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Institute of Education, University of London  
5<sup>th</sup> September 2007

## Researching Young Researchers in Primary Schools: Responding to Children's Evaluations of a Participatory Technique

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### **Abstract**

*Increased emphasis on children's 'voices' and their rights to be involved in events and decisions which affect them has seen a move towards children becoming participants and co-researchers in research projects about their lives rather than passive 'objects' of research. This has prompted a further step towards enabling children to become 'active' researchers in their own right (Kellett, 2005). The Children's Research Centre (CRC) at the Open University is a pioneering initiative in this field.*

*This paper draws on data from a doctoral study exploring the experiences of groups of English primary school children who have undertaken research training through the CRC programme prior to carrying out research projects of their own choice. Issues emerging include the importance of (i) encouraging their active involvement in the research process (ii) identifying a reliable method of evaluating what children have to say about their experiences of doing research (iii) offering them an authentic role in evaluating the efficacy of such a method and (iv) recognising the research knowledge and skills they have developed.*

*10 and 11 year old children's evaluations of a particular participatory technique as a means of representing their views have raised some important points. The value these children place upon the recognition of unique perspectives, the dangers of concealing individual priorities within group data and issues relating to internal validity all have implications for how the data generated with children within the context of this study can be analysed and represented. Moreover, ethical issues associated with offering children choice and control have been shown to impact on the data that can be generated. These are crucial considerations if the technique is to be used to make comparisons across groups as the study continues.*

### **1. Introduction**

Increased emphasis on children's 'voices' and their rights to be involved in events and decisions which affect them has seen a move towards children becoming participants and co-researchers in research projects about their lives. This has prompted a further step towards enabling children to become 'active' researchers in their own right (Kellett, 2005). The Children's Research Centre (CRC) at the Open University is a pioneering initiative in this field.

This paper draws on data from a wider doctoral study exploring the experiences of groups of English primary school children who have undertaken research training through the CRC

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<sup>1</sup> This is a draft paper describing work in progress. Please do not cite it.

programme prior to carrying out research projects of their own choice. It does not set out to offer an in-depth analysis of the data presented but rather to consider the impact and implications of 10 and 11 year old children's evaluations of a particular participatory technique as a means of representing their views.

## 2. Researching young researchers<sup>2</sup>: considering research methods

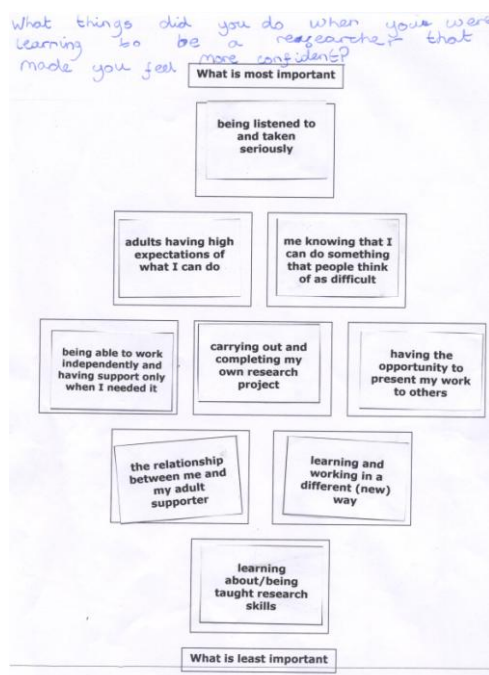
The primary aim of developing children as researchers is to 'unlock' children's voices (Kellett, 2005). Consequently, when inviting these children to participate in this adult-initiated research study, it is especially important to (i) encourage their active involvement in the research process, (ii) identify a reliable method of evaluating what they have to say about their experiences of doing research (iii) offer them an authentic role in evaluating the efficacy of such a method and (iv) recognise the research knowledge and skills the children have developed.

Implicit in these considerations is the need to address the imbalance of power between child participants and an adult researcher. It is essential, therefore, that methods adopted should

- engage the children's interests and offer them choice and control;
- acknowledge children as experts on their own experiences;
- privilege children's perspectives and their own words.

## 3. A participatory method: Diamond Ranking

This paper examines the usefulness of 'Diamond Ranking' (Thomas and O'Kane, 1998; O'Kane, 2000) as a participatory technique which might allow the criteria above to be met. Diamond Ranking was developed for use during the 'Children and Decision-Making' study (Thomas and O'Kane, 1998) and allows people to arrange a set of nine statements in a diamond pattern according to how well each statement represents their own views and opinions. As shown in Figure One, those considered 'most' and 'least' important are placed at the top and bottom respectively, with remaining statements ranked in groups. People are then asked to explain their choices and positioning of the statements. This method avoids the need for straight linear ranking, something young researchers have identified during their research methods training as 'difficult' (Bucknall, 2005).



**Figure One:**  
A completed  
Diamond Ranking  
activity sheet

<sup>2</sup> The designation 'young researchers' is used throughout this paper to refer to primary school children who have completed a programme of research training and who have subsequently carried out their own research projects.

O’Kane (2000) describes how statements describing children’s experiences of decision making which were used in Diamond Ranking activities were taken from earlier interviews with individual children. In a similar way, the child-generated statements below, in which young researchers have identified ‘important’ elements of their experiences, have been taken from interviews conducted earlier in this study with groups of children in Years 5 and 6.

<i>Being able to present the findings of my research project in front of other people</i>	<i>Having a choice about whether or not I want to be in the research group</i>	<i>Being told all about the project and how much work is involved before the group work starts</i>
<i>Being able to work on my research project with a friend</i>	<i>Having a choice about the topic for my research project</i>	<i>Having adult help only when I need it</i>
<i>Working with an adult/adults who are not members of the school staff</i>	<i>Being able to work on my project during lesson time</i>	<i>Being able to use a computer for my project whenever I need to</i>

**Table One: Child-generated statements about ‘important’ experiences of becoming young researchers in primary schools**

In the context of later focus groups, other young researchers have been invited to utilise these statements during a Diamond Ranking activity to answer the question

*What do you think are the most important things about being a young researcher in a primary school?*

The remainder of this paper centres on my experiences of employing this technique during focus groups facilitated with two cohorts of young researchers, one at Pagoda School in the north of England and one at Tower School in South London.<sup>3</sup>

#### **4. Listening to the children’s voices: Evaluating the method and taking action**

##### **(a) Pagoda School**

After completing the activity, the group of five children from Pagoda School was asked, through discussion, to evaluate this technique as a means of representing their views about becoming researchers. It is one this group of children had previously encountered during their research training but as a *group* (rather than an *individual*) activity.

The comments the children made during their evaluations indicate that they consider the opportunity to complete the activity individually to be important:

*“If it’s individual then you can express your own opinion so it’s unique.*

*“If you were doing it in a group it wouldn’t be as unique as doing it on your own.”*

*“You could think something but in your group the other people wouldn’t like it and they don’t put it down then you’re not really expressing what you think.”*

<sup>3</sup> The names of both schools referred to in this paper have been changed. Photographs are reproduced with permission of the children and their parents.

*"If you put [the statements] in the space you might have one person saying, "I'm in charge" and then there'll be two or three people that don't get a say at all."*

*"If you think that that's the most important thing then that's the most important thing to you personally so no-one can actually say, "Oh, that's stupid because that's not the most important thing"."*

*"It doesn't make sense to say to someone else, "That's wrong". Everyone's got their own opinion."*

*"You're sort of in that place where, 'Well, I think this but I really want to fit in with them'."*



Year 6 pupils at Pagoda School completing a Diamond Ranking activity. These children participated in research training and completed their research projects while they were in Year 5 and were the first group in this study to evaluate this participatory technique as a means of representing their views about becoming researchers.

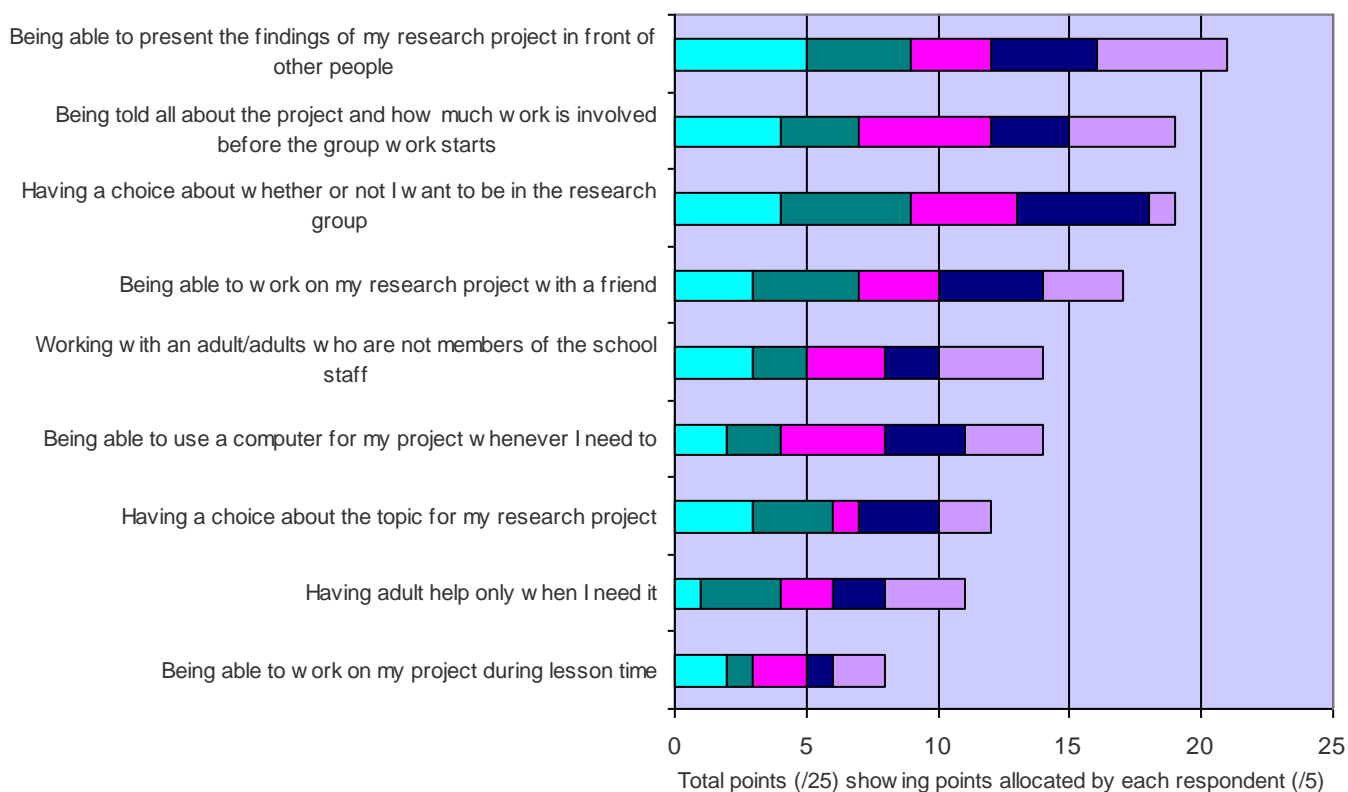


These comments are significant because by adapting the technique, it is possible to aggregate individual 'scores' to indicate how the group as a *whole* regard the relative importance of each statement in representing their views. A simple 1-5 scoring system can be applied which facilitates data display and allows comparisons to be made both within and across groups. A statement at the top of the Diamond Ranking grid scores 5 and one at the bottom scores 1 with interim 'values'

assigned accordingly. However, as Figure Two (below) illustrates, there is a danger of individual priorities being concealed within data 'grouped' in this way unless individual differences are deliberately revealed. For example, the children having a choice about whether or not they wanted to be in the research group would appear to be one of the most important factors for this cohort but for one member, this was the least important.

O'Kane (2000) describes how decisions made about their ranking of statements were discussed with her participants individually. However, although adopting this approach would undoubtedly have produced some valuable data, the children in this study, when given the choice, have welcomed the opportunity to complete the activity anonymously.

***What do you think are the most important things about being a young researcher in a primary school?***



**Figure Two: Representing group data: Pagoda School Young Researchers (n=5)**

During their evaluation of this technique, the children also commented that ranking other young researchers' statements can be problematic:

*"It's odd using other people's statements."*

*"If it was my statements, I would do completely different answers."*

*"It could end up being the same answers somehow but if you've got an open question it will be different because everyone has got their own opinion and they can say everything different to everyone else."*

Subsequent discussion led to the children suggesting how the use of this technique in this study might be improved. The children felt that they should write down their own statements, i.e., answers they would have given to the same question. I was fortunate enough in this instance to have been given enough time with the children for them to be able to do this: throughout this study, time, or lack of it, has had a real impact on the ways in which I have been able to generate data with different groups of young researchers and their peers. Some children in the group composed

nine new statements, some fewer. With the headteacher’s consent, I was able to promise the children that I would take away their statements and use them to prepare a new set. These would be sent back to them in order that the Diamond Ranking activity could be repeated if they so chose.

Since it was important to use the children’s own words, it was fortunate that there was remarkable similarity between their statements and only very minor changes needed to be made in order to allow statements on the same theme to be integrated. In this way, nine new statements were produced. These are shown in Table Two, below.

<i>understanding what research is and knowing what to do</i>	<i>getting a say</i>	<i>being able to tell teachers, adults and children what you have found out</i>
<i>working with people you don’t know as well as with your friends</i>	<i>getting enough time to do the work</i>	<i>to be happy and comfortable with the research you are doing</i>
<i>knowing what you are doing the research for</i>	<i>learning different skills and new and interesting things</i>	<i>hearing what younger people think as well as older people</i>

**Table Two: Statements about ‘important’ experiences of becoming young researchers in primary schools generated by children at Pagoda School**

However, before these could be returned to the children, I facilitated a further focus group with young researchers at Tower School, whose own evaluations provided further insights into the use of this technique.

### **(b) Tower School**

As at Pagoda School, the cohort of young researchers at Tower School began by completing a Diamond Ranking activity individually, using the original question and statements. They were then asked, during a group discussion, to say what they thought of the technique as a way of representing their opinions. Again, there were comments about the problems inherent in using other people’s statements:

*“I think it’s a good way but it’s sort of hard. Some of them are not the ones that you think. There’s different parts of it that you don’t get. They’re not what I think.”*

*“I think it’s a good way but when you get to the low part, some of them they will go lower but there’s not much space to put them on the paper.”*

*“There were some things that I thought actually would go lower and it was quite difficult.”*

*“There are some good ones but there are some that could go lower than the lowest.”*

The children agreed that these problems arose because although the original statements identified important issues, these were not necessarily important to them.

They continued:

*“It was like you see how you’re [me as researcher] supposed to be getting people’s opinions but it was like opinions that other people picked out themselves and we couldn’t like do it ourselves.”*

*“I think it’s a good way but there’s better ways of finding it out like maybe them actually telling you in person or maybe writing it down and giving you their little note so they can be as truthful as they can.”*

These comments provided me with an opportunity to ask the children if they would like to try writing down (anonymously) what they each thought was important about their experiences of doing research. One child pointed out that this would be good idea because

*“... then you’d see if any other people have like similar opinion”.*

In response, another child remarked,

*“Yeah, in this group and in other schools”.*

(The same child had said earlier,

*“I actually think [Diamond ranking ] is a good way of collecting data and it’s good to go around every school and see what they think because if you just collect one school’s opinions you wouldn’t know if another school thinks something different so you should do some other stuff as well.” )*

Table Three, below, shows the nine new statements produced. Again, only minor changes were made to integrate all the children’s views

<i>Being able to work individually and carrying out my own ideas</i>	<i>Being able to present my work to other people and feel proud</i>	<i>To be able to work in a group and share ideas and your reasons for them</i>
<i>Becoming more confident and not feeling shy</i>	<i>To be able to work with people from outside school</i>	<i>Knowing how to find out and analyse the information I need to answer my question</i>
<i>Being able to get help from my friend or teacher when I need it</i>	<i>Being able to choose and feel happy with my own research question so it will help me gather the information I need</i>	<i>To have a choice about being in the research group</i>

**Table Three: Statements about ‘important’ experiences of becoming young researchers in primary schools generated by children at Tower School**

Discussion then moved on to whether or not it would make a difference if the children completed the activity as a group rather than individually. Opinions here were more mixed than at Pagoda School:

*“I think you should do it in a group because then you get other people’s reasons and then you might start to change your mind about something.”*

*“I think it’s better to do it individually ‘cause sometimes when you’re in a group people hold back their feelings and say they agree with someone else but they have something else they want to say and when you do it individually you can let it all out instead of keeping things bottled up.”*

*“I think it’s best if you try to do it both ways because you’ll get a personal opinion and as a group together’s opinion.”*

*“... it’s best if you do it both ways because then you’ll know if someone’s participating or not and you’ll get sort of a better view.”*

I told the children that I wished I had thought of this last possibility before I had arrived in school. However, I did have a spare set of statements with me, Ince they knew this, they were keen to complete the activity again, this time as a whole group. Afterwards, asked what it had been like to do this, two young researchers commented:



*“It was easy [to complete the activity in a group] because everyone got their own say when we was working as a group. When they got their own say we was looking at them to see if they was right and then they gave their reasons and stuff.”*

*“I think it was easy than doing it individual because everyone has their own say and most people they agree on the same thing and everyone gets their own say for why their reason, why they chose that.”* (Child’s emphasis)

However, the remainder of the group were rather subdued at this point. It might have been both useful and interesting to record the discussion that took place during the group activity to ascertain whether or not every child had, indeed, had *‘their own say’*. However, one child had indicated that, although she had been happy for me to record the discussions I had had with the group, she was unhappy about being recorded in this new situation. It was important I respected her wishes and, as the other children ‘didn’t mind’ whether I recorded the group or not, I decided not to pursue this. Again, offering the children a choice about ways in which data could be generated with them meant that I missed potentially useful and interesting data.

I asked the children if I could send them other Diamond Ranking activities to complete, using their own statements individually and then as a group. I explained that I had, in any case, planned to do this with a group of young researchers at another school but that I would now write and explain what had happened during the focus group at Tower School. Consequently, the children at Pagoda School were asked if they would complete the activity again, not only individually using their own statements but also in a group, using first the original statements and then their own statements.

The children at Pagoda School were particularly interested in what I was going to do with the data they had helped generate. I promised that I would send them a summary of the results of the activities we had carried out together during their focus group. Subsequently, the children were sent (small) copies of a poster presented at a conference (Bucknall, 2006). The content of the poster is reflected in this paper.

Figures Three and Four, below, show how the young researchers in each school responded to the activity question using the original statements in both individual and group situations. Figure Five shows how the cohort at Pagoda School responded to the question using their own statements, again in both individual and group situations. Comparing ‘grouped’ data obtained from aggregating individual ranking ‘scores’ with that obtained after discussion as a ‘group’ raises some interesting points. This is discussed further below.

## **5. Discussion**

Diamond Ranking was chosen as a research technique because the children who have used it as part of their research training have reacted positively to this ‘hands on’ way of collecting data and because it seemed likely to meet the criteria that had been set for the selection of an appropriate research method within this study. It would indeed appear to have been successful in doing this, particularly when adapted and extended in ways the children suggested. By inviting children to participate in focus group activities and discussion; by asking them to evaluate the efficacy of a method of collecting data in that context; by listening to what they have to say and, crucially, by acting on their suggestions and maintaining a dialogue with them through further activities and feedback, their active engagement in the research process is encouraged. However, the original statements were collected from interviews, which although unstructured, inevitably maintained a high level of adult control. There is, therefore, some tension here between the preparation and use of this technique. This, and possible ways forward, need further thought.

In addition, offering the children choices, at every stage, about ways of doing things and about their level of participation allows them to take control of the process of generating data with their cohort. It is clear that the children have drawn upon their research knowledge and skills during my discussions with them; they have confidently used research vocabulary and have made perceptive comments about the possibilities and potential of data collection and about how people might behave in different contexts.

Through their evaluations and suggestions, the children have played an authentic role in the shaping of the data presented here and in the gaining of new and unexpected insights, not only into the different ways in which Diamond Ranking can be used to gather data but also into the implications of these for the analysis and display of data. In the words of one young researcher, “*We made our data*”. Inevitably, though, questions about this data have been raised.

Although each pair of charts in Figures Three, Four and Five show some similarities between the ‘grouped’ data in (a) and the ‘group’ data in (b) (in particular, the agreement between individuals and the group as a whole about the three or four ‘most important’ elements of their research experience) there are also differences. Which data, then, can be said to most reliably represent the views of each cohort? Is it necessary to choose between them or is it more apposite to accept that there are different ways to answer the same question (Mason, 2006)? In attempting to answer these questions, the impact of other (especially social) factors which may have influenced the children’s decisions would need to be considered.

In this study, however, these considerations have become, to a certain extent, problematic. It might have been useful to have a record of the discussion that took place while the children at Tower School completed the group activity. The children themselves pointed out that this was an opportunity for people to explain their reasons for considering that particular statements were more important than others. However, as already explained, it was decided that this was not possible since one child did not give her consent.

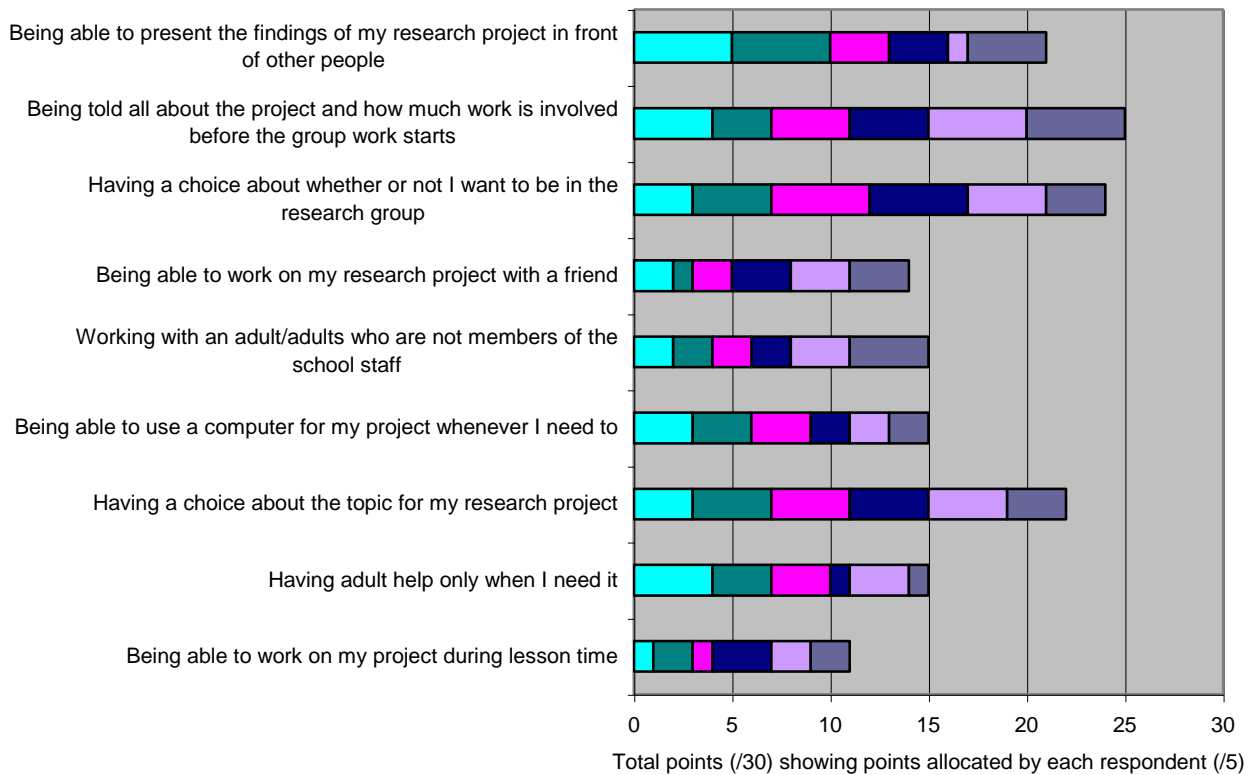
When the children at Pagoda School completed their group activities and the individual activities using their own statements, travelling distance and associated costs precluded me from making a second visit to the school. It was important that I kept to the arrangement I had made with the children about using their statements to follow up the first activity yet this meant that I could not be sure about the conditions under which the subsequent data was produced. Furthermore, even if the children had not chosen to complete the individual ranking exercises anonymously when I was present, it might not have been possible for me to discuss with each child individually the reasons for their ranking decisions. Pragmatic reasons, mainly associated with the time and the spaces made available for me to spend with each group would have presented very real difficulties.

Criticism might also be levelled at the way in which statements taken from qualitative data have been used quantitatively. It is possible at this stage to justify *post hoc* this ‘mixed method’ approach since it has unexpectedly but usefully generated further qualitative data in the form of new sets of statements – new answers to the same question which provide useful insights into the ‘bigger picture’ (Brannen, 2005). Brannen (2005) explains how the use of both qualitative and quantitative methods within a study might lead one to elaborate upon, complement or contradict the other. In this study, each of these possibilities seems apparent and this issue, too, requires further consideration.

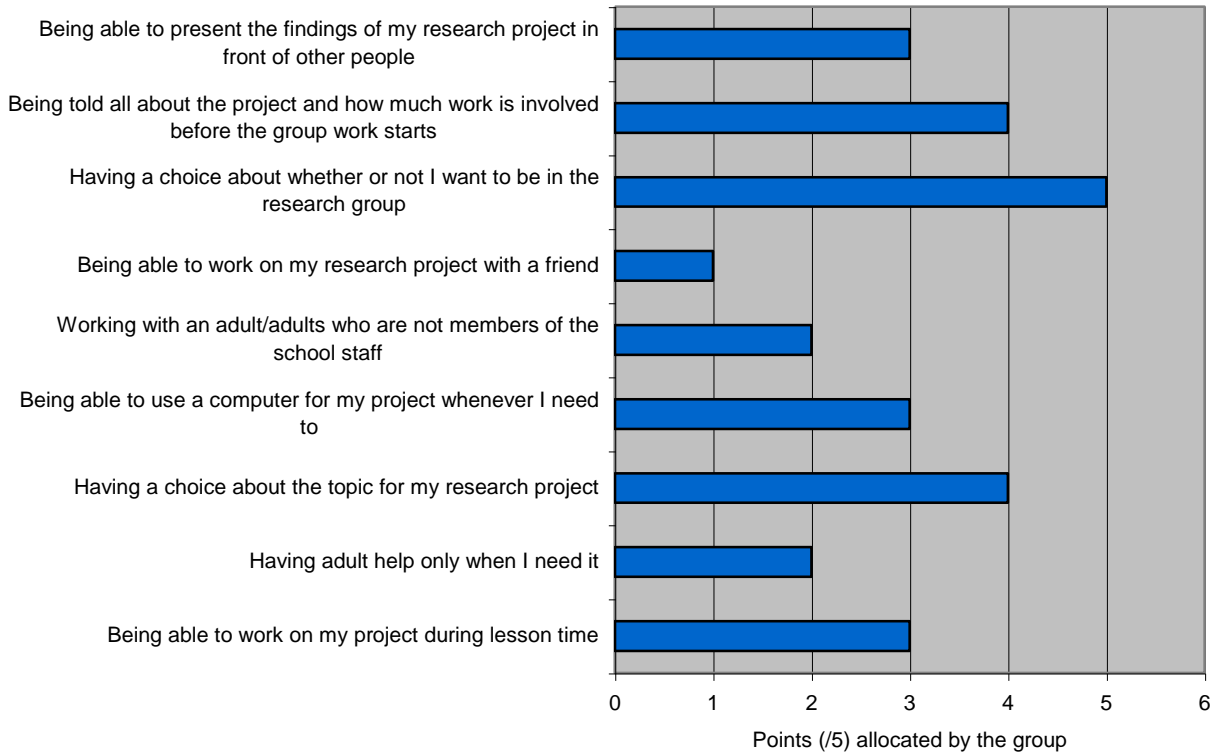
It can be seen that the statements produced by the children in each school have some common themes, e.g. opportunities to disseminate their findings, working with other people and feeling happy with the research they were doing but there are some elements which are not common to each group, e.g. having enough time to do the work and having a choice about being a member of the research group. As one of the children in the Tower School cohort said, the technique provides an opportunity to compare opinions, both within groups and between schools. The differences and similarities between the children’s statements will be analysed further during the coding of other data collected during their focus groups. Data collected during interviews conducted with the adults who have been involved in the children’s training will also inform this analysis. It is, for instance, likely to be significant that although each group in the study has followed the CRC programme of training, it has become apparent that this has been delivered in different ways, in different settings and for different purposes.

**What do you think are the most important things about being a young researcher in a primary school?**

**(a)**



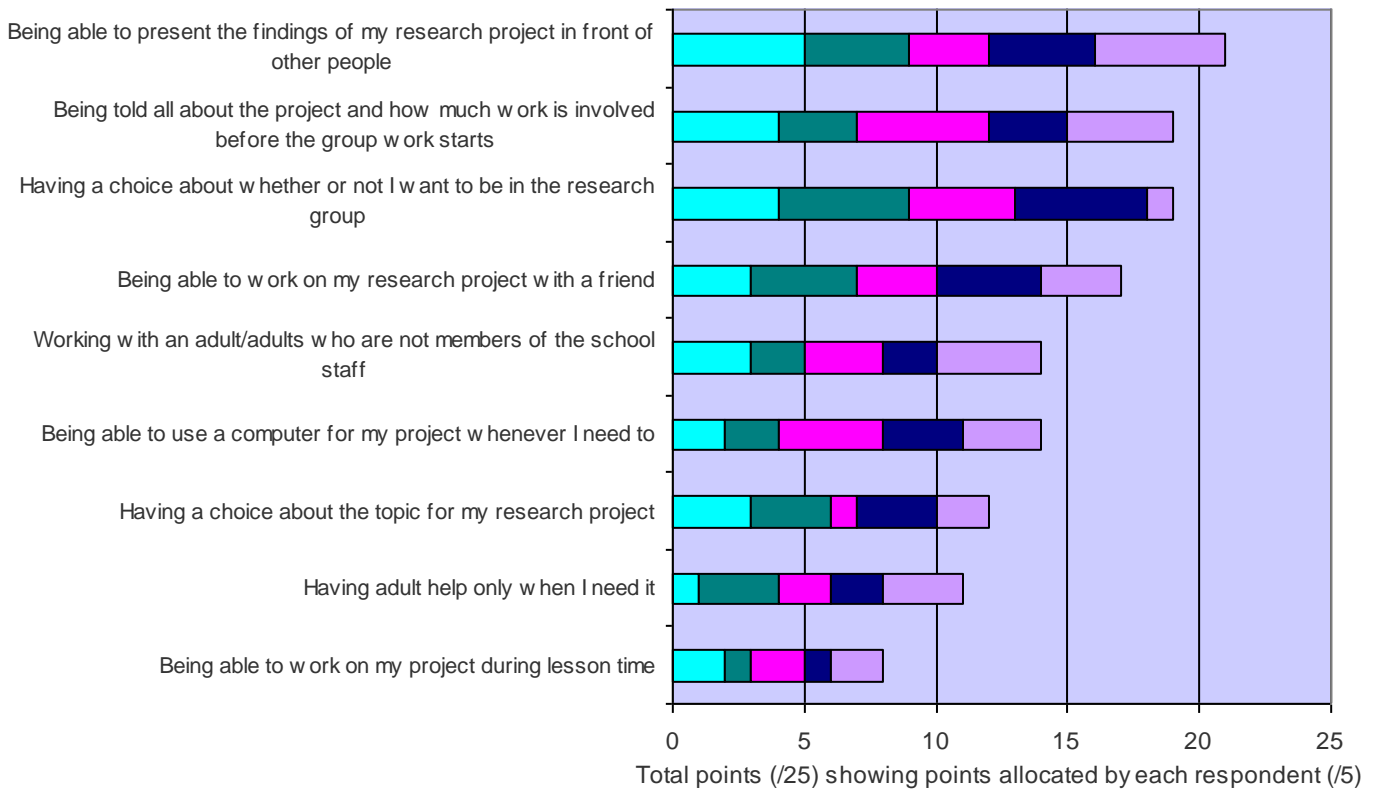
**(b)**



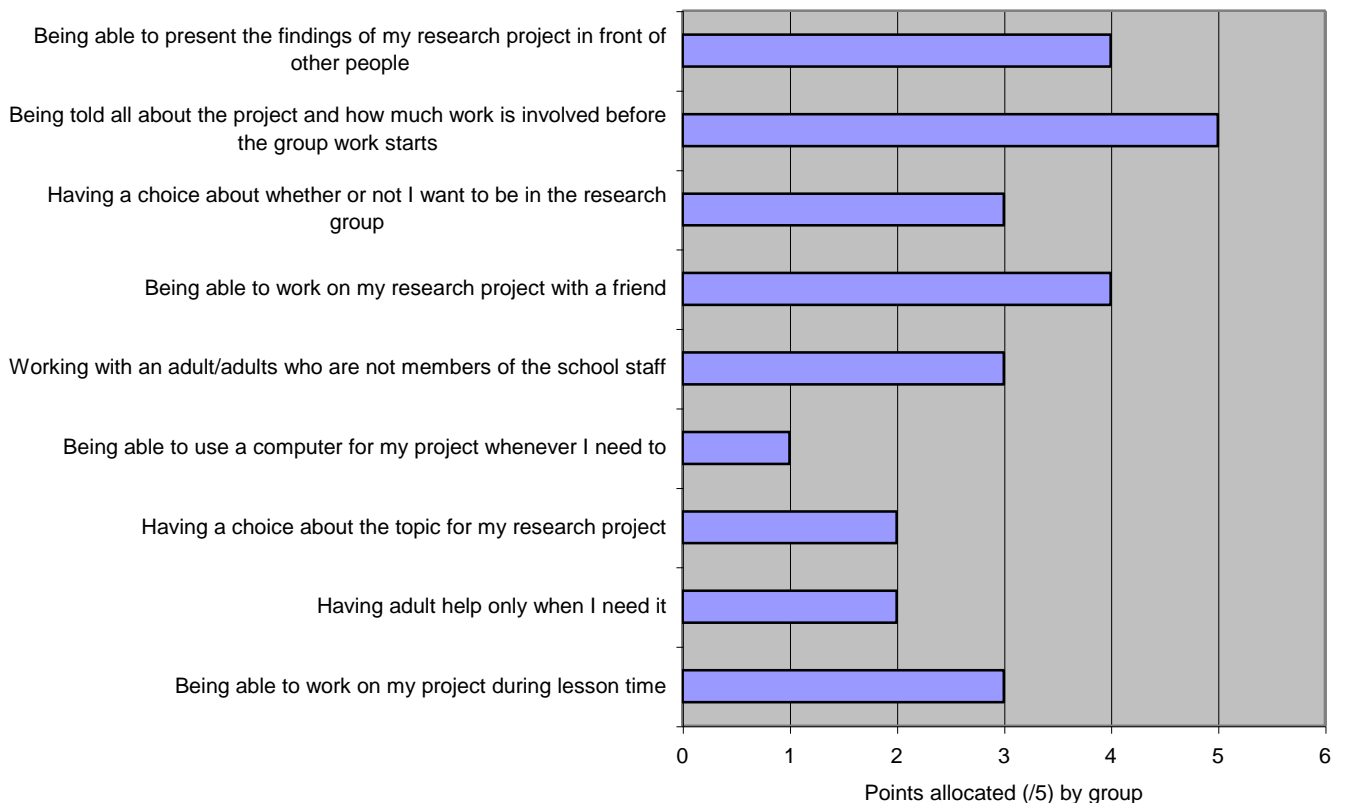
**Figure Three: Representing group data: scores from Tower School young researchers (n=6) completing a Diamond Ranking activity using statements taken from earlier interviews with other groups (a) individually and (b) as a group**

**What do you think are the most important things about being a young researcher in a primary school?**

**(a)**

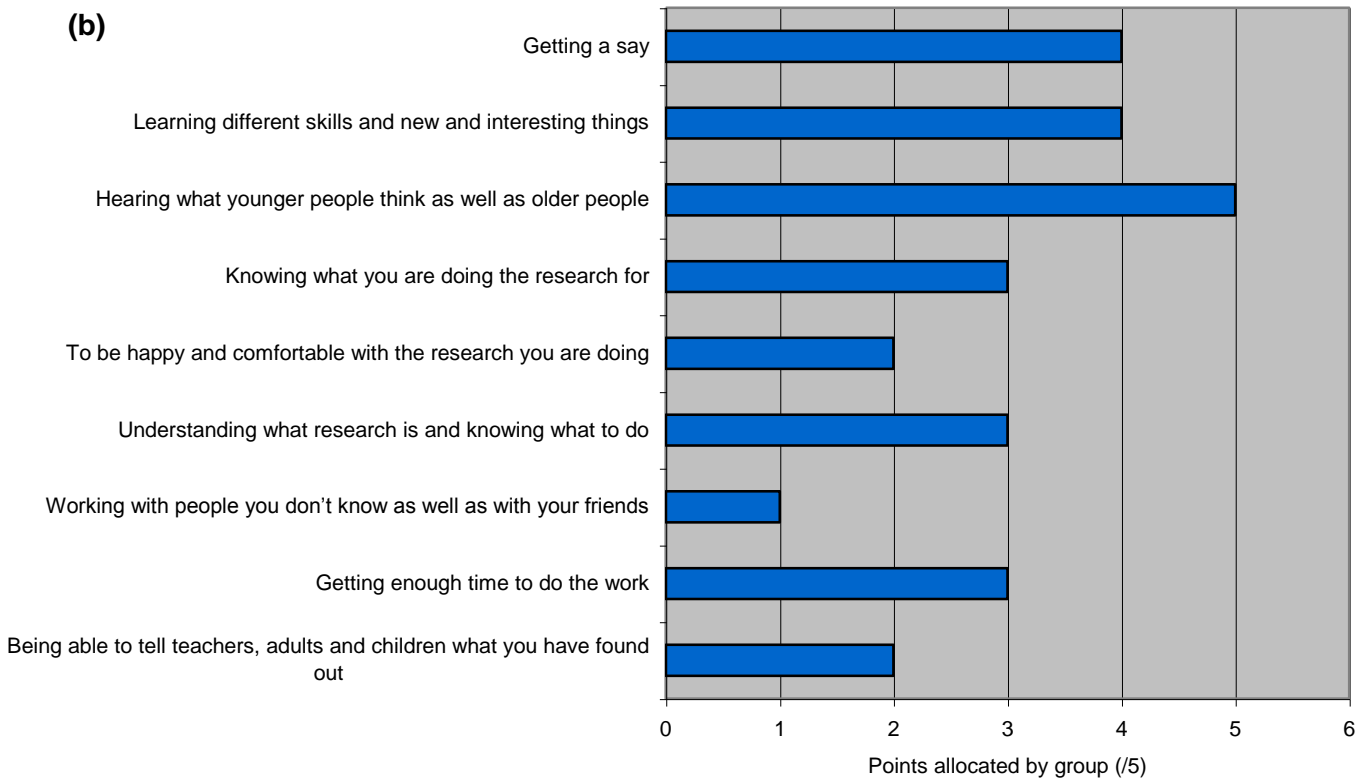
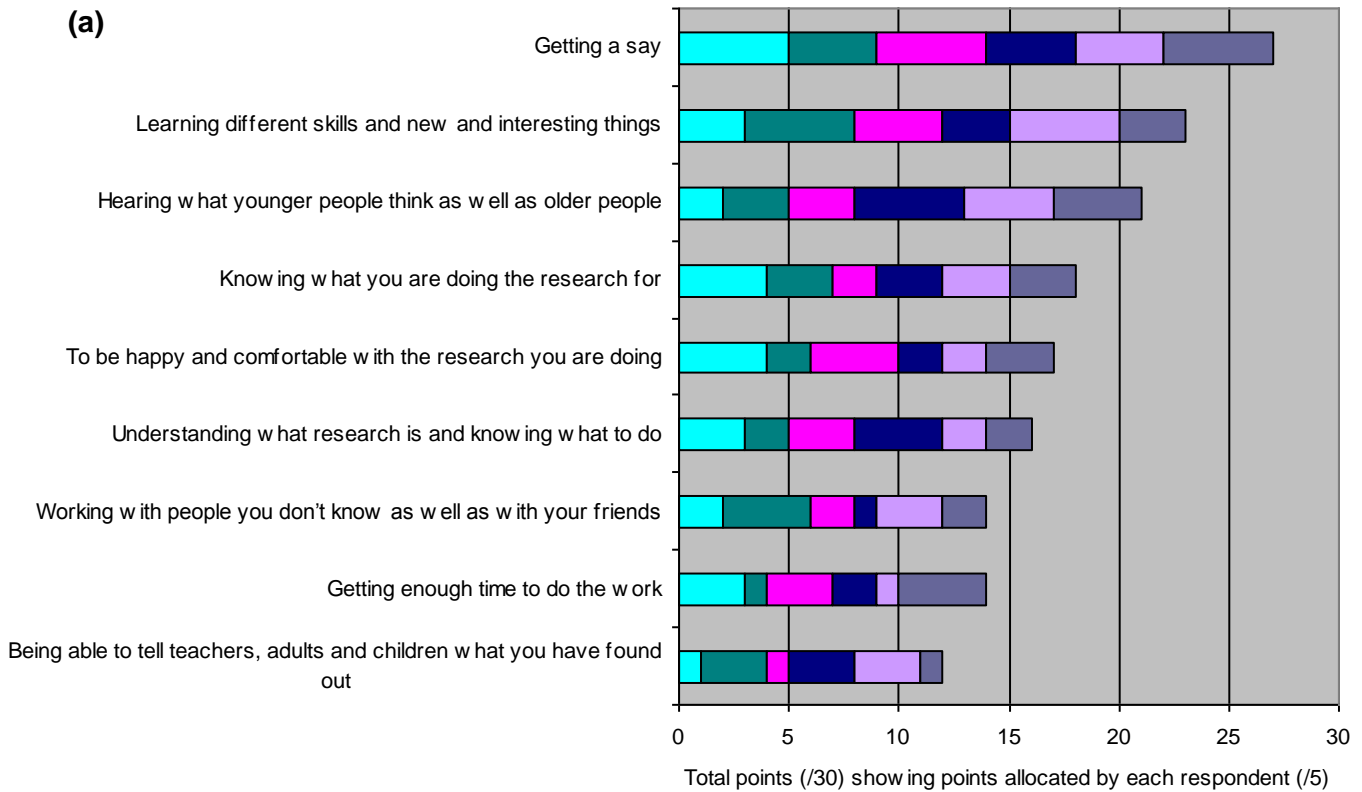


**(b)**



**Figure Four: Representing group data: scores from Pagoda School young researchers (n=5) completing a Diamond Ranking activity using statements taken from earlier interviews with other groups (a) individually and (b) as a group**

**What do you think are the most important things about being a young researcher in a primary school?**



**Figure Five: Representing group data: scores from Pagoda School young researchers (n=6<sup>4</sup>) completing a Diamond Ranking activity using the group's own statements (a) individually and (b) as a group**

<sup>4</sup> During the activity using the group's own statements the cohort was joined by one young researcher who was absent when the group completed the original Diamond Ranking activity.

Perhaps the most important questions that can be raised are those related to the validity of the conclusions which might be drawn from analysis of the data presented here. When I discussed the possibility of carrying out the Diamond Ranking as a group activity with the group of young researchers at Tower School, I asked if it would be able to look at their completed sheet and say that, for their group, the statement at the top of the grid was the most important. The response, made very quickly, was “No”. This prompted the children’s conclusion that it was best to complete the activity individually *and* as a group. Where there is agreement between the ranking positions of statements between the individual and group activities, it seems reasonable to assert that conclusions drawn about a ‘group’ view of the most important factors in the children’s experiences of becoming researchers are valid. However, there are also contradictory elements that might render any conclusions drawn about a group consensus from either the ‘grouped’ or ‘group’ data invalid. Hammersley (2005), discussing triangulation in relation to claims to validity, argues that it is not always necessary to employ different research methods within a study because the same method, applied in different settings, can prompt the reflection needed to understand how different accounts might be arrived at. In other words, to understand why and how the same question, put to the same people, can be answered in different ways.

## 6. Conclusion

These considerations have implications for how the data generated with children within the context of this study and through the use of Diamond Ranking can be analysed and represented, especially if it is to be used to make comparisons within and across groups. They are particularly important when the question of whether or not using the technique in the ways described above leads to reliable representations of the views of children. It might be concluded that using the ranking exercise as a stand-alone activity without a discussion element results in important data being missed, especially when this might provide insights into the social processes at play during group activities, and this needs to be explored further. In the words of two young researchers:

*“I think you should do it in a group because then you get other people’s reasons and then you might start to change your mind about something.*

*“You’re sort of in that place where, ‘Well, I think this but I really want to fit in with them’.”*

However, consideration of ethical issues and respecting children’s desire for confidentiality and anonymity is crucial and it is clear that this can result in tension between the researcher’s need for data which might strengthen the validity of any claims made and the choice and control which child research participants need to be offered. Further reflection on the issues raised here will be an important factor as the study continues.

## Bibliography

BRANNEN, J. (2005) *Mixed methods research: a discussion paper*, ESRC National Centre for Research Methods Review Paper, December. Available from: <http://www.ncrm.ac.uk/publications/documents/MethodsReviewPaperNCRM-005.pdf> [Accessed 02 December 2006].

BUCKNALL, S. (2005) *Exploring Children's Experiences of Carrying Out Their Own Research Studies*, Unpublished dissertation, Milton Keynes, The Open University.

BUCKNALL, S. (2006) *Respecting the Voices of Young Researchers*. Poster presented at the British Psychological Society Psychology of Education Annual Conference: 'Learner's Voices', Milton Keynes, November.

HAMMERSLEY, M. (2005) *Troubles with triangulation*. Paper presented at Mixed Methods Workshop, ESRC Research Methods Programme, Manchester, October.

KELLETT, M. (2005) *How to Develop Children as Researchers*, London, Paul Chapman.

MASON, J. (2006) *Six strategies for mixing methods and linking data in social science research*, Real Life Methods Working Paper, NCRM. Available from: <http://www.reallifemethods.ac.uk/research/wps/2006-7-rlm-mason.pdf> [Accessed 02 December 2006].

O'KANE, C. (2000) 'The development of participatory techniques: facilitating children's views about decisions which affect them' in Christensen, P. and James, A. (eds) *Research with Children: Perspectives and Practices*, London, Falmer Press.

THOMAS, N. and O'KANE, C. (1998) *Children and Decision Making: a Summary Report*, University of Wales Swansea, International Centre for Childhood Studies.