children asked a considerable number of questions during this stage of the study. These varied in type ranging from the information and explanation seeking questions discussed above to requests for permission to "Have a go" (see Table Two). These requests seem to have several functions, often it appeared that they were an accepted part of the social interaction, serving as a reminder when a child had had a torch or colour paddle for too long as the extract below shows:

Ahmed: Green, on green, on green.
Christine: Can I have a look through that, please?
Can I have a go of that?
Winston: Yea.
Christine: That’s a good colour.

At other times the children asking for a turn were those who were on the periphery of the group, watching the others interact but having little part in the activity. In these cases the requests might be construed as a manoeuvre by which they hoped to gain entry. In the majority of cases this ploy was successful but group pressure was so strong in one instance that a child (Phyllis) remained on the outskirts for the whole of this stage.

Phyllis: Can I have a go?
<table>
<thead>
<tr>
<th>Number of children</th>
<th>0</th>
<th>UNDER 5</th>
<th>5 - 10</th>
<th>MORE THAN 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAGE 1</td>
<td>7</td>
<td>28</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>STAGE 2</td>
<td>8</td>
<td>39</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

**TABLE ONE:** To show number of questions asked by individual children during both stages of study
<table>
<thead>
<tr>
<th>TYPE OF QUESTION</th>
<th>STAGE 1 CHILDREN ONLY</th>
<th>STAGE 2 CHILDREN</th>
<th>ADULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION SEEKING</td>
<td>147</td>
<td>85</td>
<td>308</td>
</tr>
<tr>
<td>EXPLANATION SEEKING</td>
<td>122</td>
<td>68</td>
<td>272</td>
</tr>
<tr>
<td>CONFIRMATION SEEKING</td>
<td>60</td>
<td>50</td>
<td>76</td>
</tr>
<tr>
<td>REQUEST FOR HELP</td>
<td>13</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>RHETORICAL</td>
<td>6</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>ANTICIPATING ACTION</td>
<td>13</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>REQUESTING PERMISSION</td>
<td>31</td>
<td>53</td>
<td>1</td>
</tr>
</tbody>
</table>

**TABLE TWO:** The number of questions asked during both stages of the study
Sharmae: No, I had it first!

Phyllis: Joanna, Can I have a go?
Joanna: That isn’t yours!

Although only seven children did not ask questions, there were some groups where the type of questions asked sought information or confirmation rather than explanation. Whilst this did not mean that the exploration and social exchanges within these groups were constrained, often the emphasis was on non-verbal communication, with explanation accompanying demonstrations as a natural part of the dialogue. In the example below Peter and Narinder are trying to work out how to make the torch light up.

Peter: Narinder, you switch it off.
Narinder: It won’t switch off!
Peter: That’s the switch down the bottom. Switch, watch, switch if off. I can do it. Switch it down.
Narinder: Oh, it’s too tight.
Peter: Push it down. See!

In most groups, however, there was evidence that questions were important to the successful continuation of the exploration, extending knowledge and facilitating understanding. Whilst it seemed that the majority of these were explanation or information seeking, questions which anticipated action, sought help or were merely rhetorical, although less frequent, also appeared to fulfill a vital role. Indeed scrutiny of the more involved exchanges frequently revealed the blend of comments, questions and answers illustrated below by Anthony and Sandokh as they examine the torch and batteries:

Anthony: We nearly broke that.
Sandokh: Mine won’t work cos look there are holes in the batteries.

Anthony: Yes.

Sandokh: Aren’t there?

I think, let me see. I wonder if the batteries waste out.

Anthony: Won’t this work?

Sandokh: How can it work if one of the batteries waste?

Anthony: Let me put this in. Can’t work.

Sandokh: We need that thing in that hole. We need that thing in that, in that hole, don’t we?

The entrance of an adult into any kind of small group discussion inevitably causes a change in attitude towards the ongoing activity. In school children become conditioned to a view of the teacher as leader and automatically turn to her for instruction and direction. The way an activity is introduced influences the children’s perceptions of it and they try to complete the task in the manner they feel is expected of them. The opportunity offered to the children in this study to make their own discoveries was an attempt to avoid undue influence. The interaction which resulted showed a sense of understanding developing between the participants with the more skilful attempting explanations aimed at helping the less able. My entry into the group discussions varied according to this interaction, in some instances I was invited in as the children required help or information, in others I chose a moment when the exploration and dialogue seemed to have come to a natural cessation. Whatever the circumstances my presence effected the children’s dialogue which was now directed towards me.

Now although there was a big increase in the number of questions found in the transcripts the vast majority were asked by me. In most cases the first part of the
exchange between the children and myself consisted of a string of questions and answers as I tried to draw out their impressions of their investigation. The tone of the dialogue altered as the children reported their findings rather than continued exploration.

Adult: What else did you do? How did you fix it?
John: We put the batteries in and they were right.
Horace: And clicked this and this.
Adult: And what happened?
John: The light turned on.
Adult: It did, didn’t it!

As Table Three shows in twelve of the research sessions I asked more than twenty questions, with more than forty being recorded in three of these! Although there was evidence of the children asking questions (Table One) there were far fewer than in the first stage when they were by themselves.

By far the greatest number of my questions were information or explanation seeking and often required a high level of understanding from the children. Although the responses to these were varied most of the children, regardless of their language level, did attempt to answer them.

Douglas: Oh, I can see your hand. It’s red.
George: Can you see mine?
Adult: Oh, yes. Whose fingers are those?
Marie: Angela’s.
Adult: Angela’s. Yes, red fingers. What happens if you put them on the other side, on another colour and shine the torch on them?
Douglas: Nothing.
Angela: It looks purple.
Marie: If you look through purple and green it looks dark.
<table>
<thead>
<tr>
<th>Number of Sessions</th>
<th>UNDER 20</th>
<th>20 - 30</th>
<th>31 - 40</th>
<th>OVER 40</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**TABLE THREE:** To show number of questions asked by adult during each research session.
In many cases, where the child did not seem to fully understand, the transcripts show further questions were asked which qualified the original.

The tendency for adult questions to be above the language level of many of the children is one which is common amongst teachers. Questions which appear straightforward often contain confusing elements or are part of a much longer utterance. The child may misunderstand as s/he looks for the simpler question embedded within the complex pronouncement. At times my utterances consisted of more than one question, on these occasions it was noticeable that the children invariably answered the simpler one.

Adult: Well, have a look at these batteries. Are they the same at both ends? Is that end the same as that?
Sharon: No.
Adult: If you put two batteries like that, with both bottoms together, do you think it will work? Or do you think you ought to have the top touching the bottom like that?
Sharon: Yes, you’ve got to put it there.

Closed questions were evident throughout all the transcripts but once the children had become used to my presence very few offered one word answers. Problems only arose in those discussions which were less successful and on these occasions it was noticeable that the number of questions I asked increased as I attempted to draw the children into conversation. In groups where the dialogue flowed more easily the style of questioning changed from ones designed to elicit recall to ones which attempted to extend understanding and initiate further exploration.

All the discussions in this second stage showed evidence of children’s questions but many of these were requests for permission to ‘have a go’. These differed
from ones asked earlier for now they were addressed to me in the knowledge that I was in the position to ensure they were included, consequently the number of these type of questions showed an increase. Children did ask more complex questions, demanding information or explanation and these were addressed to me in similar fashion to those addressed to the dominant child in the first stage. These were not ignored but the transcripts show that the reply was often in the form of another question designed to encourage the children to think for themselves.

Richard: Do you know what! I’ve got a torch and do you know what it does?
Adult: What does it do?
Richard: When you press the button, when you press the button, it goes, it goes. You need the switch off like that. It goes on just like that.
Adult: Does it?
Richard: Like that. When you put it in the middle and you press that button like that, then you go on and off.
Adult: On and off?
Richard: Yea.

It seems that in this type of situation the adult’s influence is paramount leading the discussion through description, explanation and recall, on to extended exploration and investigation. My use of questions seeking information and explanation fulfilled a different function from those asked by the children in the first stage. The questions asked to each other at that point were genuine ‘I want to know how’ ones with the questioner seeking to increase his/her understanding. Although I used similar kinds of questions, they were intended to help the children recall what they done and through their attempts to explain it, extend their own understanding.
Evaluative Conclusions

Providing a context in which children can operate without an adult led to evidence of an hitherto unsuspected fluency of language. The social demands of the small group situation with its emphasis on practical investigation offers an opportunity for children to use language to learn, find out and discover (Tann, 1991). In this study it appeared that the children were excited by each other’s discoveries and many questions were recorded which demanded and received complex answers. The findings suggest that this way of working allows children to exchange views and ideas with their peers asking each other the questions which they may not feel confident enough to ask their teacher. Whitehead (1990) feels that ‘child tutors are frequently more patient, straightforward, unthreatening and less easily offended than the mature versions’ (p.81). The complexity of adult questions must confuse some children resulting in their withdrawal from the dialogue. These children may well not ask for explanations whereas with their peers they are not so reticent (Coates, 1985).

My entry into the discussion provided opportunities for the children to describe their discoveries, explaining and recalling what had happened. In this situation I asked the vast majority of questions which were initially more instructional in nature changing the tone of the interaction from one of investigation to one of reporting. However knowledge of children’s exploration gained in this way places the adult in a position to build upon their discoveries, extending their basic understanding through the careful use of questions.

The classroom offers the opportunity for the development of investigation areas such as that used in this study, where groups can work and talk together. Groups of children interacting informally in structured environments can often help the child with poor language to develop his/her linguistic skills, as the simple
directness of the questions and explanations makes immediate rapport possible. The teacher can set up such situations using her knowledge and understanding of children's potential for language development to create tasks which enable them to define and expand previously unexpressed ideas. This study suggests one setting in which children's speaking and listening skills can be developed. It highlights the value of providing an interactive context where children can communicate with each other with or without a teacher and illustrates the skill with which participants use questions to maintain, gain and extend knowledge.

References

Clark, M.M., Barr, J. & Dewhirst, W (1985) *Early Education of Children with Communication Problems: particularly those from Ethnic Minorities* Educational Review Offset publication No.3 Faculty of Education, University of Birmingham