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Volume Editors

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Factors Affecting the Use of Experiential learning in Teaching Religious Education in Schools

Rachel Day

Abstract

This study sets out to investigate to what extent experiential learning methods are used to teach Religious Education and what factors affect this, with regard to the perceived benefits and costs. Qualitative data has been gathered through the use of triangulated methodologies, in the form of group and key informant interviews. Questionnaires have been designed in the light of interview evidence to refine data and increase reliability and validity, by accessing a wider sample.

The research was conducted in three schools: one Catholic, one Church of England and one Community School. In each school the subject coordinator and a group of Y5/6 children were interviewed. Questionnaires were obtained using a volunteer sample, and cover student teachers and qualified teachers from the Lincolnshire area.

The research was designed to examine the experiential methods teachers used, how often they used them, what they perceived the benefits and drawbacks of experiential methods to be, the barriers to using experiential methods, the pupil responses and the considered overall effectiveness. The study also consulted groups of children on their perceptions of RE and the type of activities they enjoyed and were most beneficial to their learning. It was proposed that the use of experiential methods would have a positive impact on the motivation and engagement of children, subsequently impacting on learning. It was also hypothesised that teachers would consider there to be too many barriers to using experiential learning, and that as such the perceived costs would outweigh any perceived benefits.

This small-scale research has provided contextual findings that are not open to generalisation. The findings appear to suggest that experiential methods are perceived favourably by teachers, and that they are used widely, though variably, in schools. It appears that faith schools place a greater emphasis on experiential methods and RE in general, and that teachers in faith schools are more confident in teaching RE. It also highlights the fact that many teachers find cost, resources, time and access to be key problems in providing experiential opportunities.

Introduction

The key question that this project is researching is: 'To what extent is experiential learning used to teach religious education and what are the factors affecting this?' This area was chosen after considering my own experiences of RE during my degree. In particular, the RE lectures of year 2 had influenced my choice, having given me a new perspective on the subject and how it could be taught. My experience in schools, however, had shown me that there was often a lack of interest in RE from teachers, which in my opinion resulted in its teaching being less effective. As the most influential part of the year 2 RE sessions had been the visits, I decided to focus my attention on how experiential learning was being used in RE.

Learning through first-hand experience is widely considered to be good practice, and is a key theme that runs throughout the Religious Education Non-Statutory Framework

(DfES, 2004a). Experiential Learning is underpinned by strong pedagogical principles and theory, and derives from Vygotsky's belief that cognitive structures have social origins (Bereiter, 2001). However I had seen little evidence of this in my experience in schools. This study was chosen as a way of investigating what is considered to be good practice in RE, and the problems teachers associate with experiential learning.

It is recognised that RE plays a fundamental role in children's personal, social, moral, spiritual and cultural development (DfES 2004a; Read et al., 1986), subsequently developing the whole child. Yet despite this, RE remains an undervalued area of the curriculum, with key weaknesses in its delivery. RE compares unfavourably to other subjects in its overall provision, with only 46% of lessons rated good or better, compared to 62% in other curriculum areas (Ofsted 2004; 2007). Revell (2005) agrees that in many schools RE has been marginalised as a subject, and that in schools that use subject 'blocking', RE teaching is consequently sporadic and inconsistent. The adverse affects on learning found in many schools (Ofsted, 2004; 2007) is considered by Critchley (2007) to be a result of the low priority of RE training days coupled with the comparative lack of attention, funding and resources for RE. I agree with Critchley that this situation is common; I also wonder whether this marginalisation and perceived lack of importance causes RE to suffer pedagogically. Do teachers follow the same good practice in their teaching of RE that they aim for in other subjects? If not, why not? Can RE be taught in the same way? My aspiration for this study is to attempt to find some answers to these questions.

Literature Review

Ofsted (2004; 2007) claims that good RE teaching should be lively and imaginative, engaging children's emotions as well as their intellect. The schools it identifies as having developed effective practice in RE are noted for their use of visits, visitors and ICT (Ofsted, 2005). These methods share a commonality of giving children the opportunity for practical exploration and first hand experience, something Barton (2001), Bastide (1999), Papert (1980), and Whitaker (1995) agree is inextricably linked to learning and engagement, and which is in line with Kolb's theory of experiential learning (1971; 1984; 1985).

For learning to be experiential, Kolb (1971; 1984; 1985), McCarthy (1980; 1990) and Brooks-Harris and Stock-Ward (1999) believe it should include all four modes of Kolb's learning cycle; abstract conceptualisation, concrete experience, active experimentation and reflective observation. This cycle suggests a series of discrete mental processes to follow concrete experiences, with reflection being a key factor in making sense of these experiences. Whitaker (1995:15) agrees on the importance of reflection and argues that for experiential methods to be effective they need to be 'punctuated with deliberate periods of reflection and critical thinking'. Boydell (1976:1) however offers a more general perspective and defines experiential techniques simply as those that lead to 'meaningful learning'. He stresses the importance of the learner working things out through restructuring perceptual experiences to gain insight, echoing constructivist models and Piaget's theory of assimilation and accommodation (Jacques and Hyland 2003), and gives some examples of techniques to include 'action learning...discovery learning, games and simulations...learning communities' (Boydell 1976:17). Support for these methods and for Kolb's learning cycle can be found in more recent literature. In schools however, I am unsure that all aspects of Kolb's learning cycle are used in the complementary way that was originally intended, especially in RE. Indeed, Brooks-

Harris and Stock-Ward (1999:8) argue that though the 'idea of experiential education has been discussed for...decades, there is still considerable resistance based on adherence to a traditional educational paradigm'. I am interested to see if this statement still applies today.

In research carried out by PCfRE (2000:42), pupils claimed they enjoyed RE when they were not 'just given a book to read', and the learning was relevant to them. Though these pupils came from Key Stages 3 and 4, I believe these statements can be applied to primary teaching; if secondary pupils are bored by conventional textbook methods, primary children will be even more so. Phillips (2003:109) supports the view that being told information, or reading it in a textbook 'can leave pupils cold', with learning remaining on a superficial level, if at all. Newton and Newton (2007) disagree, however, claiming that textbooks can be valuable in teaching primary RE. They argue that in teaching for understanding, textbooks are helpful to teachers who might be less confident in their own subject knowledge. Rymartz and Engebretson (2005) agree that the explanations provided in textbooks enable teachers to talk about the subject in more depth and with more confidence. However, I feel that these arguments focus on the benefits textbooks have for the teacher rather than the children, and I disagree that it is beneficial for children's learning for the teacher to talk more. Alexander (2006) shares this view and agrees that for learning to be enhanced it should be the children who are encouraged to talk. Newton and Newton (2007) nevertheless do acknowledge the limitations of using textbooks, admitting that there are many poor quality textbooks available that are of little help in teaching Attainment Target 2 (AT2) or moral education.

Teece (1994), and Whitaker (1995) agree that active learning methods are highly suitable for RE, and feel that experiential opportunities are to be encouraged. There is little research on the use of experiential learning as a whole in RE, though authors have written about different aspects. Whitaker (1995), Ofsted (1998), Barton (2001), Active RE! (2000), and Phillips (2003) agree that a sense of empathy, a key part of experiential learning, is essential to good RE teaching. They argue that this sense of empathy 'adds a dimension that traditional methods cannot' (Phillips 2003:109) by providing opportunities for children to make connections between their own experience and the area of study. This is not only a way 'to enter an understanding of...faith and belief' (Active RE! 2000:6), but also 'allows the child to begin to engage with the meaning for the other person' (Barton, 2001:18). Given that central to experiential learning is drawing upon empathy for others' beliefs and ways of life, inferences can be drawn on the benefits of using experiential learning in RE.

Artefacts are perhaps the most frequently employed experiential method in RE teaching, and have many uses. Apart from providing an obvious form of first-hand experience, they are an essential part of RE teaching that can be used with children of all ages and abilities (Langtree, 1997; Draycott, 1997). Artefacts are an excellent way to 'bring the living experience of the believer into the classroom' (Ely Diocese 2007; Langtree, 1997:84), and can be used as a lens through which children can reflect on their own lives, providing the sense of empathy discussed above. Langtree (1997) and Ely Diocese (2007) further suggest that artefacts should be explored using the senses, relating to what Morell and Fitzjohn (2002) and Little (1996) discuss about using the senses to develop spirituality and reflection to engage the learner. One possible drawback of using artefacts is that it might cause offence. However, as long as the teacher and children treat the artefact with respect this can usually be avoided. I agree

with Gateshill and Thompson (1999), and Bastide (1999) that carefully selected artefacts provide a context for children, as well as allowing them to access deeper thinking in terms of the symbolic nature of some artefacts.

Visits and visitors are also frequently associated with experiential techniques in RE, able to give children the opportunity to observe the living experience of a believer, and enabling them to understand something of the nature of religious faith (Ely Diocese 2007a; Nottinghamshire SACRE, 2003; Bastide, 1999). Visits and visitors are valuable to RE teaching in the capacity of challenging misconceptions and giving children the benefit of better subject knowledge, while also providing children with a more personal and contextualised experience. It is through this first hand experience of others' beliefs and lifestyles that children are most able to shape and change views (Whitaker 1995), and become engaged and connected with RE. As Bastide (1999:86) reports, visitors help religion to 'come alive in children's understanding and imagination'. However, a lack of funding on top of organisational worries often makes it difficult to arrange visits and visitors (Bastide, 2003). In my experience, these are usually the major factors affecting the use of visits and visitors in RE.

Critchley (2007), Little and Wilson (2001), and Active RE! (2000) claim that the use of games and drama in RE allows children to gain fresh insights, and to understand the current relevance of religious stories, which has been shown to be a key factor in intrinsic motivation (Bruner 1966; Langtree, 1997; Fox and Halliwell, 2000; Kearsley, 2005). Drama is valuable to RE on the grounds that it is stimulating and motivating, while also being a methodology that supports the teaching of thinking (Baldwin 2004). Baldwin (2004:xi) argues that drama is 'multi-sensory...multi-intelligent, emotionally linked to learning', through which we can learn about ourselves and others, and develop personally, socially, morally and spiritually. Active RE! (2000:6) also claims that drama provides an arena 'in which it is possible to discuss safely and without prejudice'. This idea is further supported by Alexander (2006), and is especially relevant given the sensitive nature of RE.

However, using drama and games in RE teaching also has limitations, such as the fear of giving offence, or that learning may be undermined if children see the activity as an end in itself; problems recognised by Little and Wilson (2001) and Active RE! (2000). Teachers should be aware of this and plan carefully for it. Possible remedies might include making sure children know the learning objectives, and making time for reflection and discussion afterwards. Langtree (1997) disagrees, however, and argues that reflection should form the basis of a lesson instead, with follow-up work in the form of drama, discussion, or creative writing.

Looking at using ICT, support can be found from DfES (1999), who argue that ICT consolidates and deepens RE knowledge and encourages creativity. This, they claim, results in more effective and efficient teaching and learning. It is also non-judgemental, providing a stress-free environment while also adding context and interest to learning (Dryden et al., 2005). This relevance, discussed above, has been highlighted by the DfES (2004) as an important factor in learning. Broadbent (2002), Monahan (2006), Dean (2000), Coster (2002) and Lynch (2003) further agree that ICT is a 'marvellous resource' (Coster 2002:15) and that is very effective in motivating and engaging children with RE. I agree that ICT is a highly effective motivational tool, as I have yet to meet a class that is not immediately excited at the prospect of using ICT. Consider this alongside the fact

that RE is frequently seen as 'boring' by children and ICT immediately becomes valuable to teachers.

However, as recently as 2004, the use of ICT in RE, both in terms of frequency and range, has been found to be lagging behind that of other subjects (Ofsted, 2004). I feel the main reason for this is that teachers cannot see links as easily with RE as they can with other subjects, but recent literature also suggests other causes. Judson (1999), Better RE (2006) and Burrige (1999) question the place of ICT in RE, claiming it is often used inappropriately, causing the focus to shift and to over-shadow learning. Children may also use ICT in ways at odds with what the teacher intended (TLRP, 2006) or may lack the ICT skills needed to access the RE (Leask, 2000). Judson (1999) and Becta (2000) further argue that a mismatch of skills and resources hampers progression, and that teachers often cannot judge which RE objectives can be well met through ICT and which are unsuitable. I agree that these are very real problems and that teachers should consider critically whether ICT would actually be beneficial. The risk of losing the RE focus is also problematic. However, I do wonder whether using ICT would actually prove less of a distraction to children, especially those with learning or behaviour difficulties, because they are engaged by the medium.

It is also commonly argued that activities that include such things as games, drama, ICT and artefacts are very helpful in meeting different learning needs (Phillips, 2003; Leask, 2000; DfES, 2004a; Ellis, 1994; and Baldwin, 2004), particularly those of kinaesthetic learners. Past research has shown that catering for learning styles can have a profound impact on learning, and is to be aimed for by practitioners (Shaw and Hawes, 1998; Askew and Ebbutt, 2000; Fisher, 2001; Entwistle, 1981). However, more recent research has questioned whether specifically catering to learning styles actually has any positive effect on learning (TLRP, 2007; Kratzig and Arbuthnott, 2006). Moreover TLRP (2007:16) discourages exclusively presenting information in the learner's preferred style, though it nevertheless acknowledges that using 'a full range of forms and different media' can engage children and support learning.

Despite the drawbacks, there seems to be a wealth of evidence in favour of experiential learning; pedagogy that 'has been discussed for...decades' (Brooks-Harris and Stock-Ward, 1999:8). Yet there appears to remain considerable resistance to its use. Phillips (2003) suggests this may be because it is seen as a time-wasting exercise by both children and teachers, while academically, experiential learning has been criticised as 'emotivism' with no real learning involved. In the case of RE, it may be fear of giving offence that puts teachers off using artefacts or drama (Bastide, 1999; Langtree, 1997; Draycott, 1997; Little and Wilson, 2001; Active RE! 2000), or simply a lack of knowledge or confidence (Judson, 1999). As RE is regularly the most under-resourced subject in schools (Bastide, 2003, Ofsted, 2004), this also provides an obstacle in terms of implementing experiential approaches. Lastly, it may be that experiential learning is still seen as simply too much of a risk - a gamble that teachers cannot afford to take in an educational climate that is constantly pushing for results.

Research Methodology

The study is small and focussed. As there is only a small group of respondents, and findings are based around opinions and perceptions, it is of a qualitative nature, which Mason (1996:9) describes as having 'a more fluid and exploratory character'. My judgement was that this was the most appropriate methodology for my study.

The main body of the research was undertaken in three small semi-rural primary schools in the Rotherham LA, all mono-cultural. These are neighbouring schools that serve predominantly working class areas with similar socio-economic status. One is a Church of England school (School A), one a community school (School B) and the other a Catholic school (School C). Each class numbered approximately 30 children. I decided to use schools that were as evenly matched as possible to triangulate my results (Bell, 2002). However, the fact that my sample was so small and of a non-probability nature means my results are not open to generalisation, and cannot represent the wider population (Cohen et al., 2007). The differing religious character of the schools prevented complete generalisation between them but I was interested to see whether this affected the approach towards RE teaching. At the start of my research I did not know how RE was taught in any of the schools in question, though I knew they made good use of ICT. Further research was carried out using questionnaires with students from Bishop Grosseteste University College Lincoln (BG) and their placement schools. This was a volunteer sample, which brings with it a bias that makes results both unrepresentative and not open to generalisation (Cohen et al., 2007; Drever, 2003).

I am known in these schools so access was not difficult, making mine a convenience sample (Anderson, 1998; Cohen et al., 2007). Prior to conducting the research I made an informal telephone call to the schools, followed by a formal letter explaining my intentions and the nature of my research. The head teachers gave their permission and arranged parental consent for access to the children. It is important to take into consideration that the established links I had with the schools may have affected the reliability of my data. Although it is ethically appropriate to respect the results as wholly truthful, participants may have altered their responses because of their relationship with me. This is an issue highlighted by Walford (1991), Delamont (1992) and Croll (1986). I would argue however, that being unfamiliar to the children I was interviewing would also have had an adverse effect on my data, as they were likely to be uncomfortable answering a stranger's questions and would not have given full answers.

As my research is firmly rooted in teaching and learning, I decided that school-based research was crucial. I initially decided to gather evidence through observations to use as a focus for interviews. This conclusion was reached on the basis that I was more concerned with what teachers did than with what they said they did and studies (Sikes, 2000; Douglas, 1976; Convery, 1999; Abolafia, 1998) have shown that the two do not always correlate. After further consideration, however, I decided that in order to gain an accurate picture of how RE is taught I would need to observe more lessons than time permitted. The compromise reached was to employ the methodology of triangulating results through interviewing children as well as teachers, and designing questionnaires in the light of findings (Walford, 2001). I expected teachers to discuss pupil responses in interview, and aimed to test the accuracy of this information by asking the children themselves. Drever (2003) argues in favour of using interviews and questionnaires consecutively, as I was able to see if there was concurrent validity between the findings (Cohen, 2007).

My teacher-interviews were conducted with key informants (Anderson, 1998), as they were both RE coordinators (in School A this is also the head). I chose to interview the coordinators as I felt they would be more knowledgeable and have more to say about how RE is taught, making it a purposive sample (Cohen et al., 2007). Drever, (2003) is in favour of this type of sampling as it avoids volunteer bias, while random samples may

also result in a skewed perspective. However, though purposive sampling allowed me to get in-depth information from knowledgeable people, it is subject to bias and cannot represent the wider population (Cohen et al., 2007; Bell, 2002).

My child-interviews were with 5 children from Y5/6. I believed this age group would be more able to express ideas and would be less intimidated by an interview situation, and felt 5 children would be a fair representation of a class of 30 (Cohen 2007); however I asked the teacher-interviewee to choose the sample. My sample was consequently a combination of purposive and convenience, as I selected the group but not the individuals (Cohen et al., 2007; Anderson, 1998). These samples are subject to the same limitations already discussed, as well as a bias from the teacher selecting the children. The children were interviewed as a group in order to create a non-threatening environment (Drever, 2003; CSTL, 2005) in which they could also build on the contributions of others and think together about 'why' (Laws et al., 2003; Bell, 2002). Nevertheless, I was aware of the possibility that responses would be influenced by social conformity, or that a few individuals might dominate the discussion, affecting the reliability of my results (Rose and Grosvenor, 2001; Bell, 2002). Though I felt I could not reduce the inclination to conform, I attempted to ensure equal contributions by making eye contact with each respondent to signal that I wanted their opinion. This was successful in encouraging responses from the quieter members of the group while still being ethical in that I did not demand an answer.

There is a consensus of opinion between Macintyre (2000), Silverman (1993), Drever (2003), and Bell (2002) that interviews should have a clear focus to ensure that the discussion stays on track. I decided a structured interview would be too restrictive, however, and might cause me to miss valuable information. Consequently, I designed both interviews as semi-structured, enabling me to gain in-depth information with the flexibility to follow up points (Ely et al., 1991; Gillham, 2000) and allowing respondents room to air what was important to them, while still controlling the overall direction of the discussion (Bell, 2002). I designed an interview schedule in order to guarantee consistency of treatment, to make results comparable, and to avoid leading or confusing the respondent. This was done by planning specific prompts and probes that would be used with each respondent or group of respondents, and by piloting the interviews with colleagues to ensure questions were unambiguous and did not lead the respondent. Piloting helped to bring to light weaknesses and reduce bias, as well as checking that the questions ensured the validity of my findings (Bell, 2002; Silverman, 1993; MacNaughton et al., 2001).

Marshall (1997), Munn and Drever (2004), and Anderson (1998) agree that questionnaires are effective in gathering information from a large number of respondents, and it was this sense of scale that prompted me to use questionnaires. I was aware that the data gathered so far would be applicable only to the school it was gathered in, and even then that it was subject to bias. By gathering information from a large number of respondents over a wider area I hoped to analyse whether the initial findings were at all applicable to other schools. Though I would be unable to generalise my results with so little information on the wider population (Walford, 2001), this would further triangulate my findings and assess their reliability. Cohen et al. (2007) and Munn and Drever (2004) argue that, ethically, questionnaires should be designed to intrude as little as possible on the lives of respondents. Consequently I took care to ensure my questionnaire was short, required a minimal amount of writing and asked for few personal details. I designed the questionnaires largely around scaled responses,

ensuring quick completion and comparatively straightforward analysis (Munn and Drever, 2004; Cohen et al., 2007; Marshall, 1997). I made sure these scales did not have a mid-point so respondents could not be indecisive.

I elected to analyse my questionnaires according to the question type. My open-response questions would be analysed for patterns and commonalities and presented alongside the interview data, whereas my category and scaled questions would be added to a summary table for analysis (Bell, 2002). Though tables may be more difficult to interpret than graphs or percentages, I decided these would be misleading in a study of this scale (Bell, 2002). I also decided against calculating measures of central tendency with the responses in the way Bell (2002) suggests, as I agreed with Munn and Drever (2004) that to do so would be to assume without grounding that I was working on evenly based scales, thereby misrepresenting the data.

I planned to analyse the interview data by issue, summarising and presenting key themes in categorised transcripts in the way Denscombe (2005) recommends, as this would enable me to identify shared issues, thus creating more reliable data. These categories would be decided responsively in order to reduce the bias my own preconceptions would bring to pre-ordinate categories (Cohen et al., 2007). Although this method suffers from de-contextualising the data, I hoped that analysing by issue (and collating data streams) would allow me to see patterns, comparisons and relationships more easily, and provide a collective answer to my research question (Cohen et al., 2007). It was through the early stages of this process of data reduction and selection that I identified the key themes I wanted to address in the design of my questionnaires.

With regards to ethical considerations, Cohen et al. (2007) state that permission should be granted from the individual and the institution they represent. As I was conducting my interviews in school hours and discussing how the school operated I gained this permission from the head teacher. I also then gained informed consent from the teachers I would be interviewing, explaining the purpose of my research (Cohen et al., 2007). I assured them that the data would be treated confidentially and neither they nor the school would be named in my research. The teachers completing questionnaires were assured anonymity, as I asked them not to give their name in order that I would not know to whom the responses belonged.

I had intended to interview the teacher at School B, however shortly into the interview she became uncomfortable with this situation and preferred to take the questions away and write her responses. Although this resulted in different methods of data collection, as an ethical obligation I had to respect her wishes (Woolley, 2007) and discontinue the interview. As the interview was semi-structured I incorporated my planned probes into the original question to try and encourage elaboration. Though this was not an ideal situation I believe the results are still valid.

As I was interviewing children, there were further ethical considerations due to the power differential that existed (Drever, 2003; Fine and Sandstrom, 1988). Therefore, it was important for me to give the children a real and legitimate opportunity to withdraw and explain what the implications of taking part might be. I was careful to explain that they had the right to withdraw at any time and that their answers would be confidential (the meaning of which was also explained). I felt that this was important in order to ensure honesty of response. Moreover, McNiff et al. (2003) state

the importance of confidentiality when the data could be compromising. As I was requesting honest opinions about the teaching they received I felt it important that individual remarks were not distinguishable so pupils could not be approached about comments.

There are, however, ethical issues in that the children could not give fully informed consent, as I did not explain the full purpose of the research to them, only that I wanted to know about their RE lessons. Ruane (2005) argues that providing children with all the information regarding the research may actually confuse them. I believe this would have been the case with my research. I feel I ensured my actions were ethical by explaining as much as was relevant and understandable without deceiving them as to the true purpose, and ensuring there would be no comeback to their responses.

Analysis of Findings

Bell (2002) claims that for research to be effective, the collected data should be categorised and interpreted in order to avoid potentially vital information being disregarded. As planned for in my methodology (Bell, 2002), I used the following stages of analysis (Ely et al., 1991) with my interview data:

- Reacquainting
- Initial note making
- Dividing into parts
- Labelling

As discussed in my methodology, these labels related to the key issues and were decided responsively (Cohen et al., 2007).

The interview data was collated and placed in a grid alongside these labels. I found that this method enabled me to see clearly the views of the respondents alongside each other and helped me to form more valid conclusions in the way Denscombe (2005) describes. The interview data seemed to suggest that teachers were widely in favour of experiential learning in RE, though Schools A and C made more use of it in lessons. The most powerful support for my initial reading, as outlined earlier in the Literature Review, was found with the children, who were ardent that they preferred experiential methods and learnt more from them. Triangulating the interviews, as discussed earlier, was therefore successful in achieving my aims, as the data obtained from the teachers was corroborated by the children, thus increasing reliability.

It may be that the religious character of the schools affected the approach to RE, as School B appeared to place less emphasis on its importance: it was taught solely by a Higher Level Teaching Assistant (HLTA) during Planning, Preparation and Assessment (PPA) time, and the interviewee seemed uncertain in her responses. Here my sample was unsuccessful, as although she was the coordinator, in my opinion she was not a key informant. Were I to repeat the process I would interview the HLTA. In Schools A and C however, religion permeated the whole ethos of the school. As faith schools, they had double the time allocation for RE and easy access to Christian resources. I believe these to have been contributing factors to the increased use of experiential learning in Schools A and C, as time, cost, resources and access were repeatedly identified in both interview and questionnaire as being the biggest problems with experiential learning, something I had anticipated in my Literature Review.

The questionnaire data was obtained from 24 respondents, making statistical analysis unsuitable, as discussed earlier (Bell, 2002; Munn and Drever, 2004). While 23/24 respondents indicated that experiential methods were either 'very beneficial' or 'extremely beneficial' to motivation and engagement, there appeared to be some confusion over what qualified as experiential. Although role-play, visits to places of worship, use of religious artefacts and hot-seating all scored highly, other answers varied widely and showed some unexpected responses. I had included a few non-experiential techniques (such as reading from textbooks) to try and encourage the respondent to read the options carefully and not immediately assume that they were all 'correct'. While this was generally successful, one respondent had ticked every box, which may indicate that they had not considered every option fully, thereby affecting the validity of the data. It may also indicate that my own ideas of experiential techniques are inflexible and are affecting my objectivity.

I had not expected anyone to select 'researching from textbooks', 'researching online' or 'listening to religious stories' as experiential techniques, yet these all appeared with 'listening to religious stories' being the fifth most commonly selected answer. Had I conducted interviews afterwards, this in particular is an issue I would have wished to raise; is it the story itself that people consider experiential or the activity that follows it, which is often dramatic in nature (e.g. re-enactments or hot-seating)? This inability to follow up questions is a limitation of questionnaires, and one that I had tried to avoid by using mainly closed questions.

The results also seemed to indicate that many teachers, though in favour of experiential techniques and generally able to identify them, largely used only one or two (or none at all) in their own classrooms. This may be because of the perceived limitations of experiential techniques, which centred mainly on the cost of visits and a lack of funding for resources/artefacts. I did however embark upon this research with the expectation that the majority of teachers would view experiential techniques as impractical for more than occasional use, a preconception that may have affected my interpretation. It is possible that other factors such as teacher confidence and curriculum time may be the reason for these seemingly contradictory findings, despite these being selected less frequently as problems.

My analysis of what experiential methods are actually used in schools is also hampered by a possible misunderstanding of the question. I had felt that this question might confuse some respondents, and as such subjected it to rigorous piloting and multiple re-drafts. This was largely successful, but in 5 cases respondents appeared to have interpreted the question to mean that they had to choose between whether each method was experiential or whether they used it themselves, resulting in somewhat perplexing answers. As a result I discounted these answers for this question, consequently leaving me with skewed results and a less than thorough understanding of how experiential methods are used. I feel this question would have been more successful had it been split into two parts, something I initially avoided in order to restrict the length of my questionnaire. Despite this however, the questionnaire data is largely in line with the interview data, making my triangulation successful in increasing my reliability and validity.

I was interested to see that, though participants generally agreed that visits were experiential (and that these were also too expensive to arrange), they did not view virtual environments or videos as experiential. Though not ideal these would go some

way towards providing the benefits of a visit without the barrier of cost. Respondents did select the more 'low-tech' version of using photos however. This may indicate that teachers are uncomfortable or unfamiliar with the use of ICT in RE, especially as this area was also only briefly picked up on in interview.

Conclusions and Recommendations

I have attempted to ensure that my research and its conclusions are valid. I aimed to ensure its integrity through methodological triangulation as a means of enhancing reliability and validity, and by avoiding generalisations and sweeping statements. All conclusions are tentative and are based solely on the evidence provided for the purposes of this project. The data collected is valid only for the specific respondents interviewed or those who completed questionnaires, and should be acknowledged as contextual findings (Maykut and Morehouse, 2004). Some of the conclusions drawn may be useful for further consideration but are not open to generalisation, as they refer to data from a small and unrepresentative sample of respondents. It is also important to note that the data collected will have unavoidably been influenced by external factors and is subject to my own personal interpretation and subjectivity. However, Bell (2003) suggests that when bias is present, it does not necessarily make the data invalid, but can provide more truthful data.

As this was a small-scale study I had the opportunity to interview only a small number of teachers and children. With more time I would have liked to interview a larger sample, from a wider area, to make my results open to generalisation. I do feel I achieved a high level of reliability and validity however, and that if the research was repeated the results would be similar. I believe that this is in part due to piloting the interviews and to my decision to use semi-structured interview schedules. Through this I was able to ensure that my wording was consistent, thereby avoiding bias and increasing reliability and validity (Bell, 2002; Silverman, 1993, MacNaughton et al., 2001).

To refer back to the original research question, the study was concerned with how and why experiential methods are used in Religious Education, and if not, why not? The data appears to suggest that experiential methods are essentially seen by teachers to be valuable to learning. The children interviewed also widely agreed that they were enthused and motivated by experiential methods and that they saw them as fun, supporting the Literature Review. From the interview data, the emphasis placed on RE by the school also appears to affect how often experiential methods are used, with schools of a religious character using experiential methods more frequently. Teachers in faith schools seemed more confident in teaching RE through different methods, and were aware of the need for reflection and personal relevance in RE lessons. They also did not appear to find the organisation of experiential learning as problematic as those in community schools, perhaps suggesting that RE is given a higher status, which allows teachers to overcome funding and resource issues. The collected data suggested that a lack of resources, the expense of visits, a lack of confidence in RE and limited curriculum time were the main factors discouraging teachers from teaching RE experientially, though many did continue to do so. From the questionnaire data it appears that the most commonly used methods are artefacts, visits, role-play and 'hot-seating'.

From the tentative conclusions reached, I recommend that schools and Initial Teacher Training (ITT) providers should give teachers and students input on how to use 'alternative' experiential methods, as many respondents seemed to limit their idea of

experiential methods to visits, visitors and artefacts. Training teachers in how to provide experiential opportunities through practices such as reflection, ICT and use of photos would make experiential learning a more practical option in school by avoiding much of the cost and access difficulties that were identified by teachers. Ideally, I would also recommend that some schools reassess how they view RE and its place in the curriculum and aim to provide the support, funding and resources that appear to be lacking.

This small-scale research project has the potential for further development. In my future career I would be interested to discover whether other professionals share the same opinions as those discussed here, in addition to looking more deeply into the pedagogical benefits of experiential methods in RE. I would also find it interesting to study in greater depth the views of children on the RE teaching they receive, and their perceptions of RE. There is further potential to investigate whether a teacher's gender or level of confidence affect the methods they use, or how important the religious character of a school is to its approach to RE. This research has given me an insight into the teaching of religious education. Moreover, the opportunity to discuss different views of RE teaching with other professionals has enabled me to consider my own approach to teaching this subject. I have developed a strong conviction that experiential methods are highly valuable to teaching RE well, and I am sure that this project will influence my future career.

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An investigation into the attitudes and use of resources for life-long learning in the heritage sector.

Esther Horner

Abstract

The provision for life-long learning is a focus of the current Labour government, to continue education and skills development beyond mainstream education and the compulsory school age. The heritage sector, which includes resources such as museums, galleries, libraries and other cultural venues, has been recognised as a vital potential resource for this provision. However, there is an inequality in the audiences who use these resources, as several demographic groups are under-represented. Young people have been identified as a key group who do not use these resources. This study explores why young people do not use these resources, and what strategies could be put into place to increase their participation. Nine young people, working on a twelve-week programme within the voluntary sector that aims to raise self-esteem and prepare young people for employment, completed a questionnaire with the help of the researcher in a structured interview. The participants indicated their level of use of these resources and the opinions they held of them. They indicated their perceptions regarding for whom these resources are designed, and what barriers restrict them from using them. Possible strategies to make these resources more appealing were then considered, and the participants gave their own suggestions as to how participation could be increased. The results of this study show that the nine young people identify a number of physical and psychological reasons as to why attendance is low among this group. These barriers correspond with the findings of previous research into the relationship between young people and the heritage sector. They then indicate a high level of support for various strategies to improve the attendance among young people, indicating that they feel the under use of these resources among their demographic is an issue that can be resolved. An emergent theme within the study is the strength of the negative opinions the participants had towards these resources despite their low levels of experience. This implies that the psychological barriers identified for this group need to be addressed to encourage a more positive perception of them if there is any hope of encouraging them to use these important resources as a key element of life-long learning.

Introduction

The Labour government, when it came into power in 1997, identified Education as one of its main policy issues. However, this was not confined to the realms of schools and formal education. Indeed a strong emphasis has been placed on the concept of 'lifelong learning'. This means that education must continue beyond the traditional constraints of the classroom and the compulsory school age (DfEE: 1998). The heritage sector has been recognised as a key potential resource through which education and learning can continue throughout people's lives (Barzey, 2003; Wilkinson, 2001; DCMS, 1999). Heritage can be regarded as an umbrella term that can cover many different resources, not just those related to history.

However, it has been recognised that there is a significant imbalance in the demographic groups that use these resources (Martin and Fraser, 2004). Surveys and research into the audiences and users of these resources repeatedly show that there is a significant under usage among young people (Martin and Fraser, 2004; Harland and Kinder, 1999; DCMS, 2007). However, it is identified that young people could

significantly benefit from the provision of lifelong learning (Illingworth and Rider, 1997).

The twelve-week programme is designed to help young people to build self-esteem and gain skills to help them into employment. The majority of the young people included in this study left school with very few formal qualifications and have been unable to find employment. This investigation considered the relationship between young people and the resources that could benefit them through life-long learning.

In order to do this three key research questions were addressed:

- Do young people on the twelve-week programme use resources for life-long learning found in the heritage sector, such as museums, galleries, libraries etc.?
- What barriers do they identify to prevent them from using these resources?
- How could these resources be improved and be more appealing to their demographic group?

Although this research project was small-scale, an insight has been gained through qualitative research into why this inequality occurs in the use of resources. By targeting young people who would probably not normally be included in surveys and questionnaires around this issue, it is hoped that an insight into the thoughts and attitudes of this under-represented demographic has been gained. The findings of this investigation were compared to those of previous research and surveys into the use of life-long resources in the heritage sector, barriers to usage, and strategies to encourage this under-represented group. The following section is dedicated to the identification and analysis of previous findings in this field.

Literature Review

Due to the disparate nature of the heritage sector, research tends to focus on individual aspects, such as museums or libraries, rather than evaluating it as a whole. This research therefore tends to focus on general attendance and attitudes towards these facilities, rather than specifically as resources for life-long learning. However, regardless of whether they are viewed as resources for learning or not, people's attitudes towards them, and identified barriers to attendance, are highly relevant to this study.

The Heritage Lottery Fund, through visitor surveys, has identified young people as a missing group in the audiences of the heritage sector (HLF, 2001). However, by gathering this information through visitor surveys, they are not actually gathering information directly from those who do not attend, but rather by deduction and implication. However, Martin and Fraser (2004), using information gathered from the MORI omnibus survey, which gathers information from a cross-section of private households, not just users of the heritage sector, found similar results of under usage among young people. This is confirmed by an analysis of museum attendances by Davies (2007), which found that just 14% were aged 16-24.

Roker and Richardson (2003) have looked specifically into the relationship between young people and the heritage sector. They offer a comprehensive literature review of research into young people's usage of and attitudes towards the heritage sector. The

main finding of their review was that there is a significant gap in research looking specifically into young people, despite the fact they are seen as a focus for audience development. Their study goes on to recognise that there are several physical and psychological barriers to why young people do not attend heritage sites, including cost, lack of transport, a lack of interest and a view of such sites as 'adult's activity' (Roker and Richardson, 2003: 7).

The barriers identified by Roker and Richardson are common among a wide range of research projects. The issues of cost and lack of time have been put forward as main barriers for attendance at these resources by Fenn et al. (2004), the Department for Culture, Media and Sport, (DCMS, 2007), and the Heritage Lottery Fund (2001). However, when looking particularly at young people, some believe that the reasons of cost and lack of time are given to 'mask a more deep-seated discomfort' with these resources (National Campaign for the Arts, 1999: 26). This 'discomfort' is a consequence of physiological barriers to the use of these resources, as opposed to physical or economical ones (Harland and Kinder, 1995; Harland et al., 1996; Halsey and Kinder, 1999). Fleming (1999) has identified that potential audiences are conscious of the demographic disparity among users of these resources, and this can form a barrier to their attendance. This discomfort may be attributed to the commonly held view that these resources are elitist (Ashworth et al., 1999; Pitts et al., 1999; Halsey and Kinder, 1999).

Harland and Kinder (1999) present perhaps the most comprehensive coverage of studies into the physical and psychological barriers experienced by young people to these resources. They speak of an 'invisible line' which must be crossed by young people to get them to attend cultural venues. This line is created by many potential barriers, perhaps the most significant of which is the belief held by young people that there will be nothing of relevance to them on offer (Richey and Betjemann, 1999).

A lack of comfort with these resources felt by young people can be accredited to feeling 'out of place' (Fenn et al., 2004: 35). Repeatedly, studies have found that young people identify these resources as being for other people, whether due to age (Unnamed, undated; Halsey and Kinder: 1999), social class, or the need to have a degree of prior knowledge or experience, or be better educated in general in order to comprehend these resources (Fleming, 1999; Harland et al., 1996; Halsey and Kinder, 1999); Harland and Kinder, 1995).

Once the barriers to attendance among young people have been identified, audience studies have then proceeded to look at ways of engaging this disaffected group (HLF, 2001; DCMS, 2007). A number of key strategies have been identified to broaden the appeal of the heritage sector, and to increase attendance and participation among young people. Some strategies target physical barriers. The cost of entry has been investigated, and has been identified as a way to increase the appeal of these resources to disengaged groups (Unnamed, undated; HLF: 2001). Included in this is the need to appease the issue of transport (Ashworth et al., 1999). The government has implemented a strategy to make more national museums free to people from these excluded groups (DCMS, 2002). Awareness is another physical barrier that has been identified as needing to be addressed to increase the usage of the heritage sector: many young people are simply unaware of what is available to them (Halsey and Kinder, 1999; Unnamed, undated; Harris, 1993). By increasing marketing that targets this group and by utilising methods of communication that young people feel

comfortable with, such as email and SMS text messaging, this issue can be addressed (Fleming, 1999); Halsey and Kinder: 1999; Lincolnshire Cultural Service, 2006). However, it has been recognised that the removal of physical barriers is not enough to attract these disengaged groups (Fleming, 1999; DCMS, 1999) and, unfortunately, the psychological barriers are much harder to remove (Pitts et al., 1999).

Making the content of these resources more relevant to young people is one of the most recognised strategies, as a lack of relevance is a commonly identified barrier (DCMS, 1999; Ashworth et al., 1999). A key way in which this is addressed is the inclusion of contemporary culture and themes from modern life into the heritage sector (Illingworth and Rider, 1997; Ashworth et al., 1999). It is hoped that by covering topics that are of interest and importance to this group, they will be more likely to attend or participate in resources for life-long learning within the heritage sector.

A second key strategy is to create relationships between the heritage sector and organisations or individuals that have prominence among this disengaged group. As has been discussed, a feeling of lack of belonging can prevent people from engaging with these resources; however, by having working relationships with trusted groups, individuals and social networks, disengaged groups may feel more comfortable to engage with the heritage sector (DCMS, 2007). This may be through working with youth schemes (Pitts et al., 1999), community outreach projects, which encourage a sense of ownership, (Fleming, 1999) or cultural mentors - respected individuals within the community who actively encourage involvement in these resources (Kinder and Harland, 1999).

Another key strategy is to provide opportunities for active involvement, rather than just being audiences. Young people are targeted to actively participate in the heritage sector (Pitts et al., 1999; Birkett, 2007). This helps redress the notion that the heritage sector is only for those who have previous knowledge and to develop a sense of ownership over their heritage. If this is done on a long-term scale it also allows young people to 'colonise' these resources and therefore feel much more comfortable with them (Willis, 1990: 41). There is a range of research to identify barriers and strategies to increase usage among this group, as outlined in the following chapter this investigation aims to discover if young people from the twelve-week programme identify the same barriers to under usage of the heritage sector and whether the strategies put forward to counter this would be viewed favourably.

Methodology

The participants in the study were 9 students, aged 16-24, on a programme to raise self-esteem and prepare young people for employment. The size of the sample limits the scope of this project; however, if the project had been extended to a wider group of participants, it would have been necessary to compare results across the two sample groups, which would have taken the study to a scale beyond the scope of this project.

The participants took part in a structured interview in which they were helped by the interviewer to fill out a questionnaire. Questionnaires are typically associated with larger scale projects; however, by using them to structure the interview, it allowed for a standardisation of responses, which allowed for the collection of quantitative data, for more straightforward analysis (Denscombe, 2003). As identified by Denscombe, the wording of the questionnaire had to be carefully balanced so that it did not lead the

respondents to answers, while at the same time giving enough support to avoid responses of 'I don't know'. Closed questions were used to gather factual data about the use and awareness of the different resources, while open questions allowed for fuller responses by participants to identify barriers to use and suggested strategies for increasing participation (Denscombe, 2003). The questions were designed to target the three research issues that are the focus of this study and used identified barriers and strategies from previous research, as covered in the literature review. This allowed the results from this study to be compared with previous findings and to measure whether the sample group of the target demographic would favour the proposed strategies.

The questionnaire was piloted, after which it was decided that several questions would be removed as they were not deemed relevant to the study, and therefore did not ethically belong in the questionnaire (Denscombe, 2003). The use of questionnaires does have disadvantages due to the risk of lack of understanding among participants, and not being able to check the truthfulness of responses. This was countered by combining it with an interview, through which qualitative data could be gathered. The interview allowed questions to be explained to ensure understanding, and before recording a response, the interviewer asked respondents to clarify responses and asked for explanations to act as evidence for truthfulness of their answers, though it is recognised judgements over accuracy will always be affected by the interviewer's personal opinions (Davidson and Layder, 1994).

Pring (2000: 1) criticises educational research on the grounds that researchers approach similar topics from different angles so 'a coherent or reliable base for practice or policy' is hard to ascertain. However, by taking this approach of directly targeting a group of young people, the gap identified in current research looking directly at the usage and attitudes of young people can hopefully be narrowed (Roker and Richardson, 2003), as this study gathered information from 'key informants' (Denscombe, 2003: 189). This has particular significance, as it is unlikely that these individuals would alternatively have been approached for participation in research of this kind, despite there being a focus for audience development. The findings of this small-scale research project are outlined in the following section.

Presentation and Analysis of Findings

Level of usage since leaving school/turning 16

The first question aimed to identify the level of usage of these resources among the 9 participants, as independent visitors/users rather than as part of a school or childhood trip.

Table 1: The level of usage for each resource among the nine participants:

Type of Resource	No. of participants
Art Gallery	0
Dance Performance	0
Historic Site	2
Library	7
Theatre	1
Museum	5
Music Performance (classical/jazz/opera)	0

The most noticeable finding here is the much higher usage of libraries over other resources within the heritage sector. This trend is not surprising. Martin and Fraser (2004) highlighted that library usage was highest among these resources, coming second in their survey to the cinema, in a wider survey of leisure activities. The second most used resource was museums, with 55% of participants having visited a museum. This would imply that the level of usage is higher than expected among this group, as Martin and Fraser found that only 2.9% of people aged 15-24 had visited a museum or gallery. However, subsequent to the collection of data it was discovered that the participants has been taken to a museum during their twelve-week programme. Therefore it is not known what the level of independent usage is among the participants, so this finding must be viewed cautiously. The findings of question one can only indicate the level of usage; it does not give an insight into what factors impact upon this level of participation.

Identification of Barriers

Questions two to five investigated any barriers identified by the participants that could explain the low level of usage among this group.

Table 2: The perception of the participants regarding whether these resources provide for young people:

	YES	NO
Do these resources provide for young people?	2	7

It is clear that the majority of the participants did not feel that these resources provide for young people. What we cannot deduce from this study is the correlation with the level of usage. This opinion could be formed due to a lack of knowledge about the resources, due to under-use. Alternatively, this opinion could be the cause of the under-

use, as young people do not feel the resources provide for them so they do not feel comfortable using them.

To gain further insight, the participants were asked to explain why they felt this way. The two participants who felt that they did provide for young people gave responses that implied that these resources cater for certain groups of young people. One participant felt they did provide for young people, but only if they had a particular interest in the content of the resource, while the second participant felt they provided for young people as part of an educational group, but not necessarily young individuals. To aid the analysis of negative responses the explanations have been sorted into three categories.

Table 3: The types of response given and their frequency:

CATEGORY	FREQUENCY
Physical Barriers	3
Content Issues	8
Psychological Barriers	4

The additional responses are from participants who gave more than one reason. Physical barriers include issues of cost and the ability to get access. Content issues cover responses that identified that the participants felt these resources did not appeal to young people's interests, knowledge or enjoyment, viewing them as 'boring' or 'not relevant'. The psychological barriers gave an insight into a feeling that young people did not belong in these kinds of resources or that they would not be welcome. One recipient felt that these resources did not provide for young people due to a need 'dress in a certain way', while other participants also identified these resources as only being for 'older people'. The physical and psychological barriers appear to indicate that even if these resources were to contain something of interest to these young people, they would not necessarily feel they were able to access them.

Question three explored the idea that these resources were designed for people in general, rather than young people by asking the participants to identify who they felt the target audience for each resource was. Rather than looking at each resource individually, the types of responses have been categorised for all the resources.

Table 4: The categories of people these resources are designed for and the frequency of each type:

CATEGORY	FREQUENCY
Specialists	9
People with a prior knowledge/interest/experience	13
Older people	9
Rich/wealthy people	5
'Posh' people	3
Students	4
Tourists	2
Everyone/General Public	14

The results could be interpreted to argue that the 'general public' is the most commonly identified audience. However, caution must be taken when making statements from statistics alone. If the distribution of this frequency is analysed, it shows that half these responses come from one individual who stated that all these resources were designed for everyone. What is also significant is that this individual also had the highest usage of these resources compared to the other participants. The other seven responses that identified the general public as the target audience, are in relation the libraries, which, as already stated, have a much higher usage among this group. This would imply that there is a link between usage and a feeling that they are designed for the participants. However, once again we cannot know if usage is a consequence of the feeling of being welcome, or that as the participants already use them they feel that everyone is welcome. Halsey and Kinder (1999) identified that once young people had attended such a resource, they felt much more comfortable to return in the future, which would appear to emphasise the link that has been identified between usage and a more positive perception of these resources.

The identification of these different groups, based around different factors, including age, education, interest, experience and wealth, implies that the young people in this study do not identify themselves with these groups, and that it is these groups, from which they are alienated, that are targeted for these resources, rather than themselves. The young people in this study identified the same categories of target audience as those identified by the young people in Halsey and Kinder's (1999) study.

Question four aimed to gauge the participants' opinions of these resources, to aid in the identification of barriers to young people's use of these resources.

Table 5: The Likert scale used to gauge participants' opinions of these resources, and the frequency for each option:

	1	2	3	4	5	
Exciting	1	0	4	4	0	Boring
Interesting	1	2	1	5	0	Not Interesting
Friendly/Welcoming	2	0	2	4	1	Unfriendly
Relevant to you	1	0	3	5	0	Not relevant to you
Cheap	0	0	1	6	2	Expensive

As the table shows, 11 out of 45 (24%) responses were in the central column, which would imply a neutral response. The inclusion of a middle column was to ensure that the participants were not forced to make a judgement about the resources (Davies, 2007). This neutral stance may be a genuine indifference, or it could be an indication of a lack of experience or knowledge upon which to base this judgement, due to the low levels of usage identified among the majority of the participants.

If the scale is divided into positive opinions (1 and 2 on the scale) and negative opinions (4 and 5 on the scale) the majority of responses can be seen to be negative: 27 out of 45 (60%). This leaves just 16% responses (7 out of 45) indicating positive opinions of these resources. Cost was the most common negative response, indicating that this may be a significant physical barrier to usage. However, the participant with the highest usage of these resources had a neutral response to this question, perhaps indicating that the

perception of cost is greater than the reality. This may be due to the association the participants have of these resources with wealthier people, as identified in the previous question. However these thoughts are merely speculation, as the study does not explore the explanations of these opinions and therefore cannot provide sufficient evidence to conclude such a judgement.

This question confirms that the participants perceive the content of these resources negatively. They cannot identify an interest or relevance within them that appeals to their mindset; this is then encapsulated in a view of them as 'boring'. These responses were not surprising; the perception of the heritage sector as 'boring', 'not relevant to young people' and not of interest has been identified by Harland and Kinder (1999) in the comprehensive survey of young people and their attitudes to the heritage sector. These negative opinions indicate that there are a number of psychological barriers that need to be addressed to increase the usage of the resources for life-long learning in the heritage sector among this group.

Table 6: Shows how many participants could give a local example of each type of resource:

RESOURCE	NO. OF PARTICIPANTS
Art Gallery	4
Dance Performance	1
Historic Site	7
Library	9
Theatre	4
Museum	5
Music Performance (classical/jazz/opera)	0

The aim of this question is to gauge the level of awareness of these resources among the participants. As would be expected due to the higher level of usage, 100% of the participants could name a local library. A high proportion of the participants were able to identify a historic site; however, all seven responses indicated the Cathedral as an example. Due to the location of the study and the prominence of the Cathedral in the city landscape this high level of awareness is not surprising. Perhaps more surprising is the failure of two participants to mention it. This may show a lack of understanding of what is meant by a historic site. Over half the participants could name a local museum, however, 60% of these examples were the museum that the group had been taken to visit and therefore independent knowledge could not be established. Less than half the group could give an example of a theatre or art gallery. These figures indicate that awareness of these resources and what they can offer to people is low, implying that marketing and advertising is not being sufficiently communicated to this group. The Heritage Lottery Fund (2001) identifies that, within the heritage sector, marketing that specifically targets specific groups is a way of engaging a broader audience, but it is an area for development. The two resources with the lowest awareness correlate with the lowest participation, as would be expected. What is interesting is that these two resources were strongly identified as being for groups of people the participants did not associate with - 'posh' or 'wealthy' people. It is interesting that they formed such strong negative opinions about these resources despite appearing to have a low level of awareness. This would imply that the participants have a strong image of what they perceive these resources to be like, without actually having experience.

Overall, however, levels of awareness are much higher than the level of participation, which would imply that it is not simply a lack of awareness that prevents this group from using these resources. An awareness of their existence does not indicate whether this group is aware of what these resources offer, and what might interest them. This is a limitation of the study and further investigation needs to look into young people's awareness of the benefits of these resources and their knowledge of what might be of interest or importance to them. The high proportion of neutral opinions about these resources in question 4 could be an indication of a lack of awareness about what these resources are about, rather than just knowing of their existence.

Strategies to encourage young people

Table 7: Shows the number of participants that thought strategies that have been put forward in current literature to encourage young people would be appealing to them:

STRATEGY	NO. OF PARTICIPANTS
Relevant to modern life	8
Reduced price/free	8
Chance to get involved	6
Brought out to you	6
If you knew someone involved	7

The overall popularity of the different strategies implies that the participants felt that making these changes would alter their attitude towards becoming part of the audience for these resources. The most popular strategies link directly to the main barriers identified previously by this group. The need to address the relevance of the content, and remove the physical barrier of cost are identified as the two most popular methods to encourage increased usage. Nearly 80% of the participants also stated that knowing someone who was involved would encourage them to get involved. This would suggest that the strategies such as 'cultural mentors' as put forward by Kinder and Harland (1999) would be popular. Individuals or services that are already known and trusted by this under-represented group can be used to encourage young people to take that all-important first step towards feeling comfortable in using these resources. One participant highlighted this point during the interview by stating that he would be more inclined to use these resources if 'he knew someone he could go with.'

Providing an opportunity to get involved was stated by two thirds of participants as a strategy that would appeal to them. This may be an indication that these participants recognise that they would feel more confident in using these resources if they gained some experience. This is perhaps a reflection of the fact that when the participants were identifying audiences for these resources, people with a prior knowledge or experience were repeatedly identified. By gaining experience the participants may feel they could access these resources more easily. This may in turn help break down the identified barrier of 'feeling out of place' and not belonging in these types of resource. Getting young people involved has been championed by a number of studies in this field (Ashworth et al., 1999; Birkett, 2007). Increased involvement may have a wider impact than just on those who take up the opportunity, as one would assume, based on

the findings here, that a larger audience would be brought in through people they know coming to support the work they have done.

Two thirds of the participants also expressed the feeling that these resources would appeal more if they were brought out to them. This appears to emphasise that this group have an interest in these resources but there are barriers that prevent them from feeling they can access them. This strategy could therefore combat both physical and psychological barriers. By bringing resources to disengaged individuals, the issues of cost, transport and awareness can be addressed. It could also help break down the barriers of feeling out of place or the perception that these resources are unfriendly and unwelcoming to this group.

The participants were then asked if they could think of any strategies that would help engage young people with these resources. Many responses emphasised those examples contained in the previous question, including transportations issues, cost, relevance to their own life and the chance to get involved.

Table 8: Alternative strategies suggested by the participants and how many times they were mentioned:

STRATEGY	FREQUENCY
Make it sociable	2
Make it fun	2
Have something to do	3
Increase awareness	2

The main focus of the alternative suggestions is to make the nature of these resources more appealing by making them sociable and fun. This indicates that the participants do not currently associate these resources as fun or sociable activities. These suggested strategies correspond with strategies put forward by different organisations and researchers into broadening audiences to include young people. Pitts et al. (1999) emphasise the importance of including an element of fun to encourage young people, while the recognition that young people are more likely to get involved with something which allows them to socialise has been highlighted by Halsey and Kinder (1999), who suggest a multi-use approach to these resources as a way to encourage young people to use them, such as the inclusion of cafes and leisure facilities.

The issue of awareness has been addressed in this analysis although the participants were not given this as a suggested barrier or strategy. Therefore this can be seen as a strategy that they identified by themselves. The identification of a need for young people to be more informed implied that these two participants felt that if young people were more aware of what was happening then more people would get involved. Therefore the strategies mentioned previously to target marketing towards this disengaged group would be viewed as a favourable method of increasing usage.

Finally, a third of participants emphasised that to get young people to use these resources there had to be a sense that there was something to do, and be active, rather than simply be a passive observer. This can be seen as an extension of the strategy favoured in the previous question to get young people involved. One participant particularly highlighted the relevance of this for young people in their statement that it would appeal, as it would 'get them out of doing nothing'. This implies, if the view of

this participant represents a broader consensus, that young people are looking for activities, and therefore if they are made aware of resources that are available to them and that what is on offer appeals to them then they would be inclined to use these resources.

The findings of this study give an insight into the usage of the heritage sector by a group of young people and their opinions. Some suggestions have been made as to how the results correlate to the findings of other studies and to the suitability of proposed strategies to attract more young people to these resources, but the size of the sample means that generalisations cannot be made. The following section will address the conclusions that can be drawn from this study.

Conclusions and Implications

This study gathered data from a group of participants whose demographic status made them an identified under-represented group in the audiences of resources for life-long learning within the heritage sector. The findings of the study highlighted that usage was low among the participants, with the exception of one individual. This allowed the researcher to explore why this level of usage was so low and what could be done to encourage these young people to use resources which 'can do much to assist young people by adding to their knowledge, interests and skills' (Illingworth and Rider, 1997: 5).

The study found there were a number of physical and psychological barriers that could be identified by the young people as to why they do not use heritage resources. These identified barriers corresponded with those found in previous studies which look at the relationship between young people and the various resources within the heritage sector. The size of this study means that generalisations about the cause of under use among young people cannot be made; however, it can be used as additional evidence to support the findings of previous research.

Despite the low level of usage, one of the most significant findings of this study is the strength of some participants' opinions towards these resources, especially the negative connotations they had about them, despite showing comparatively low levels of experience and awareness about the various resources. This would imply that the psychological barriers identified for this group need to be addressed to encourage a more positive perception of these important resources, if there is any hope of encouraging them to use them. This appears to confirm the findings of the National Campaign for the Arts (1999: 26), that there is a 'deep seated discomfort' with these types of resource.

The study also indicates that the proposed strategies to target the barriers and encourage young people into these resources would be successful among this group. There was a high level of support for the proposed strategies, and those that were suggested independently corresponded with findings and proposed strategies found in current research aimed at broadening participation among this target group.

The scale of this study precludes generalisations being drawn, and its implications are therefore limited. However, the indication of support for the strategies designed to increase usage among young people would imply that they should be implemented, and on a larger scale, as this study showed there was a lack of awareness among this

demographic of what was on offer to them in their local area. The trial of these strategies then needs to be monitored and analysed to identify what really works to help engage young people in what can be important and beneficial resources.

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An Investigation into Teachers' Views on Children's Spirituality, with Particular Reference to 'Godly Play'

Cheryl Livingstone

Abstract

This small-scale research project set out to investigate teachers' views on children's spirituality and the schools' role in this aspect of development. It examined how spirituality is nurtured in schools, particularly through Godly Play. The research attempts to establish whether there are particular factors that influence opinions on spirituality, found to be variable in similar research. The initial motivation for the research arose from observing a Godly Play lesson on a school placement and my subsequent interest in the approach.

The data for the research was gathered through questionnaires and interviews. Questionnaires were used to gain the views of teachers working at Community and Church of England (C.E.) primary schools and also a middle school. The aspect of the research focussing on Godly Play took place at a C.E. primary school that had been using the approach. An interview was conducted with a teacher and year one children during a Godly Play lesson.

The findings suggest that teachers' views vary on what spirituality is and how this may be developed in schools irrespective of their own religion, the type of school in which they work, or their experience in teaching. However, those teachers less experienced in teaching were found to be more confident in developing children's spirituality. The research also indicates that Godly Play generally has a positive impact on the children and teachers involved and that the story and time for reflection make a contribution to children's spiritual development.

Introduction

This small-scale research project sought teachers' opinions of the school's role in developing children's spirituality and how this aspect is promoted in school, particularly through the Godly Play approach. The interest for the research arose after observing a Godly Play session on a school placement and as a result I wanted to develop a greater understanding of the potential for such methods in the classroom. While there is much information available about Godly Play, there has been little research conducted into its impact, or indeed a balance of literature including its possible limitations.

The initial reading led to the research being focussed on children's spirituality, which was an aspect of child development that I felt I had overlooked during my training, and also had not been aware of its importance when at school on placements. I therefore sought to gain teachers' views on spirituality and how they nurtured this in school. Particularly influential to this part of the research was the earlier research undertaken by Davies (1998) into head teachers' views and Eaude's (2005) small-scale research into the views of teachers, which are referred to throughout. They found that opinions vary on what spirituality is and how it is developed in school. What the researchers did not address, however, was whether there were possible factors influencing these different views. Watson's research (2000) into understandings of spirituality found that there was considerable diversity of understanding between people of different faith groups and that the route to spiritual development depended somewhat on their understanding of

spirituality. The research set out with the assumption that the teachers' views were likely to be influenced by different factors, including their own faith.

There has recently been a significant growth of interest in developing children's spirituality in education (Wright 2000), which has been a result of a number of factors (Crossman, 2003). Its importance was recognised in the 1944 Education Act and then later in the 1988 Reform Act, contributing to the second aim of the National Curriculum (DfEE and QCA, 1999). This inclusion, along with moral, social and cognitive development, provides an education system concerned with the development of the whole child rather than solely on their learning. The legislation gives those involved with education a professional responsibility to deal with the issue (Wright, 2000; Eade, 2006), but despite this interest and recognition, spirituality is consigned to the margins of educational concern (Erricker and Erricker, 2000). Watson (2006) believes the lack of mention to spirituality in 'Every Child Matters' (DfES 2003) raises concerns about its future consideration.

The importance of developing children's spirituality is contested by few writers (Mason, 2000; Blake, 1996), but rather seen as part of the heart of what education is all about (Ofsted, 2004), and to neglect this aspect of child development would be undoubtedly damaging (Rodger, 1996). Hart's research (2003) into children's spiritual experiences suggests that children have a rich and formative spiritual life. This view is shared by Copsey (2005), and it would seem that education too has assumed that spirituality is a universal, naturalistic human attribute (Watson, 2000). However as Warner (1996) points out, the experiences children have, both in and out of school, will either help to nurture or damage that spirituality. It is the latter point that most writers associate with the common spiritual experiences of children (Copsey, 2005; Hart, 2003; Wright, 2000), and it is the induction into adulthood and the resultant alienation of spirituality that are seen to contribute to this decline in spiritual awareness (Hay and Nye, 2006).

Through the research, I hoped to raise the profile of the development of children's spirituality in school and to influence my own future practice through a deepening understanding of this aspect. The focus questions for the research were:

- What are teachers' views on the term spirituality and their role and influence in developing this in children?
- How do schools develop children's spirituality?
- What impact is Godly Play having on the children and teachers using the approach?
- How does Godly Play contribute to children's spirituality?

Literature Review

Davies (1998) states that it is necessary to have an understanding of the meaning of spiritual development within the school context. However, this is in no way easy and it is widely agreed that 'spirituality' is a difficult term to define (Adams, Hyde and Woolley, 2008; McCarthy, 2001; Watson and Thompson, 2007; Wright, 2000). Research conducted by Davies (1998) and Eade (2005) into the views of teachers and heads found that they lacked agreement on the meaning of the term and that it had different connotations for different people. A particular aspect causing divided views is the link with the term to religion. In Davies' research, the association of spirituality with religion received the smallest percentage (just over half) of agreements compared with

other possible definitions. However, the majority of the head teachers involved (83%) worked at county schools, which may have affected the reliability of the results. What is not made clear is whether the responses differed between the heads of the county and faith schools, or if the heads' own faith made a difference to their response. In addition, such a divide exists between writers. McGrath (1999), while recognising that this is not the only way to define the term, believes that spirituality is concerned with the quest for a fulfilled and authentic religious life. Watson and Thompson (2007:200) see spirituality as an awareness rather than a quest, but they too associate the term with a transcendent, which 'can be intimated in and through all aspects of life and which is grounded in the reality of God'.

Most writers, however, prefer to give a more inclusive definition. Wright (2000:104) states that 'spirituality is the relationship of the individual, within community and tradition, to that which is, or is perceived to be, of ultimate concern, ultimate value and ultimate truth'. Other definitions include the 'development of a sense of identity, self worth, personal insight, meaning and purpose' (Ofsted, 2004:12), and inspiration, wholeness, depth and mystery (Hay and Nye 2006). There is also a common association between spirituality and morals (Hay and Nye, 2006; Eade, 2005). As Eade (2006) points out, such a term that lacks exact boundaries in its definition does not mean that it is not real or important, but the consequence of such uncertainty in the meaning is that it will inevitably be a controversial issue in schools (Wright, 2000).

Wright (2000:74) states that authentic spiritual education 'will seek to sensitise pupils to a heightened awareness of their personal inner space, stimulate their imagination, nurture their creativity and spark their imagination'. While spirituality is concerned with matters beyond religion, religious education in school does make a significant contribution to this aspect of children's development (Rivett, 2007). Gillard (1998) states that as religions have a spiritual dimension, we must accept that they may have something of value from which to learn. Not all Religious Education (RE) teaching, however, would be successful in promoting the spiritual aspect, particularly that which is focused on the learning of facts. Blaylock's (2007) distinction between weak and strong RE, of which the latter involves the exploration of mysterious aspects of life in the light of religious teachings, may suggest that the relationship between RE and spirituality is a mutual one, in that teaching concerned with the spiritual is effective RE teaching. Rodger (1996) points out, however, that no subject is devoid of a contribution to spiritual development. Despite this, it is viewed that some subjects make more of a contribution than others. Davies (1998) found that RE was considered to make a contribution by the majority of head teachers, followed by music, English and history. Subjects that were seen to contribute less were PE, maths, science and technology. Nearly all the respondents deemed worship and the school's ethos to be important contributors. Hay and Nye (2006) point out that nurturing spirituality is much more about the realities of human relationship. This is supported by Eade's (2005) research, which found that teachers felt that spiritual development was concerned with the relationships and environment they fostered rather than with specific activities or experiences. Best (1996) believes that only holistic approaches, considering the whole child, the whole curriculum, the whole school, the whole of society and the whole world are likely to encompass spiritual development. The connection Best makes with the role of the world outside of school is an important one and should not be overlooked. Kibble (1996:72) believes that most spiritual education takes place outside of school: 'it is the experience of life itself which is the great spiritual educator'.

Berryman (1995) believes that the spiritual development of the teacher and children are closely linked, and each stimulates the growth of the other. Smith (2000) takes this further when discussing Stevick's research (1973), suggesting that teachers' spirituality may also be a significant factor in shaping teaching and learning. It is therefore important that a climate is created in which teachers care for their own spiritual well-being and that it is reflected in the relational patterns across the whole learning community (McCarthy, 2001). This challenges educators' professional identity, so that personal and professional issues begin to merge (Crossman, 2003). This connection is a significant one, but one that none the less is overlooked, as Wright (2000:96) points out that many teachers 'feel they lack the training, insight, knowledge and skills necessary'. Other problems that affect teachers' involvement in the nurturing of children's spirituality include that they need more detail on what spiritual development might mean and how this can be put into practice (Kibble, 1996; Mason, 2000; Marples, 2006); it is an aspect beyond measurement and assessment (McCarthy, 2001; Copsey, 2005); and that schools are more concerned with what is perceived to be the 'real' agenda of raising academic achievement (Gillard, 1998; McCarthy, 2001). These factors seem very apparent when spirituality is addressed as a separate aspect to school life, or to the whole child, but Davies (1998) points out that much of what happens in school already potentially contributes to the qualities associated with spiritual development.

One way in which spirituality is being fostered in the classroom is through Godly Play. Godly Play is a Christian approach based on Montessori principles being used in various settings across the world. The approach allows children to 'enter' religious language to discover meaning and their own spiritual knowing through story and play (Berryman, 1995; Nye, 2002). Each of the lessons follows the same structure, based on the Christian pattern of worship where the children hear God's word through a story and collectively wonder about its meaning. The children then have time to respond individually to the story before the class community is reformed for a feast and a blessing (Nye, 2002). Of the many ways in which spirituality can be fostered in the approach, the use of Christian language is particularly prominent. This is modelled by the storyteller as a way of making meaning from the Bible and to encounter the mystery of God's presence (Berryman, 1995). Hull (1991:4) believes that talking about God opens up a 'rich vein of human experience and spiritual sensitivity'. However, Hay and Nye (2006) found in their research that such language can limit children's expression of their spirituality and can be used as a way of detaching themselves from the reality of their own experience. McCreery (1996) believes the connection between spirituality and language (particularly religious language) to be complex. The writer argues that there is a danger that children will not understand it, and only when they know how to apply such language will they be deemed to be spiritually aware.

The use of language is modelled by the teacher through the telling of a Bible story with the use of tangible props. Teece (2001) believes that such stories enable children to operate at different levels of meaning and gain a profound source of insight into their own experience. The 'wondering' questions that follow allow the children to enter the story imaginatively, honouring their personal spiritual insights while considering others' responses (Trousedale, 2004). This is facilitated by the adults in the room, who create space for each child's spiritual quest and a sense of community (Berryman, 1995). Following the story, the children have the time to respond in their own way. Berryman (1995) believes that it is through play that children create meaning and construct their own spiritual knowing. Many writers agree that children expressing their imagination and creativity through their play and work can at times provide insights into their

spirituality (Hay and Nye, 2006; Copsey, 2005; Rivett, 2007). This form of expression is particularly important for children who may not have the vocabulary to express their spirituality through words (McCarthy, 2001). How this expression of spirituality is recognised and interpreted, however, is not just a problem for teachers, as mentioned above, but has been a major challenge for researchers in this area (for example Hay and Nye, 2006; Erricker and Erricker, 1996; McCreery 1996).

Research conducted over three years by the National Society for Promoting Religious Education (NATSOC, 2003) found that Godly Play has a positive impact on the children involved. This, however, was only based on the teachers' interpretations, not the children's, which would have affected the validity of the research to some degree. It did find from the teachers' experiences that Godly Play also had a positive impact on the teachers themselves, and on teaching across the curriculum. As stated in the introduction, there has been little research conducted and made available on Godly Play and literature that gives a balanced view of its implications in the classroom.

Methodology

Methods used in research for collecting evidence vary and each has its advantages and disadvantages. Gillham (2000a:5) states that it is important to 'balance the gains and loses in anything we choose to do'. What is vital when selecting which methods to use is that those chosen will provide the data required for the research (Bell, 2005), and that the limitations of the methods are considered and minimised. One way of achieving the latter is to use a multi-method approach, or triangulation, which Burton and Bartlett (2005:28) define as 'to fix one's position from two known bearings'. This is achieved through using different means of collecting and analysing data, involving a range of participants, and by using both qualitative and quantitative methods. Knight (2002), however, questions the multi-method approach, stating that it can produce more complex accounts and greater uncertainty rather than leading to more accurate, converged findings. While I can understand Knight's view, I believe that my research has been strengthened somewhat by the use of different methods, and has given me confidence in the findings. Evidence was therefore collected through questionnaires and interviews, involving both teachers and children (although the changes that were made to the research meant that less was gained from the children, and as a result has limited the use of triangulation to some extent), and was both qualitative and quantitative. The justification for these choices will be considered below.

Questionnaires

Questionnaires were used as a means of gaining teachers' views on spirituality. By using this method I was able to collect data from a larger sample of teachers compared with other methods and had the advantages of ensuring respondents' anonymity and the lack of interviewer bias (Gillham, 2000a). Cohen et al (2007) believe that the anonymity of questionnaires tends to result in the data being more reliable and encourages greater honesty, but Gillham (2000a) disagrees, stating that respondents rarely work at the answers, completing them hastily and carelessly. Research conducted by Hay and Nye (2006) highlights the fact that people can often feel embarrassed talking about spirituality. I therefore considered questionnaires, in which anonymity was guaranteed, to be the most reliable and least threatening method of collecting teachers' opinions on this aspect. Bell (2005) states that ideally questionnaires should be piloted on a group similar to the one that will form the population of the study, and I felt this was

particularly important due to the sensitive nature of the subject. Four teachers known to me agreed to pilot the questionnaires, but were unfortunately unable to complete them in the time available. It was therefore necessary to pilot the questionnaires with other students, which although not ideal did highlight the need for changes to be made to the wording of the questions and also to the response options given.

The questions chosen for the questionnaire reflected the issues that arose in the literature review, including Godly Play. Although the questionnaire itself did not make reference to the approach, the inclusion of those elements that were related enabled comparisons to be made to the interviews in the analysis, thus increasing the validity of the findings. Similar research conducted by Davies (1998) and EAUDE (2005) into views on spirituality were particularly influential and indeed some of their questions were adapted for the questionnaire. The last section asked teachers about the school in which they worked, their own religious beliefs and their experience in teaching, to ascertain whether these were possible factors behind their views.

Originally 16 primary schools, selected randomly from three Local Authorities via the Schools Web Directory (2007) were contacted and three gave consent for the questionnaires to be sent. These schools were located in urban and rural areas: two were Church of England and one a Community primary school. Of the 23 questionnaires sent out, 11 were returned. Bell (2005) warns that posting questionnaires is likely to result in a poor response rate and that it is best to distribute them in person. As the latter was not possible, I believe that the initial consent gained from the head teachers would have been an important factor in the reasonable response rate. A further 14 questionnaires were distributed and collected, by a teacher known to me, to teachers working in primary and a middle school. Although the schools in which the teachers worked are thought to be either 'Community' or 'Church of England', 7 were marked 'other' and did not specify what they meant by this. One respondent did specify that the school had a 'Christian ethos' and so probably did not feel the school fitted into the given categories. What I cannot be clear about is if all 7 teachers worked at this school or whether perhaps this was chosen for other reasons, and due to anonymity this could not be checked with the respondents. Cohen et al, (2007) note that questions can have different meanings for different people, and the researcher is unable to clear up misunderstandings, which is a particular disadvantage of questionnaires. Better piloting at the start may have identified the problems associated with the given categories but, as it was included in the questionnaire, it has been necessary to include 'other' in the analysis of the data.

It was from some of the questionnaires distributed by the teacher that the stronger views were expressed. This was perhaps due to the fact they were not collected by the Headteacher, which puts into question whether the questionnaires sent out to teachers were completed honestly, or whether they were completed in the manner in which they thought they should be. Burton and Bartlett (2005) point out that the researcher can only assume that the respondent has answered in good faith, and in order for the data to be analysed that assumption was made. Nonetheless, it is important to be honest about the limitations of the research. Also, of the questionnaires sent out, 12 were not returned and this non-response may have been due to a number of reasons. What cannot be clear is if those teachers that did not respond would have answered in a similar way to those that did. Therefore the data only represents the views of those teachers who did return the questionnaires. Of the other 14 questionnaires returned,

one was barely filled in and so it was decided that it would not be included in the analysis. In total 24 questionnaires were analysed.

Interviews

To look into the impact Godly Play is having in the classroom, it was planned that interviews would be carried out in response to a lesson with a group of children, and individually with the teacher. Interviews are a 'fundamental research tool' (Burton and Bartlett, 2005:109), one which is flexible and enables multi-sensory channels to be used (Cohen et al., 2007). The school involved in this part of the research was a Church of England primary school located in the centre of an urban area, selected by purposive sampling. The school was specifically chosen, as it was known to be using Godly Play, and therefore met the needs of the research. Cohen et al. (2007) note, however, that this type of sampling does not pretend to represent the population as a whole and is selective and biased. As Godly Play is not widely used in schools, this type of sampling was necessary and Bell (2005) believes to be generally acceptable in small-scale research as long as the limitations are realised.

Initial consent was requested from the Headteacher and I subsequently met with the teacher who had agreed to take part prior to the interviews taking place. This initial meeting, which Gillham (2000b) describes as the introductory phase, was for me to explain the purpose of the research and what would be involved for the teacher and the children. Following this contact, a letter was sent out to parents to gain their consent for me to interview a group of children in Year 3 about their responses to the lesson and their thinking behind their 'work'. Unfortunately due to circumstances beyond my control, it was not possible to meet again with that teacher and class during the research period. Instead another teacher at the school agreed to participate in the research with a Year One class. Due to the very short notice of the changes, it was not possible for consent to be gained from the parents, and as the children were younger and not familiar with me, a formal interview with them did not take place. Instead I talked to the children during the lesson about their responses and these were recorded. This was not ideal as I was unable to ask the questions that had been planned and I do not think that I gained what I could have if an actual interview had taken place. The children were reluctant to talk much about the lesson which may have been due to my not being familiar with them or because they were distracted by what they were doing. What little I did gain from the children may also be unrepresentative of their views. McCreery (1996:199) points out that 'children are quick to give us what they think we want', and so the children's statements may be based on what they think they should say rather than what they actually believe. As a result, what I have learnt about the impact Godly Play has had on the children has been derived mainly from the teachers' accounts. This is something I believe weakened the research conducted by NATSOC, (2003), and has similarly affected the reliability and validity of my own.

The interview conducted with the teacher did not need to change, and focussed on their experiences of using Godly Play and how the approach may contribute to the children's spiritual development. An interview was chosen, rather than a questionnaire, so that the participant's views could be expanded on, and events that occurred during the Godly Play lesson could be discussed. It also enabled me to make reference to, and discuss findings from, the questionnaire which had been returned prior to the interview. Bell (2005) states that open questions used in questionnaires often provide useful pointers to the types of issues that may be worthwhile discussing in interviews.

It had been planned previously that the interviews would be taped, enabling me to obtain data which reflected as accurately as possible the teacher's and children's views (Oliver, 2003). Having experienced being a participant in a research interview, I appreciated the positive impact a tape recorder had on the flow of the interview, benefiting both interviewer and interviewee. However, again due to the changes, the interview and the children's comments were not taped but were written down. The teacher's interview was recorded in note form and then written up afterwards. Opie (2004) states that such a form of recording is subject to interviewer bias and the status of the data is questionable. While all the teacher's key points were written down and checked with her at the end of the interview, it may be likely that, as I needed to interpret the notes to write them up, the validity of the data has been reduced.

Observation

Observations allow the researcher direct access to the focus of the research (Simpson and Tuson, 1995), which can reveal characteristics that cannot be discovered by other methods (Bell, 2005). As part of the research I observed a Godly Play lesson, which gave me a context to draw upon in the interview that followed with the teacher. However, no formal observation was made, in that no data was collected from the lesson itself (although points the children made when they were working individually were noted). I believe that observation would not have been an appropriate method for collecting data for this research, particularly because the researcher can have a measurable effect on the outcome (Burton and Bartlett, 2005). Important to Godly Play is the atmosphere and sense of community maintained by the adults in the room, and I felt that this may have been affected if I were to observe the lesson formally. Berryman (1995:22) believes that only two adults should be present, as more can 'over adult' the room. During the Godly Play lesson there were four adults (including myself) in the room. While one cannot be sure that this had a direct impact on the children, it did affect the confidence of the teacher, which may have impacted on her delivery. As the lesson did not, therefore, reflect a typical Godly Play lesson the reliability of the data is questioned.

Methods of analysis

Information collected through the research methods means nothing unless it has been categorised and interpreted (Bell, 2005). Cohen et al. (2007:347) describe the initial process as 'data reduction'. As the data collected was both quantitative and qualitative in nature, different methods of analysis have been used. All the responses to the list, category and scale questions in the questionnaires were represented together per question so that comparisons could be made. Analysing the qualitative data was more complex, and as Opie (2004) points out, is much more open to the subjectivity of the researcher. To reduce this subjectivity, all the data collected has been included in the analysis. Hitchcock and Hughes (1995) state that qualitative data analysis involves organising the data into units of meaning, which the researcher can then subsume under a general heading. The qualitative data from the questionnaires and interviews were categorised in this way. I had intended to prepare the categories to the open questions in the questionnaires before analysis, which Bell (2005) believes gives a start in collating the findings, but there is a danger in placing too much reliance on preconceived ideas. As the responses were broader than the categories chosen it was decided that the responses given would determine the categories used.

Analysis of Findings

With reference to the literature review it was clear from a number of writers and similar research that spirituality was difficult to define and had different meanings for different people. This is viewed as a contributory factor in the problems teachers face in developing children's spirituality in school (Kibble, 1996; Mason, 2000; Marples, 2006). The questionnaire asked teachers to define spirituality by indicating their agreement to a collection of statements that arose from authors' definitions and also to some of those included in Davies' (1998) research into head teachers' views. The statement that Davies found to be most associated with spirituality from 97% of head teachers was the development of personal values. Similarly, in this research 23 out of the 24 teachers who responded agreed or strongly agreed that spirituality involved the development of beliefs and values. Out of the 24 teachers 22 agreed or strongly agreed that spirituality was associated with a development of moral thinking, which supports Hay and Nye's view that 'almost without exception, people link their spiritual... experience with a moral imperative' (2006:29). A sense of identity and personal insight and a search for meaning and truth were also seen to be associated for 20 out of 24 teachers.

The statements upon which the teachers were more varied in their agreement, were those concerned with a response to challenging experiences, and a relationship with God. The former statement in comparison to the others was the one the teachers were most unsure about (7 out of 24) and received the least number of teachers strongly agreeing with the term (2 out of 24). The link with religion and spirituality was something that had divided views in the literature review and received the lowest percentage of head teachers (56%) agreeing with the term in Davies' research. However, in Davies' research this was still significantly higher than the percentages of head teachers uncertain (27%) and disagreeing (18%) with the connection to the term. This contrasts with my findings, as an equal number of teachers (11 out of 24 either side) agreed and disagreed on the link between spirituality and religion. What I felt had been lacking with other research into this area was that possible factors affecting the varied views were not looked into. Comparing my findings on the statement with the teachers' own religion, the views of the teachers who stated that they were not religious reflect the overall varied findings, whereas 5 out of the 7 teachers who stated that they were religious agreed or strongly agreed with the term. Interestingly, 4 out of the 5 teachers who chose to state that, while they were not religious, they still believed in Christian values, morals or were spiritually aware, disagreed with the link with religion. This was perhaps based on their being more conscious of their own experience of living a spiritual life in the absence of a belief in God.

Roberts (2000) states that schools that do not plan for spiritual, moral, social and cultural development disadvantage their pupils. Out of 22 teachers 16 felt the school was important in developing children's spirituality, recognising the broader role of the school in developing the whole child. The aspects of school life that were seen to make a significant contribution by the most teachers were: RE (13 out of 22); PSHE (12 out of 23 respondents); citizenship (11 out of 22); assemblies (11 out of 22) and the school's ethos (10 out of 22). Other subjects that were also viewed to be important were history, geography, art and music. Those subjects with the highest number of teachers (in comparison to the other subjects) stating that they did not contribute at all were: maths (9 out of 22 respondents); Design and Technology (8 out of 22); ICT (7 out of 23); and PE (6 out of 23). Rodger (1996) believes that all subjects can make a contribution to children's spirituality, and the overall findings suggest this. However, since there was a

lack of overall agreement, why was there such a varied response? Teacher 4 suggested from her own experience that such a variation might be due to subject knowledge and confidence. Having a more confident knowledge allows the teacher to find ways of attending to the spiritual aspects in that subject and respond to the children's ideas, whereas this is not possible in those subjects of which the teacher is less knowledgeable.

The questionnaire asked teachers to give examples of activities that they associated with developing children's spirituality. The responses were again varied, suggesting that there are a number of ways that can potentially nurture spirituality. Aspects that were more common were associated with speaking and listening activities (noted 8 times), children working in groups (noted 5 times), and responding to others (noted 5 times). Similarly, time for individual reflection was viewed to be important (noted 5 times). Out of 24 teachers, however, 6 did not respond to this question. What cannot be certain is whether this indicates that those teachers were not sure how to answer or whether it was left due to it being an open question. Cohen et al. (2007) state that open questions may be too open for the respondent to enter a response and can make the questionnaire discouraging. The responses made therefore only represent the views of the 18 teachers who did answer the question, as the other 6 may not have responded in the same way.

In the literature review I referred to Best (1996) and Kibble (1996) who state the importance of the role of others in developing children's spirituality outside of school. This was brought up by three of the teachers, one of whom felt more strongly about the school's contribution:

I strongly believe that school teachers are being used as surrogate parents. The more school teachers are directed to adopt these roles the more they contribute to the lack of parental responsibility (Teacher 1).

What I had not expected, which the research brought to my attention, was that a child's life outside school could impact on the school's contribution to nurturing their spirituality. This was highlighted by Teacher 2 who stated that '...unless home gives a sense of awe/wonder then teachers could be less able to have success in this area', and Teacher 4 who believed that Emily's difficulties at home were behind her emotions and withdrawal from Godly Play. A response made by Olivia also suggests that there is a difference between her experiences in school and at home.

Hay and Nye (2006) point out that often people assume spirituality is always extraordinary instead of its being a very ordinary aspect of children's everyday experience. However, the data suggests that this is not a view of the teachers who responded. The majority of the contexts that the teachers identified as being important outside school were everyday occurrences such as family life and occasions (noted 13 times) and religion (noted 5 times). The natural environment was noted to be important in and out of the school context, and one of the teachers stated that all experiences could potentially develop children's spirituality. What also seems to be important from both is the relationships children have with others. What was not stated by any of the teachers to be important in developing spirituality was their own relationship with the children, which contrasts with Eade's research (2005). However, as these were open questions, the teachers' responses may not have reflected all their thoughts and it may have been that the question led away from such a response.

In response to many writers' views that teachers face problems in developing children's spirituality, for example Wright (2000); Copsey (2005); Kibble (1996), the questionnaire asked the respondents to rate their confidence in this aspect. The findings suggest that different teachers have different levels of confidence. The majority chose the values closest to the centre (18 out of 23) and only three teachers stated that they were very confident. Fifteen of the teachers had had no training on how to develop children's spirituality and by comparing the two factors there does not seem to be any relationship between confidence and training. Teacher 3 stated that '...developing a spirituality is probably more innate than something to be trained for'. This was followed up during the interview about Godly Play, in which Teacher 4 stated that she believed it to be more about general subject knowledge and confidence, as stated above. These views were perhaps reflected in the finding that 8 out of the 24 teachers were unsure whether they needed more training on spirituality. Again, there was not a relationship between the teachers' level of confidence and the need for more training, but other factors such as perceived importance may have impacted upon the results.

There does seem to be a slight relationship between the teachers' level of confidence and their experience in teaching. Out of the 8 teachers with more than 16 years experience, 7 stated that they had low or no confidence compared with 3 out of 12 teachers with fewer than 10 years, and none of the 3 of teachers with between 11-15 years experience. The factors behind this link are likely to be complex, but the changes in education and teacher training in more recent years may have had an influence.

17 out of 24 teachers agreed or strongly agreed that teachers' spirituality has an impact on that of the children's, which is supported by Berryman (1995). Teacher 4, however, believed that it was not necessary for teachers to view themselves as spiritual in order to nurture the spirituality of the children. The teacher interviewed about Godly Play (referred to above as Teacher 4) believed the approach generally to have a positive impact on herself, other teaching staff and the children, and the findings from NATSOC, (2003) support this. The time that Godly Play allows for reflection and wonder, and how this is reflected in the classroom environment, were viewed to be important elements in developing spirituality. Also, the hand movements and gestures were seen to be effective in encouraging the children to think and make connections beyond the story. However, this is an aspect that the teacher thought was lacking in the guidelines for the lesson, which may suggest that some of the Godly Play lessons make more of an impact than others.

The sense of community, which was referred to in the literature review as being created and maintained by the adults in the room, was something the teacher had also experienced herself through carrying out the lessons. The positive impact the approach is having on the teacher is likely, therefore, to have an impact on the children. However, factors outside of Godly Play were seen to affect the impact the approach had on the teacher during the lesson seen. The factors identified were the number of adults in the room, the 'door person' understanding and carrying out their role, and the lack of lighting. As this may have affected the teachers' delivery, and also went against advice given by Berryman, the impact the lesson had on the children may too have been affected.

Overall the time together on the carpet, with the story telling, appropriate props and reflection were seen to make the biggest impact on the children. What was noticed by the teacher, and was also reflected in my discussions with the children, was that a

change occurred when the children moved from the circle to individually respond to the story. Hay and Nye (2006) state that children's imagination, seen in their art, play and work, may at times provide a window on their spirituality. This time in Godly Play is seen as important for children to make their own meaning, but during the lesson this did not seem to have as much of an impact on nurturing children's spirituality compared to the time spent together reflecting on the carpet. As the teacher described, the children went from thinking in the abstract, to more concrete thinking when working individually. It may have been that the atmosphere created on the carpet, which encouraged the children to reflect and share their ideas, was lost during the transition.

As stated in the methodology very little was gained from the discussions with the children and so it would not be valid to draw much from this data. The majority of the children used religious language in their responses and some, for example Hannah and Adam, seemed to be finding meaning beyond the story told. One child, David, also made connections from the story to his own experience. Berryman (1995) believes that children use religious language to make meaning, and the findings suggest that the children have begun to do this. Whether this use of religious language was in any way limiting the children's spirituality, as proposed by Hay and Nye (2006), is difficult to ascertain, but only four teachers identified the use of religious language as a characteristic of children developing spiritually.

Only one child, referred to as Emily, responded negatively to the lesson by getting upset and withdrawing from the activities. This was viewed to be a result of difficulties at home. Eade (2006) points out that spirituality is not all about positive experiences but the search for meaning sometimes involves making sense of painful experiences. Whether children should be protected from thinking about painful questions and experiences is a difficult decision to make.

Conclusion

The research set out to examine teachers' views on developing children's spirituality and how spirituality is developed in school, particularly through Godly Play. As with similar research, the findings tend to indicate that teachers have different views on what spirituality is, and how this may be developed in school. Overall many aspects of school life are seen to contribute, but some aspects are viewed to contribute more than others, particularly RE, PSHE and Citizenship, assemblies and the schools' overall ethos. The school is generally seen to be important in developing children's spirituality and teachers' own spirituality is viewed to have an impact on that of the children's, which was proposed by Berryman (1995) in the literature review. Everyday experiences outside school were seen to have an impact on children's spirituality and may have an effect on its development in school.

The findings suggest that there is no clear reason for teachers' differing opinions, and that their views vary irrespective of their religion, the school in which they work, or their experience in teaching. Although the factors explored are not exclusive of those that could have an impact, it may be more likely that a number of factors culminate to impact on their views and, as Watson (2000) found, be based on their cognitive understanding of their individual experiences of spirituality. The only relationship that was found suggests that teachers with less experience are more confident in developing children's spirituality than those teachers with more teaching experience.

Although the research did not explore the reasons for this, it may be that differences in teacher training had an impact. Generally, the data suggests that teachers' confidence in developing children's spirituality is mixed. A teacher's overall subject knowledge and confidence may be important in finding ways to address spiritual development.

The research into Godly play suggests that the approach generally has a positive impact on the children and the teachers, although organisational factors and experiences outside of school could have an influence. The beginning of a Godly Play lesson is considered to contribute to nurturing children's spirituality, through the telling of a story and the time for reflection that follows. The time for play and creative activities may have less of a contribution in this area.

Due to the small number of participants involved, which were not representative of the population as a whole, it is not possible to generalise from the findings and accurately state whether relationships do occur. What was learnt from the research only applies to the participants involved and this is particularly true for those involved in the Godly Play due to the sample method chosen and the fact that only one lesson was used as the context for the research. The changes that had to be made during the later stages of the research meant that less data was gained from the children than originally planned. This limited to some extent the use of triangulation and in my view affected the validity of the findings about Godly Play.

Although limitations were minimised initially, factors that could impact upon the reliability and the validity of the findings arose during the research period and have been highlighted in the methodology. Despite this, and the lack of generalisability, I agree with Bell (2005), and Opie (2004) that research findings can be invaluable and have important implications for future practice.

This research has highlighted to me the importance of nurturing children's spirituality in school, and I hope it has also raised the profile with the teachers and schools involved. The findings have implications for my future teaching, to ensure that opportunities are provided to develop spirituality across the curriculum and throughout school life. I also intend to use and adapt Godly Play methods in my own teaching, and to support others in their use of the approach as a subject leader. Although much has been learnt from the research and background reading, an awareness of the complexities of developing children's spirituality and its identification has been gained. My understanding of children's spirituality will need to continue to develop, and this will be aided by being more aware of this aspect in my own practice.

My recommendations would be for more research to be conducted, particularly into Godly Play, to examine the impact of the approach on children across different age groups, including how the children's responses to Godly Play change over time, whether all children, of different faiths and none, are able to access Godly Play in the same way, and if the approach is being successfully adapted for other religions. How a child's experiences outside school impact on their spiritual development in school would also be worth exploring.

How to raise teachers' confidence in developing children's spirituality may be more complex, and the research suggests that more training would not necessarily be of benefit. I believe that the development of children's spirituality requires a raised profile through research conducted into this aspect being made more available to schools and

for approaches that aid teachers in developing spirituality, such as Godly Play, being more widely known.

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The Role of Fiction in Motivating Boys to Read

Julie Robinson

Abstract

The aim of this action research was to see whether fiction books read aloud by an adult could motivate a group of five Year 6 boys, each with a reading age below their chronological age, to read at home. Prior to the research these boys were not motivated to read independently and subsequently did not instigate reading at home. Sylva (2007) believes regular reading to be an important way to develop children's reading skills.

Both quantitative and qualitative paradigms were used to endorse the claims made throughout this project. The data was gathered using initial and final questionnaires completed by the children, observations, baseline and final reading tests, children's reflective comments, digital photographs and written comments by parents and the class teacher.

A fiction book was read aloud to the boys three times a week by an adult, and each week saw the start of a new book. Each session, several pages of the book were read to stimulate the boys' enthusiasm for the text. Then, purposely stopping at a cliff-hanger, the boys were provided with the subsequent four pages to read at home. The boys participated keenly on the whole, and were highly motivated throughout the project. Rembow, (2006) suggests when children listen to adults reading stories it is enormously motivating. This motivation was evident during the research as all five boys read at home, although some read more significantly than others.

The recommendations are that these boys should continue to be exposed to books read aloud by an adult to help motivate them to read, with a view to introducing other genres to help sustain motivation.

Introduction

The aim of this action research was to see whether fiction books read aloud by an adult could motivate a group of five Year 6 boys to read at home. On a daily basis during Literacy, I support these boys whose reading ages are significantly below their chronological ages. On several occasions I have recorded in my reflective journal that these boys are often disruptive during reading sessions, which is possibly due to their inadequate reading skills. As Mason (2002: 52) points out, 'marking' incidents down enables researchers 'to recognise other situations in which something similar may have happened'. One example of this was when they were following a piece of comprehension text read aloud by selected pupils. The boys began to show disruptive behaviour possibly due to the fact they were struggling to keep up with their more able peers who were reading at a quick and competent pace. It is known when children have difficulties reading it affects all areas of the curriculum, which in turn limits a child's experience (Macmillan, 1997). These boys are not motivated to read independently and subsequently do not instigate reading at home. Sylva (2007) suggests regular reading helps to develop children's reading skills, a view echoed by Wilson-Fletcher, the Project Director for the government initiated National Year of Reading 2008 (BBC1, 2008).

The teacher encourages the class to read daily and has set up a reading challenge whereby children must read three times a week at home, including once to an adult, to be able to receive an end of term reward. The teacher and I also provide additional opportunities during break times for children whose parents/carers struggle to listen to them read. This is to ensure they are not at a disadvantage in achieving their reward due to the lack of an adult signature. Despite these incentives and opportunities provided, the boys identified failed to read regularly and gain their weekly reading challenge sticker and subsequently the end of term reward.

From these observations I decided to consult the class teacher to ask permission to work with these specific boys. The purpose was to see if I could find a way to motivate them to read regularly at home. Negotiating time at first proved difficult due to the constraints of my timetable. However, it was decided that I could use three of the guided reading sessions to carry out my research. I then needed to identify a strategy to be used to see if I could motivate these boys to read for pleasure, as it is known that children who regularly 'read independently become better readers' (Rembow, 2006:14). Rembow also comments that when children have good language acquisition, this is also linked to good behaviour. This would be beneficial not only to the boys, but also the rest of the class, as their disruptive behaviour during reading sessions also has a disruptive effect on their peers.

A limitation of this research was negotiating time to be able to observe these boys throughout the day. I had hoped the observations would help determine whether the additional reading was impacting upon their confidence and behaviour within class.

Literature Review

Before embarking upon my action research I first read relevant literature to discover the views of others on the ways in which to motivate children to read, in particular boys. I discovered that motivating boys to read has been a key debate in many educational research projects, with many differing views being expressed (Wilson, 2006). Rembow (2006:15) suggests motivating children to read has become difficult due to the fact society is fast paced and 'focused on technological advancement.' However, reading is a crucial life skill and not possessing this skill can have a profound effect on a child's future (McCue, 2007). For example, entering the working culture requires competent reading skills to complete job applications (McCue, 2007). Research has revealed that children who struggle to read are less motivated readers resulting in a decrease in the opportunities to learn (Clarke, 2008). Clarke proposes that children's negative attitude towards reading is a result of this lack of motivation, thus creating a vicious circle where poor readers remain poor readers. Therefore, as the debate continues, I would like to examine the differing opinions of others on the strategies to help motivate children to read.

Williams (2003) suggests motivating children to read can be accomplished by exposing them to a variety of books, which enables them to choose their reading according to personal preference. He goes on to say that choice helps to encourage children to read for pleasure, a view supported by Excellence and Enjoyment (DfES, 2003b). This strategy of using a variety of books is supported by Silcock (2005) who successfully tried this theory in her school to help motivate boys to read. However, this free choice may provide the opportunity to avoid fiction texts, as the trend among some boys is to believe that only females read fiction (Wilson, 2006). This may be due to the fact they

have only been exposed to their mother reading such texts, whereas their father may read newspapers and instruction manuals (BBC1, 2008), fuelling the stereotypical belief that males only read when they need to find something out (BBC1, 2008). Wilson (2006: 38) believes boys need to be exposed to fiction because it gives them the chance to reflect on 'emotions and relationships, characters and situations;' without this they may become adult males unable to express their feelings or 'work out a measured response to a problem'. Smith (2004) agrees with Wilson that some boys resist fiction in text form, but he suggests they enjoy stories contained in comics and also fiction presented through film and television, thus overcoming the issue of a lack of exposure to fiction, which is believed to help males reflect on real-life issues.

Turner (2005) suggests Drama and Art promote motivation in reading. Therefore, she encourages her pupils to act out stories and create artwork to represent the texts they are reading. She believes this creative approach improves self-motivation, thus creating autonomous learners (Turner, 2005). Sylva's research project supports this theory suggesting role-play helps to motivate children to read (Sylva, 2007). However, the research did highlight the fact that large amounts of role-play were of no more benefit than small amounts.

Rewards are used to motivate children to read, an approach known as operant conditioning, a theory advocated by the behaviourist Skinner (Boeree, 2006). Operant conditioning occurs when behaviour is modified by the use of positive reinforcement. However an opposing theory, proposed by Stout (2008), suggests that rewards create a negative impact on future work, as they teach children to work only when rewarded. On the other hand Maslow, a humanist psychologist, states that students can only be motivated in one way by ensuring that 'students' belongingness, esteem and self actualisation needs are nourished through the learning activities' (Petty, 2001:47).

Finally I will consider the differing opinions of the benefits of adults reading aloud to children and children reading to adults, questioning whether either helps with motivation. Sylva (2007) suggests reading aloud to children does not necessarily help them to develop a love for reading. However Bashir (2007:19) disputes this assertion, stating that 'there is simply nothing more likely to encourage children to begin picking up books for pleasure than being read to.' This is supported by Rembow (2006), who suggests that, when children listen to adults read stories with enthusiasm and expression, it is enormously motivating. She goes on to say that one of the best motivating factors of reading aloud is when adults stop at a cliff-hanger, thus enticing children to complete the story alone (Rembow 2006). Wilson-Fletcher (BBC1, 2008) believes that children who get read to, get ahead. Reading aloud is also a way for adults to share their passion for books with children, thus helping to motivate them to share the same passion for reading (Fisher, 2000). However, Sylva (2007) suggests that listening to children read is far more motivating than adults reading aloud to them. Richards (2008) disagrees, advising that it is unnatural to read aloud, and in reality this is a skill that is rarely required outside of the classroom, and therefore they believe a waste of time.

The conflicting opinions on which method is the most effective way to motivate children to read have been presented to show the strong feelings for and against each approach. Although each claims to have the answer, the common consensus is to inspire children to read for pleasure. I feel that whichever approach is adopted, it should be carried out in an enjoyable and motivating manner, thus ensuring that

children do not view reading as dreary and monotonous. With this in mind I decided to carry out an action research project with a small group of Year 6 boys who very rarely read at home. The reason for my choice of strategy, although others had fervently disputed its effectiveness, was rooted in my passion for reading, which I hoped to convey to the children, reflecting the thinking of Rembow (2006), and thus creating a positive learning environment to motivate and inspire the focus boys to read. Gilbert (2004:36) believes a positive learning environment helps students' brains make connections 'between learning and pleasure that will last them a lifetime'. Therefore, the aim of the action research was to see if an adult reading aloud sections of a fiction book would inspire them to read on at home.

Research Method

Action research is carried out to address concerns that a practitioner has identified within their practice 'with a view to making changes' (McNiff, 1996:104). I had identified that the five boys' lack of motivation for reading was possibly restricting their reading development. Therefore, as reading is a prerequisite throughout the curriculum, and also in the adult world, this spurred me on to try to help them overcome these barriers to achievement. McIlvain (2007) suggests researchers should research something that interests them. I wanted to help these boys find their motivation from within, and realise the point of reading and its enormous benefits in life (Gilbert, 2004). Gilbert suggests that once children realise the 'point' of something, their intrinsic motivation develops. This is opposed to the behaviourist Skinner's belief which contends that behaviour followed by a reinforcing stimulus results in an increased probability of that behaviour occurring in the future (Boeree, 2006). However, as mentioned earlier, the class teacher had already initiated this operant conditioning approach, through the use of weekly stickers and rewards at the end of each term. Yet, with these particular boys, it had little effect in stimulating home reading.

I am aware that this small-scale research project is focused on boys and that 'it is unlikely that the research results could be generalised to other settings' (Taylor, 2006:5). Cohen (2007) suggests that the principles for carrying out action research are to increase professional development, incite awareness of the working environment, and highlight the need to reflect upon practice.

Before undertaking the research it was pertinent that I received verbal permission from the head teacher and class teacher, with written permission from parents. Without these, problems can arise; for instance I would not be able to share my findings if colleagues were unaware of my observations (Koshy, 2006). Also, without parental consent, the research information could not be shared with a third party (BERA, 2006). Outlining my project and promising anonymity meant that my research could be shared with others. All of this ensured that ethical protocol was adhered to, and the openness allowed colleagues to recognise professional learning as everyday practice, and not view my research as mysterious (McNiff, 1996). This is also in line with the 1998 Data Protection Act, which sets out the participants' right to know who will be able to access the information. Therefore, to comply with this ethical protocol, the five boys will be referred to throughout this report by initials only.

This research was carried out three times a week over a period of four weeks, incorporating four cycles, thus enabling any adaptations to be made. Each week saw the start of a new cycle, which took the form of a different book being read. The

cyclical process consists of identifying a need, implementing action, reflecting upon the outcomes, and making any adaptations before carrying out any further action. Koshy (2006:27) states, 'action research is a cyclical process that takes shape as knowledge emerges'. The first cycle consisted of me reading aloud a fiction book to the boys. Subsequent cycles included a different short story at the start of each week using the same strategy of adult reading. During the sessions I read the book aloud ensuring I stopped at a cliff-hanger, which was predetermined prior to the session, a strategy advocated by Rembow (2006). The following four pages were then photocopied for each child and they were expected to read these pages at home before the next session. The sessions were carried out on Mondays, Wednesdays and Fridays, thus allowing two evenings between each session, in case children were busy one night, making it difficult to read.

Both quantitative and qualitative paradigms were used to collect the action research data. The qualitative methods included observations of the children during guided reading and other reading sessions, children's reflective comments, digital photographs, class teacher's final reflective comments, and children's questionnaires. I also invited the class teacher to observe the children while participating in the reading sessions. The parents/carers were encouraged to listen to their child read at home and also given the opportunity to comment.

The observations I carried out enabled me to note changes in behaviour during class or group reading sessions throughout the curriculum, and note changes in confidence. Questionnaires were used, as the children were capable of reading competently and interpreting questions. From these questionnaires I hoped to obtain the children's initial and final perceptions and attitudes about their reading abilities. My primary objective was to note any differences between the numbers of times they read at home (Koshy, 2006). As the children in Year 6 are accustomed to writing reflective comments, this type of data collection would be beneficial in obtaining an insight into their own feelings about stories read aloud by an adult. Gaining the views of the class teacher provided an opportunity to gain an unbiased opinion on the effectual use of an adult reading aloud. Finally the digital photographs were useful in providing proof that the event had taken place (McNiff, 1996). As parental consent regarding photographs is obtained by the school at the beginning of the academic year, this was a good source of data collection as it did not require any extra work which could have proved time consuming (Taylor, 2006).

The quantitative data was collated from the sections of the questionnaire, which required a numeric answer, known as Likert scales (Cohen, 2007). These questions had a number for the children to circle from 1 to 4 (4 being 'excellent' and 1 'not so good'). An even number was purposely provided so they could not opt for the median, thus enabling me to gain a definitive measure of how they really felt. Base line and final reading assessments were also implemented to see if there had been any effect on their reading abilities. This type of quantitative data collection was then easily collated and presented in either graph or table form. McNiff (1996) suggests that using a quantitative paradigm allows the researcher to group data together and present it in a statistical format.

Findings/Results with Analysis

Baseline reading tests were carried out on each child to determine their reading age compared to their chronological age. The same tests were carried out at the end of the

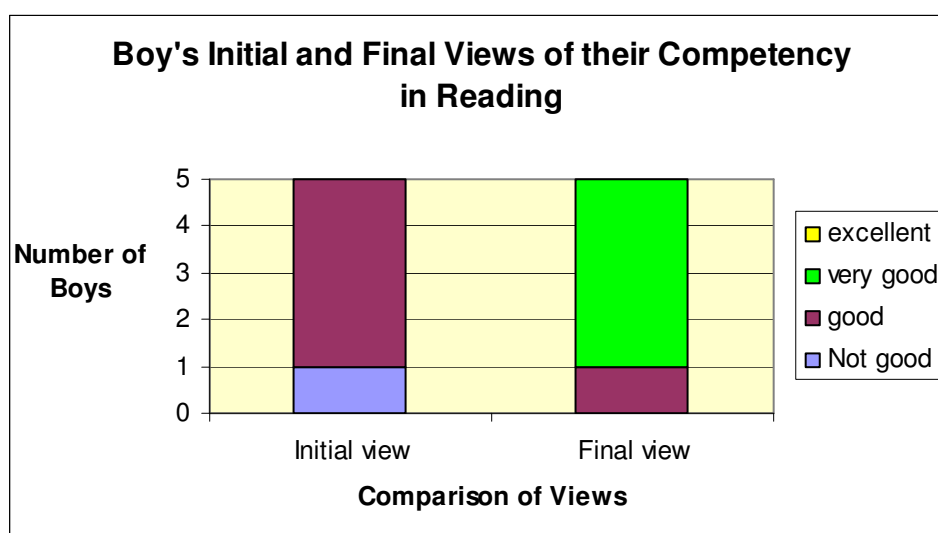
research to establish if there had been any improvements in their reading abilities. Taylor (2006) believes that this type of testing should be undertaken to allow the researcher to make a comparison. The children’s reading results are presented in Figure 1, showing a positive increase.

Figure 1 - Children’s Reading Age Results.

	Chronological Age	Initial Reading Age	Final Reading Age
Child MW	10yrs 5mths	9yrs	9yrs 2mths
Child AH	10yrs 11mths	8yrs 11mths	9yrs 6mths
Child AW	10yrs 10mths	8yrs 5mths	8yrs 7mths
Child AC	10yrs 7mths	9yrs 1mth	9yrs 3mths
Child JH	10yrs 11mths	8yrs 9mths	8yrs 11mths

Each week I read a different short story, which was chosen by the children through voting from a selection of fiction books. After reading several pages at the start of the story to stimulate the boys’ enthusiasm for the text, I paused and then provided each child with the subsequent four pages to read at home. Each child read at home after the first session and recorded this, as requested, on the grid provided in the back of their reading records. The same process took place over the following three weeks; however, some read much more than others. Four out of five of the children also read to an adult several times over the four-week period. However, as not all children read every extract, I had to adapt some reading sessions to include a recap of the story so far, thus ensuring interest in the story was maintained.

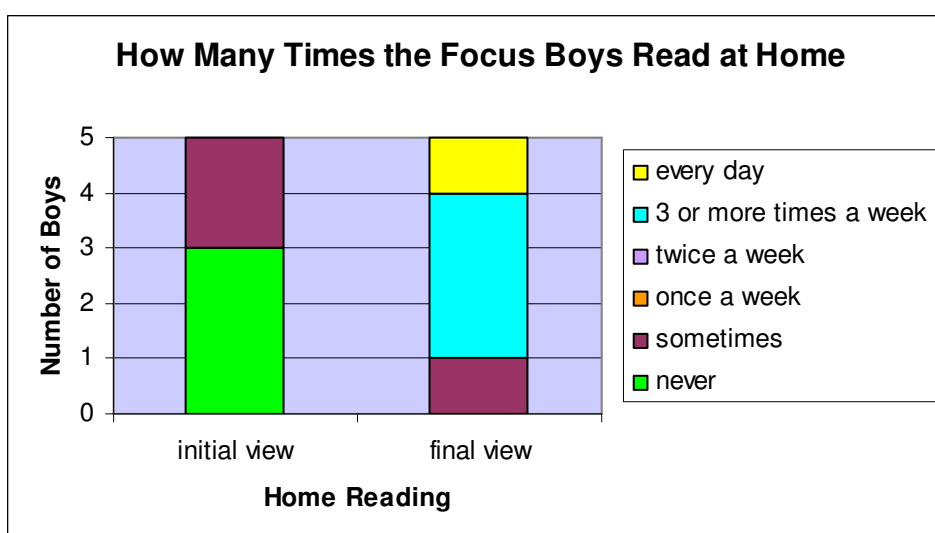
Figure 2 – the children’s initial and final views of their competency in reading, gathered from the questionnaires filled in prior to starting the research and on completion:



The information gathered from these questionnaires shows a positive change in the children’s views. Koshy (2006) believes that using questionnaires in this way can help to provide children’s initial attitudes, giving a comparison of before and after the research intervention.

The children were very keen to participate in the reading sessions and did not view it as work. As one child stated, 'Are we doing any work today or are you just reading us another bit of the story?'

Figure 3 - the results from the initial and final questionnaires, which confirm a positive difference in the amount of times the boys read at home during the research, providing evidence of reliability:



Their weekly reflections were useful in giving me an insight into how they viewed the daily sessions. The general consensus was that they enjoyed the fiction books, with some commenting on how they enjoyed listening to them read aloud, and felt this had motivated them to read at home. Child AH wrote in one of his weekly reflections how he now asks his mother to listen to him read instead of her 'nagging' him to read. This particular child had not been reading at home voluntarily, and his mother commented on his newly found enthusiasm. However, Child JH only read three times during the four-week period. Although he recorded in his weekly reflections that he enjoyed listening to me read, he wrote on his final questionnaire that both he and his parents are too busy to read. I was curious to know what he did during the evening so I posed this question to him. He stated that he played computer games and participated in internet conversations with friends. This supports the view of Rembow (2006:15), who suggests that it is difficult to motivate children to read due to their focus on 'technological advancement'. It was clear from this conversation that reading was going to have to compete with the enthusiasm he had for computer technology.

Before commencing the action research project I had intended to use a Dictaphone to record the children's views. However, I decided against this due to the time needed to transcript this type of information alongside the rest of the data I was collating. As the children are Year 6 I decided that the weekly reflections and qualitative data from the questionnaires would be sufficient to provide the children's views. Involving the class teacher and parents to express their views on the research project enabled this unbiased opinion to be obtained. The class teacher was asked to observe a morning session and write her opinion of the research. She gave positive feedback on the research outcomes. Parents were given the opportunity to fill in a daily and final comment of how they perceived the effectiveness of the reading programme. However

not all parents participated in this reflection with only the same three providing feedback during the research and at the end. Therefore, only limited views were gained on the effectiveness.

As anticipated, the daily observation sheets were difficult to carry out, due to my timetable restrictions, so these had to be undertaken when time permitted. According to Koshy (2006:103) 'disruptions may lead to missing important data'. However, the final observation did show an improvement in the concentration of the group of boys during independent reading. Later during Literacy Child MW volunteered to read a section of text aloud to the class, which was out of character. This is the same boy who had recorded in his questionnaire that his reading ability was not 'as good as some people'. Mason (2002) believes that noticing and marking incidents down is the essence of researching.

The short stories were carefully chosen ensuring that they contained sufficient text to last for the week and at an appropriate level. These short stories quickly engrossed the children, who have a short concentration span. This is due to the fact that the plot in short stories becomes rapidly apparent, whereas longer novels often develop the plot slowly, which can make it difficult to enthuse struggling readers and hold their attention. Thomson (2006) substantiates this by suggesting that short stories are more suitable for children with a short concentration span as they offer the instant excitement and satisfaction needed to motivate children to read. However, there was a limited supply of short stories suitable to allow the boys to continue reading alone.

The stories read aloud to the children enabled them to be exposed to fiction in a fun way without the pressures associated with, in their words, 'real work'. This strategy I believe motivated them to become active learners as they viewed the reading sessions as fun rather than work, an approach advocated by Cowley (2002). Reading aloud lured these boys '...into the pleasures of reading for themselves' (Brennan, 2007:15). Bashir (2007:21) suggests that 'reading aloud is one of the most powerful means of supporting and encouraging children's interest in books'. This interest in books is evident in Figure 3, which shows an increase in the boys' home reading, and although one boy only recorded 'sometimes' this is better than 'never' as recorded in his initial questionnaire. It could be suggested listening to stories enabled these boys to 'rediscover the pleasure of reading' (Albrighton, 2007:20). They also changed their view of how they perceived their competence in reading. The grading the boys circled on the final questionnaire showed a significant positive change (see Figure 2).

Motivating the boys to read at home had offered them the opportunity to empathise with the characters. This is something that Wilson (2006) suggests helps boys to become more in touch with their emotions. This empathy was evident after the boys had read at home the ending of 'Tiny the Terrier'. The nature of the story provoked Child AW to talk about regularly visiting his mother's grave. He openly discussed this with the other boys, which was out of character, and the boys listened and discussed the subject sensitively. This incident reflects the view of Lambert (2002), who states that 'fiction helps children face up to real problems', which is something I had not considered before. McIlvain (2007) suggests that action research can highlight other findings, which had not been considered by the researcher.

Involving parents in this research project was beneficial as it enabled me to gain their unbiased opinions. Stewart (2007:13) suggests that schools need to involve parents in

their children's reading as 'it is not just about teaching reading it is also about getting everyone on board helping to change children's attitudes towards reading'. However, even after discussing the benefits with the parents, while handing them the consent letters, Child JH's parents failed to be supportive throughout the research. This may have been a contributing factor as to why this child only read three times during the course of the research, none of which was to an adult. Bird (2005:7) believes some parents may not have experienced reading to their parents or having stories read aloud to them as a child; therefore, they may just view reading as a chore and 'do not attach great value to reading'. Listening to stories read aloud could have also been a contributing factor to this boy's lack of motivation, and this would support Sylva's theory that reading aloud to children does not necessarily help them to develop a love for reading (Sylva, 2007). However, the same boy wrote in his weekly reflections how he enjoyed listening to the stories. It could be argued that he may have felt obliged to write this as the others' enthusiasm was apparent; therefore, he may not have wanted to stand out from his peers. This would support Maslow's theory that humans often conform, as they need to belong (Petty, 2001).

Child AW, who prior to this project had never read at home, discussed how he 'nagged' his father to stop watching television and listen to him read. This worked as he gained four signatures from his father and also participated in regular independent reading. Therefore, it could be suggested reading the stories aloud had managed to stimulate his intrinsic motivation as he was instigating the reading sessions at home. This could also be true of the other three boys, who read consistently throughout the research, as their parents' final comments highlighted their enthusiasm to read. However, Child AC wrote in one of his weekly comments that he wanted to read at home to be able to receive his end of term treat, which was confirmed by his mother. This would support Skinner's belief that rewards can help to encourage specific behaviour. Therefore, it could be suggested this child was motivated to read through a combination of reading aloud and the class teacher's reward system, as this reward system had previously failed to work alone. Consequently, child AC may not benefit in the future from reading aloud if the reward system were to be terminated. This joint motivation was substantiated when he did not continue home reading after the research finished, thus failing to receive his end of term reward.

Reading aloud enabled me to include excitement and suspense through voice variation, thus stimulating their interest and enticing the boys to read on. Moreover, stopping at a cliff-hanger, as suggested by Rembow (2006), motivated these boys to want to read on. This was apparent from the children's moans when I stopped reading, a factor also noticed by the class teacher. Another factor highlighting this enthusiasm was when I found three of the boys in the cloakroom at lunchtime reading the extract to be read at home. When questioned they commented how they could not wait to find out what was going to happen next. These boys' enthusiasm challenges the view of Wilson (2006), who suggests boys avoid reading fiction books and generally only enjoy non-fiction. Rhodes (2007:8) suggests reading aloud exposes children to books they may not choose and '...would therefore miss out on'.

Mentioned earlier was Gilbert's (2004) suggestion that motivation is best stimulated from 'within', which generally happens when children discover the 'point' of doing something. Child AH certainly seemed to have found the 'point' of reading; as he realised his improvement in reading was due to regular practice. He has gained a lot more confidence in class and his behaviour during guided reading sessions has

improved with the teacher noticing his newly found interest in books. Prior to the research the teacher wrote in his reading record for him to read at home, yet he read every night during the four weeks and his mother commented on his eagerness to read. This consistent reading has carried on after the research finished, gaining him his class reward. Hannell (2004) remarks that the best way to build self confidence is for children to recognise that their successes are due to their own efforts; therefore, if they believe they have created their own success it can be replicated again in the future. It could also be suggested this boy provides evidence for Maslow's theory, mentioned in the literature review, that motivation is stimulated by satisfying needs, thus, helping him reach his true potential (Petty 2001). Enabling children to reach their full potential is a practice advocated by Every Child Matters (DfES, 2003a).

Although Children AC and MW did read sporadically prior to the research, this was only because their parents instigated reading. However, during the research their parents noticed a marked difference in their motivation to read, both expressing their gratitude for the programme. However, it could be suggested that it was difficult to gain a definitive outcome for Child MW as he was ill for the final four days, and no home reading was recorded subsequently. Unfortunately, since finishing the research, his enthusiasm for home reading has waned, creating a challenge again for his mother.

The unbiased opinions of three of the parents and that of the class teacher verify the evidence supporting the data collated. Sharing the research in this way and gaining others' opinions has given the results a level of validity. McNiff (1996:24) substantiates this by stating that 'action research that can be meaningfully shared by a number of people is a good basis for establishing validity'. Nevertheless, it would have been beneficial to have gained all parents' views to have established an overall reflection. Although the class teacher commented on the boys' positive progress, confirmed in Figure 1, it could be argued that it was just natural progression, as child JH, who only read three times, also progressed. However, child AH, the only boy to read every day, did make the most progress overall.

Conclusion and Recommendations

The aim of this research was to see if fiction books read aloud by an adult could motivate a group of five Year 6 boys to read at home. The evidence collated throughout this research shows that reading fiction books aloud did help to motivate the boys to read at home. Although one boy only read three times, this was nevertheless a great improvement. This reflects the thinking of Bashir (2007) and Rembow (2006) who suggest that adults reading aloud can motivate children to read. Prior to the research three boys never read at home and two read reluctantly when instigated by parents.

During the project, four parents participated in recording the support given at home, with three writing detailed comments. The fifth boy had no parental input, which could have been a contributing factor to his lack of home reading. Nevertheless the class teacher noticed the boys' motivation and their improved reading skills. Unfortunately only child AH continued to read in the subsequent weeks after the research had ceased. However, four weeks was a relatively short period of time to notice realistically and statistically any impact on the boys' reading abilities. Although the final reading test did show an improvement, this may have been due to natural progression.

I am keen to resume the action research, as is the class teacher who is investigating the possibility of incorporating it within my timetable. However, there was little choice of short stories at a suitable level so it may be difficult to sustain the same strategy. Therefore, I am eager to try the approach of Silcock (2005), and Williams (2003), which exposes the boys to a variety of books to motivate them to read. This would enable me to include many different genres, including computer-generated books, which may suit child JH, who showed a preference for computers rather than reading. I would still regularly include fiction, as Wilson (2006) suggests that boys develop empathy with the characters, which was unexpectedly highlighted during the research. Although the research method was effective, the same boys' enthusiasm may wane if fiction books were to be employed continually. Therefore, a mixture of genres read aloud by an adult may be more effective over a longer period, enabling the same degree of motivation to be maintained.

The majority of the data collection methods proved to be useful when writing this report. However the daily observation sheets were difficult to analyse in order to gain an accurate measure of the influence the action research was having generally on the boys. This was due to my being required to undertake supply cover in different classes to the boys, resulting in problems in monitoring them consistently in the class situation.

I have approached the head teacher recommending that a paragraph be included in the home reading records, highlighting the benefits of parents reading aloud to their children, and why regular home reading is important. I agree with Bird (2005:7) that some parents may view reading as a chore and 'do not attach great value to reading'. It could be suggested that highlighting the benefits to parents may help change their perceptions of reading, a theory echoed by Stewart (2007). After reading my literature review the head teacher is keen to incorporate an academic view, as presently the record books only provide parents with advice on how to teach children to read. As Stewart (2007) suggests, it is not just about teaching children to read, it is also about changing attitudes towards reading.

I am not claiming that this study would have the same effect in all cases, as this was a small-scale research project designed to enrich my own teaching (McIlvain, 2007). However, the overwhelming evidence provided, through both quantitative and qualitative paradigms, clearly shows that the strategy of an adult reading aloud fiction books motivated the boys to read at home. Therefore, I would recommend that these boys should be given the chance to continue being exposed to stories read aloud, with a view to incorporating other genres to help maintain motivation.

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The Effect of Role-play on Children's Speaking Skills

Julia Newton

Abstract

Role-play is traditionally viewed as an activity for children in the Early Years and Foundation Stage; however, growing concern about the standard of children's language at all ages has led to an interest in different methods for developing and improving speaking skills. Role-play is one such method and this research investigates whether the structure of role-play can improve children's speaking skills in a Year 2 setting. The research focuses on a group of seven children in a themed role-play setting in which a different weekly activity is introduced. The participants speech is recorded and analysed to establish the effect of the structure on their speech and interaction. The findings reveal that the role-play generated almost continuous speech and interaction among the participants, and the majority of that speech was related to the theme. The different weekly activities prompted excitement and interest but also different levels of interaction. The children were motivated by the role-play suggesting it has appeal to Year 2 children and is a potentially important method for improving speaking skills for children across Key Stage 1.

Introduction

The aims and purpose of this research were to investigate how the structure of role-play can improve children's speaking skills in a Year 2 setting. The reasons for carrying out this research were twofold; firstly because of the concerns over the general standards of children's speaking skills, and secondly as role-play appears to be viewed as only important or relevant to children's language development in the Early Years and Foundation settings and not for older children.

Frean (2008) reports of an independent review which suggested that over 89,000 children of school age have language difficulties, which if not addressed will continue through primary and on into secondary schools. These findings are supported by Rose (2006: 3) in the Rose Report, who added to the concern about children's communication abilities and suggested that:

Far more attention needs to be given, right from the start, to promoting speaking and listening skills.

The focus on speaking and listening skills has been heightened through the Primary National Strategy (DfES, 2003) and its publications on speaking and listening skills. Furthermore, speaking skills are an integral part of the New Primary Framework for Literacy.

Rose (2006) suggests that schools should provide more opportunities for children to listen and speak. Role-play is one such opportunity. In the setting for this action research, role-play areas are provided for every year group. This in itself is unusual as role-play is traditionally seen as an activity for children in the early years and as such the majority of the related literature focuses on the Foundation Stage. Also, while there has been research and recognition of the value of role-play in these years (Rogers and Evans, 2007), there appears to be little research of the effectiveness of role-play for

children in Key Stages 1 and 2. This study aims to rectify this by researching the effectiveness of role-play in improving children's speaking skills in a Year 2 setting. To accomplish this, the children's speaking skills will be analysed in terms of the extent of their speaking, the length of their sentences, whether they are speaking about the topic, and the extent of their negotiation. To focus the scope, the research will consider the influence of the structure of the role-play area.

The study centred on a group of seven Year 2 children in a large village school. The group used the role-play area for a period of 20 minutes, once a week. The group were observed and their conversations recorded over a five-week period. The small-scale nature of the study may be a limiting factor to the scope of the research, as may the fact that the group only use the area once a week. However, the period of study should provide sufficient data for analysis.

There are different types of role-play and for the purpose of this research, the explanation by Kitson (2005: 112) is most appropriate. Referring to role-play as socio-dramatic play, Kitson suggests that it is play that is 'concerned with the nature of role and social interaction'. Key to this definition is the fact that the role-play is carried out with at least one other child and there is verbal communication between the children (Smilansky and Shefatya, 1990). It is also necessary to clarify the definition of 'structure' within the research focus. For the purpose of this research, structure means the physical structure and theme or topic of the role-play rather than the role of an adult in structuring the play, which is perhaps worthy of a research project on its own.

For the purpose of the study the role-play area was themed in relation to the topic for the class for that term which was 'The Great Fire of London'. A different focus activity for the role-play area was introduced each week to establish the effect of this on children's speaking skills.

The research question is:

How can the structure of the role-play area improve children's speaking skills in a Year 2 setting?

Literature Review

The Primary National Strategy (DfES, 2003: 3) states that:

Language is an integral part of most learning, and oral language in particular has a key role in classroom teaching and learning.

This statement highlights the importance of providing children with opportunities for speaking in the classroom. The current debate focuses on the value of play for children's learning. Certainly for the Foundation Stage, the value of play and particularly role-play has been recognised (DfES, 2007), but there is a question as to why this value is not also recognised for children in Key Stage 1. Moyles, (2005) suggests that the National Curriculum requirements for Key Stage 1 and Statutory Assessment Tests (SATs) at the end of Year 2 do not leave room for play related learning. This is a view shared by Hall (2005), who adds that the opportunities for learning literacy through role-play are being lost because of the pressures of the curriculum in Key Stage 1. Smith (2005), however, proposes that the problem with role-

play in the classroom is not the perceived value but that it is difficult for the teacher to quantify and record the effect of the play.

The view among authors is that role-play is effective in developing children's speaking skills. Browne (2007) highlights the importance of role-play in encouraging children to communicate with each other, while Hall (2005) identifies the opportunities role-play provides for children to interact and learn cooperatively. These views are not just current thinking; contrasting views about the value of play can be found in the works of the theorists Vygotsky (1978) and Piaget (1951). Vygotsky focused on the development of language through play and how other children and adults could support or 'scaffold' that learning. This concept was called the 'zone of proximal development,' where the zone represents what the child would be capable of achieving on their own compared to what they could achieve with support. In contrast, Piaget believed that children could discover and learn through play by themselves. He was concerned with children's cognitive development through self-discovery and did not focus on other aspects such as communication or learning through social interaction. The contrasting views of two significant theorists raises the debate on the influence of other children and adults in the role-play.

The effect of the structure of the role-play is considered in research by Broadhead and English (2005) and Rogers and Evans (2007). Broadhead and English (2005) considered the influence of structuring of the role-play, which they refer to as 'open ended role-play'. They found by observing children in different types of play they could identify the extent of cooperative play among the children. The researchers were surprised to observe that the least amount of cooperative play was in the role-play, despite the fact that the role-play had been structured to promote interaction. One conclusion was that the role-play was in fact too structured and therefore did not stimulate interaction. Similarly, Rogers and Evans (2007) found that role-play in schools tends to be structured and related to a particular topic or theme, however, the role-play did not prompt the same interaction, particularly negotiation, as those role-play areas resourced with more open-ended materials.

Research carried out by Kitson (1997 and 2005) found that it is the intervention of an adult that influences the social interaction. He concluded that adults were necessary to direct and facilitate the play, otherwise the learning potential of the play would not be maximised. Calabrese (2003) however suggests that if the role-play is child centred, then the children will be more motivated than they would be with 'more academic teacher directed activities', thus the adult's role should be to create the role-play area and ensure it is structured in terms of a theme. The area should have a variety of roles for the children to adopt and provides resources and opportunities for the children to speak. Grugeon et al (2000: 50) consolidates these views by suggesting that children should be provided with the structure to allow them to 'communicate and collaborate'. However, an adult who is the more experienced language user should look for opportunities to intervene and enhance the interaction.

Rogers and Evans (2007) provide perhaps the most extensive, current research into the effect of role-play. While this research focused on Reception children, the findings can be reflected upon in relation to other year groups. Whereas other work has recognised the influence of the structure of the role-play and adult intervention, (Broadhead and English, 2005, Kitson, 1997 and 2005, and Calabrese, 2005). Rogers and Evans (2007) observed other factors that impact on the extent of social interaction. They found that

a lack of space could inhibit interaction, as could the amount of time the children were allowed to play. In fact, play was interrupted as children were called away to complete another activity and this disrupted the social groups. Another factor was the composition of groups within the role-play, as some children interacted better with some than others.

Research on role-play is sometimes difficult to find and often located within research studies investigating play in general (Broadhead and English, 2005). It also tends to focus on role-play within the Early Years or Foundation Stage setting. Whitebread and Jameson (2005) suggest that by the time children reach Year 2, the assumption is that the children are ready for formal learning and play is excluded. There is however a consensus that role-play has a positive influence on children's speaking skills at an early age, and thus it would be useful to see if this influence can continue to have effect with older children. The field of research identifies certain variables that can influence the effectiveness of the role-play. However this research will consider one variable, that of the structure of the play.

Research Method

Bell (2005: 8) defines action research as 'carried out by practitioners who have themselves identified a need for change or improvement'. This research focused on how role-play could improve children's speaking skills. Koshy (2005), in her definition of action research, refers to the self-reflective spiral described by Kemmis and McTaggart (2000) which is reflected in this action research. The spiral starts with planning a change, acting and observing, reflecting on the results, re-planning, and repeating the process.

The first consideration for the research was the ethical issues. Cohen et al. (2007) discuss the ethical dilemmas researchers face in finding a balance between their pursuit of valid information and the rights of the research participants. Nowhere is this more applicable than in research involving children, and reference to the Revised Ethical Guidelines for Educational Research published by the British Educational Research Association (BERA, 2004) is required. Where research involves young children, the Guidelines state that researchers must 'also seek the collaboration and approval of those who act in guardianship' (2004: 7). To this end a letter was sent to the parents or guardians of the children chosen to participate in the research. The letter was endorsed by the school's head teacher which contributed to the validity of the research. The children's parents or guardians confirmed their consent to their children being involved by signing and returning a consent form.

Further consideration was given to the ethical implications of the research in ensuring confidentiality and anonymity, which the BERA Guidelines (2004) state to be an entitlement of the participants. During the research, the participants are not named; however the research does include photographs as the School Photography Policy (2006), which specifies that photographs of children may be used for the purposes of staff professional development. Parents are invited to sign this policy when their children are admitted to the school. Photography was used in this research to provide evidence of the children's behaviour and choice of activities in the role-play area.

This action research focuses on the behaviour and social interaction of children in role-play, a focus that lends itself to qualitative research methods. Koshy (2005: 86) explains

that qualitative research requires the analysis of data taken from 'transcripts, descriptions and documents', whereas quantitative data usually involves questionnaires or surveys where the data is numerical and can be easily measured. While this research is primarily using qualitative methods, quantitative methods in the form of questionnaires are used to help inform the research, for as Koshy explains further:

The use of questionnaires within a qualitative study often provides ideas for further exploration.

The research sample was a group of seven Year 2 children, five girls and two boys. In Year 2, the opportunity to take part in role-play occurs within a single weekly twenty minute activity within the 'reading roundabout' session. The children were grouped according to their reading ability and the children chosen for the research were assessed as higher ability, working at a level between 2a and 3a. Whitebread and Jameson (2005) point out that play is often deemed as unnecessary for able or high achieving children so it would be interesting to the research findings to see if this is the case. The research was carried out over four cycles of action research. The first cycle was to observe the role-play without a single activity focus. In cycles two to four, a different weekly activity was introduced to discover how this affected the children's interaction.

Qualitative data was collected at different stages of the action research. Initially a group interview was held with the participants to gain their views of the current role-play. Taylor (2006) suggests that a group interview can result in children's responses being influenced by others; however, it can generate greater discussion, which was the reason for using this method.

Data from the first cycle was collected through observation. This method was chosen so that the researcher could note details of the children's behaviour in addition to their speech. Bell (2005) explains that observation is useful for collecting data about behaviour; however it is not an easy technique. It soon became clear that there would be limitations to using this method in subsequent cycles of the research. There was too much detail to record and the conversations too quick to note all that was said. As speaking skills were the focus of this research, observation would be an inappropriate method. Interestingly, this was also a finding by Hyne (2003) in her research of play.

A further limitation to observation as a data collection method was the presence of an adult, which resulted in the participants interrupting their play to come and speak to the observer. It soon became evident that it would be necessary to use a tape recorder to gather the data in cycles two, three and four. Taylor (2006) warns that tape recordings, while providing accurate information require significant time to transcribe. As the role-play sessions lasted only 20 minutes, it was felt that this would not be a limitation to this research. However, one limitation did occur when the tape recorder stopped recording during the fourth cycle and no data was gathered.

An alternative research method would have been to use a video recorder, but this has limitations. Koshy (2005: 104) identifies one of the limitations as:

Those who are being recorded may behave differently in the presence of the camera.

As the research was focusing on the behaviour of the children, any data collection method that may inhibit the natural behaviour of the participants could have influenced the reliability of the research data. The final stage of the research method was to carry out a questionnaire. As this method was also assessing the children's attitudes to the role-play, the questions were designed using the Likert (1932) scale. Cohen et al (2007: 325) point out, that this method uses a 'rating scale' to measure one aspect at a time. This research method was chosen because it would provide data of the children's views of the role-play during the research period and would allow an analysis of their thoughts against the data collected in the actual role-play.

It is important that the research methods chosen ensure, as far as is possible, that the research is both reliable and valid. Koshy (2005: 105) refers to validity of data as a reflection of the accuracy of the data collected. She refers to Elliot and Adelman (1976: 74) who recommend 'triangulation' as method for ensuring validity of research. They suggest the researcher collects data:

From three quite different points of view, namely those of the teacher, his pupils and participant observer.

To this end, in this research, data was also gathered from the class teacher through a structured interview process. This method was chosen as it would allow the teacher to express her views about the role-play, and also provide the researcher with an opportunity to discuss and investigate issues further. This final research method completes the triangulation and enhances the validity of research. However, as Cohen et al. (2007: 133) state:

Threats to validity and reliability can never be erased completely; rather the effects of these threats can be attenuated by attention to validity and reliability throughout a piece of research.

Findings and Analysis

The purpose of this action research was to find out whether the structure of the role-play improved children's speaking skills. The first task was to assess the children's views of role-play before the research. The children had experience of role-play in previous years of school and during their first term in Year 2. The results of the interview show that the children were enthusiastic about role-play and held clear views as to what they would like to see in the Great Fire of London role-play. These views were confirmed in the responses to the final questionnaire, where they clearly enjoyed being in the role-play. This enthusiasm for role-play was evident in all participants and conflicts with the views of those practitioners who feel that role-play is not important for older or able children, for as Whitebread and Jameson (2005) explain, there is a view that for children and particularly higher ability children in Years 1 and 2 the teaching emphasis should be on formal methods.

The transcription and analysis of this data raises some interesting issues in relation to the children's speaking skills. Throughout the initial observation and the two cycles that were recorded, the children were speaking most of the time; however, the majority of the speech was in sentences of fewer than five words. This could be a result of the age of the children, the extent of their vocabulary or the excitement of the theme and the activities. The DfES (2003: 7) may offer an explanation in that oral

language has its own distinctive features, resulting in short exclamations or 'rapid changes of tones, formality and topic'.

The extent of speech recorded during the research suggests that role-play does encourage speaking between the participants, a finding that is supported by both Browne (2007) and Hall (2005). It could be argued that it is the structure of the role-play that encourages the children to speak for, as the results show, the majority of the speech is topic-related. This view is supported by Calabrese (2003: 2), who suggests that for teachers to create quality role-play, they should choose 'themes that are of special interest and familiar to the students'. Kitson (1997) also suggests that by offering a range of thematic role-play areas, the opportunities for learning are greater. Certainly the results of the final questionnaire show that the participants felt strongly that the role-play helped them to learn about the topic. These views are also shared to some extent by Rogers and Evans (2007); however, they found that, should the theme of the role-play have a bias towards one gender, this could influence the extent of the interaction between participants. This analysis could suggest that the Great Fire of London theme had equal appeal to the participants.

The results also showed how the participants brought new information they had learnt about the topic into the role-play situation. The reinforcement of topic knowledge was identified by the class teacher as an objective for role-play, and the results appear to support this objective. In cycle 3, the participants talk about using fire hooks to 'take the hay off the buildings', a fact they had learnt in class. This suggests that role-play can contribute to the reinforcement of learning and knowledge through speaking skills. Grugeon et al. (2000: 126) explain that role-play provides an 'imaginative impact on children's language and learning', which makes it easier for them to remember what they have learnt. What is unclear, however, is whether role-play with different themes would have the same effect or whether this finding is unique to the Great Fire of London role-play.

The introduction of a different weekly activity generated interest and anticipation as the last comment in the third cycle stated 'ready for the next surprise'. The analysis of the transcribed data revealed that the different activities generated different frequencies of speaking skills associated with that activity. Using real bread dough generated a third of the total speech and indicates that activity generated more speech and interaction than the written activities. Furthermore, the results of the final questionnaire confirm that this was the most popular activity among the participants. Calabrese (2003) and Browne (2007) suggest that the provision and rotation of a variety of activities in the role-play will prompt different responses from the participants. Rogers and Evans (2007: 163) also support this view, suggesting that there should be a balance between 'formal, table top activities and active play based activities'. However, they warn that some activities might appeal more to one gender than another. Certainly in the observations of the first cycle of this research, it was the boys who chose to dress up as firemen and enact putting out the fire.

The results from the initial research with the participants and from the interview with the class teacher highlighted the value of planning for the role-play. Browne (2007) suggests that activities in the role-play that are carefully planned with clear learning objectives will provide greater opportunities for learning. Prior to the decision to carry out the research, the role-play theme was detailed on the long term plan but its structure tended to evolve using information from previous role-plays and available

resources. The research participants contributed several ideas for the play, some of which were included in the plan. This result indicated that the children should be included in the role-play planning, a fact confirmed in the responses to the final questionnaire. However, Broadhead and English (2005) warn against making the role-play too planned and structured so that it inhibits the children's creative freedom, which was also seen as an objective of the role-play by the class teacher.

While the structure of the role-play and the different activities generated interaction, the results in all the cycles showed that there were several incidents of the children repeating the theme of their speech and type of play. This could be interpreted as the children of that age choosing the language they are familiar with or perhaps the children having an insufficient variety of activities or resources to prompt different speaking skills and play. Browne (2007) refers to the choice of resources in the role-play suggesting that they should be selected carefully to motivate and appeal to the children. A further consideration was raised in the teacher interview: the availability of resources especially as the role-play changes each term.

A further reason could form an argument for adult intervention in the role-play. Browne (2007: 9) suggests that adults should direct the play to:

prevent the children's play becoming repetitive and stimulate the children to extend their understanding

Kitson (1997: 32) however believes that this level of intervention is insufficient and that adults should actively interact with the children 'to challenge and deepen their experience'. In addition, he felt that children left in the role-play will only operate at a 'superficial level'. Grugeon et al. (2000) also suggest that if children are left to play freely they will not necessarily interact with others and thus their speaking skills will not be developed. The results of this action research suggest otherwise. Despite the incidents of repetition, the data shows that there was only one comment made that was unrelated to the role-play, suggesting that the children were fully involved in the play, interacting and sharing knowledge. This difference may be due to the research participants' age as both Grugeon et al. and Kitson refer primarily to role-play in the early years. Despite the contrasting views of the role of the adult in role-play, there is an agreement that when adults interact with role-play they need to be careful that their interaction does not inhibit the children's play and more importantly influence the children's speech (Kitson, 1997; Grugeon et al, 2000; Calabrese, 2003; and Rogers and Evans, 2007).

One surprising result of the role-play was that the children often chose to move and play away from the themed role-play area. The area was themed as the bakery where the Great Fire of London started. One reason for the children moving was revealed in their speech where on several occasions they re-enacted the starting of the fire and they needed to get out of the bakery to escape the fire. This activity also involved moving the role-play resources out of the area. The children would then continue to play and interact away from the role-play. This choice by the children may have been unique to the story of the Fire of London, and a role-play with a different theme may have produced a different result. However, it could also have been that the children felt more comfortable playing and interacting where there was greater space. Furthermore Rogers and Evans (2007) observed children extending the role-play or

moving into different areas of the classroom, and concluded that a lack of space for role-play was influencing how the children played.

Further analysis of the transcribed speech showed that the extent of negotiation between the participants over which 'role' they would take was limited to four instances across the research. This was less than expected and could be due to the fact that the children were willing to share roles or maybe being a particular person was unimportant to them. Certainly the results of the final questionnaire showed that the children were not keen on pretending to be someone else and certainly did not like dressing up in the role. This was surprising as role-play certainly in the early years promotes 'dressing up' in role. Perhaps this is a difference as the children are older and 'dressing up' does not have the same appeal, although Grugeon et al. (2000: 126) do suggest that children of all ages enjoy dressing up. This area could be the focus for further research. Not that the lack of negotiation or taking on role appeared to limit their speech, as it seems that the children were able to talk in role, without the need for an identity.

The interview with the class teacher also raised the issue of the composition of the groups of children in the role-play. Currently the children are grouped in reading ability groups. The class teacher raised the question whether the role-play would be more effective if the children were in mixed ability groups allowing the lower ability children to experience greater variety of vocabulary and greater social interaction. Rogers and Evans (2007) found that group composition influenced the children's interaction and that this was more evident when children were not in groups with their friends. This raises more issues that would perhaps benefit from further research.

Conclusion and Recommendations

This action research was implemented to establish whether the structure of role-play could improve children's speaking skills in a Year 2 setting. The main finding was that during the role-play the children's speech was frequent and topic-related. The structure of the role-play prompted discussion and re-enactment among the children of the information that they had learnt in class. This reflects the findings of Rogers and Evans (2007: 163) who suggest that uninterrupted role-play can help children to 'demonstrate sustained and complex narratives' possible for the age range. The results were however generated by one theme of role-play, that of the Great Fire of London. Further research would be necessary to establish whether different role-play themes would have the same impact on children's speaking skills.

The introduction of a different focus activity each week generated excitement and anticipation. However, the overall finding was that different activities generated different responses by the participants. Kitson (1997) also suggests that a wide range of themed activities create increased opportunities for learning. The kinaesthetic activity proved more popular with the participants and generated more speaking than the written activities. This finding suggests that the activities chosen will need to relate closely to the learning objectives of the role-play.

The research also highlighted the value of planning for role-play, as identified by Browne (2007) but also involving the children both in the planning and creation of the role-play area. This finding has already informed practice in Year 2, as a result of which a role-play planning file has been created, and all role-plays since the research have

been planned following the pro forma of the research. A weekly focus is now included in the planning and the children are consulted for their ideas.

The data collection methods proved to be appropriate for the research; however, the results were limited by the failure of the audio-tape in the fourth cycle. This was disappointing; however, this cycle of the action research would have been impossible to repeat as the data relied on the participants' reaction to the weekly focus being spontaneous. Despite this weakness, data had been collected from a triangulation of sources, which were of sufficient quality for analysis (Koshy, 2005), and future research could use the same action research method to gain data over the longer term.

While the research focused on the influence of the structure of the role-play on children's speaking skills, the findings also highlighted other relevant issues, in particular, the role of the adult in the role-play. Currently in the Year 2 setting, adults do not intervene in the role-play. The research findings together with research of literature (Browne, 2007; and Kitson, 1997) suggest that adult intervention could improve the direction of the speech and prevent the repetition identified in the research. This has an implication for practice as at present the adults in the classroom are leading guided reading while the children are in the role-play. It also raises the debate of how much adult intervention is realistic versus the ideal.

The research identified aspects of role-play that could be considered for future research. These are referred to in research by Rogers and Evans (2007) for the Foundation Stage, and would be worthy of investigation in the other Key Stages. Further research could consider whether boys or girls generate more of the speech, the influence of the composition of the group and also whether there are personalities in the participants who perhaps dominate the interaction.

The research has potential implications for the school as each year group has its own role-play area. The research will be presented to all staff and the findings will be used to prompt a debate about the sharing and funding of role-play resources, which will impact on practice.

For the future, it would be beneficial to run the same study but over a much longer period to allow a comparison of results from different themed role-plays. It would also be interesting to carry out the study in different year groups, particularly in Key Stage 2, to compare and contrast the findings at different ages, for as Whitebread and Jameson (2005: 61) state: 'given the opportunity, all children, regardless of age often choose to play'.

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Pupils' Attitudes towards Practical Work in Science: Motivating or Monotonous?

Rachel Meek

Abstract

The use of practical work in science has been a somewhat questionable affair in terms of its true benefit to pupils' learning. Current and past literature focuses predominantly on the purposes of practical work in science, which has been a disputed topic for many decades. Secondary science teachers were asked to rank ten aims in order of importance, identifying changes in the perception of the purpose of practical work in science over the decades. These results were analysed against pupil responses to a questionnaire concerning their perceptions of practical work, which presented similar findings, indicating that motivation and interest are still considered important aspects of practical science. Results from year seven and year eleven pupils' learning, dependent upon activities structured around theoretical or practical based learning, were analysed using the Student T-test and a comparison between the unit of disparity of achieved and expected level of attainment. The results of this analysis indicate that year seven students undertaking solely practical based learning achieved results considerably below their predicted attainment level. Analysis indicates that this could be the result of the distraction created by the practical activity itself. Year eleven data indicates that when pupils address a topic solely from a practical perspective, their achievement is statistically significantly lower than students who take part in theory based learning. Analysis suggests that this can be accounted for by the need for a more in-depth understanding to be acquired at this level. The final conclusions to be drawn from this study suggest that practical work in science has both negative and positive implications for pupils' learning and this is a topic which is in desperate need of further analysis.

Introduction

'I hear and I forget, I see and I remember, I do and I understand.'
Confucius 551-479 BC

The famous Chinese philosopher may not have envisaged that this, one of his most famous aphorisms, would one day be used by many as a way of justifying the use of practical work within science (Swain et al. 1999). In spite of Confucius's sophisticated use of language, can we as a society afford to base our science educational practice on a saying, albeit one with which so many would empathise. For those educationalists who are striving to reassess the use of practical work in school science, statements like those of Confucius and this rather unjust and outlandish extension of Solomon (1980) by Jenkins (1999:19) highlights the ongoing battle that educationalists face in an attempt to re-clarify the purposes and goals of practical science:

Science belongs in the laboratory as naturally as cooking belongs in the kitchen and gardening in the garden.

The nature of the use of practical work in science is an issue that has been debated for many decades (Armstrong, 1897; Kerr, 1963; Hodson, 1990). Practical work first featured in schools in the mid-1850s, when it 'was regarded primarily as a means of illustrating concepts' (Gott and Duggan, 1996:791). As Ntombela (1999) notes, by 1903

the nature of practical work was coming into question. With Armstrong's heuristic method gaining momentum, the purpose of practical work was no longer seen as a means of illustrating concepts, but an opportunity for pupils to become masters of their own learning, discovering concepts and theories independently. The 1960s, 1970s and 1980s were eras when the role of practical work was shrouded by what Hodson (1996:56) describes as 'three decades of confusion and distortion.' During this period the UK education system was subject to three contrasting phases in terms of practical work. The 'discovery approach' (Wellington, 2002:56) was the first phase, its implementation being largely accountable to the Nuffield movement. This phase was followed by one Wellington (1998:5) refers to as the 'process approach', a phase which was short-lived, and in 1988 with the introduction of the National Curriculum came 'practical work by order.' It is not only the nature of practical work in science that has been changing; the purposes of practical work also pose an ongoing dilemma for those involved in science education, as White (1996:761) notes, 'their purpose is not universally agreed, and evidence of their effect is equivocal'. In spite of the differing opinions regarding the most appropriate method for delivery of practical work in our schools, and an uneven air of consensus surrounding its purpose, practical work is an area of science which is deeply embedded in the National Curriculum, for better or worse.

This research aims to examine the true value of practical work within science education by addressing the extent to which practical activities can enhance pupils' learning. This study will be conducted in a large mixed comprehensive school in Nottinghamshire and will focus on the following questions as a basis for its research:

- 'Staged' practicals and 'rigged' results in secondary science: questioning the benefit of practical work to pupils' understanding.
- Do all pupils value the experience provided by practical work?
- How do science teachers perceive the role of practical work in the classroom?

Due to the small-scale nature of this research study, a comprehensive review of past literature is required in order for the aims of this research to be fully accomplished.

Literature Review

When reviewing literature published on practical work in science, it appears that there is an infinite number of focuses. In spite of endless volumes of research in this area, a large proportion of papers seem to return to the same somewhat unanswerable question: what is the purpose of practical work in school science?

One of the first major pieces of research undertaken into the nature of practical work was that of Kerr (1963), a piece of research which Nott and Wellington (1996:808) refer to as an 'interesting landmark'. Kerr's (1963) research was an extensive project which included over 150 schools and more than 700 teachers (Nott and Wellington 1996). Conclusions drawn from this research showed that the three primary goals for teachers undertaking practical work were:

- To arouse and maintain interest;
- To make biological, chemical and physical phenomena more real through actual experience;
- To verify facts and principles already taught.

This research was followed by the Nuffield movement which brought with it a whole new set of vocabulary to the world of practical science, vocabulary such as: 'investigate', 'discover' and 'being a scientist for the day', which ultimately led to Kerr's (1963) research becoming clouded due to the 'new' vocabulary now entering science education. In spite of this, the results of Kerr's (1963) study continue to be the basis for many research projects, with only slight additions or alterations to the ten aims Kerr proposed back in 1963. Beatty and Woolnough (1982) extended Kerr's inventory to twenty aims, producing similar results: 'accurate observation and description' was once again an aim which was high on teachers' priority list (Beatty and Woolnough, 1982:25-26). However, the aim 'to prepare students for practical examinations' was ranked in last position on both occasions, as well as being ranked in the lowest five in a study by Swain et al. (1999:1312-1317). In the light of the low ranking of this aim, questions must be raised as to whether teachers are expressing their true opinions, or an answer which they feel obligated to give, especially when considering the fact that research by Swain et al. (1999) was carried out after practical examinations were well embedded in the science GCSE courses prescribed by the National Curriculum. For this aim to be ranked in the lowest position by a large proportion of teachers raises questions about the validity and reliability of teachers' responses. Regardless of the queries surrounding teachers' responses, Kerr's (1963) list of ten inventory aims undoubtedly produced a viable set of criteria against which to assess the purposes of practical work.

The significance of the aim 'to arouse and maintain interest' has become clear following the comparative study carried out by Swain et al. (1999:1314-1317), in which this aim was ranked above average in all instances. However, as Amos and Boohan (2002:51) emphasise, 'the motivational aspects of practical work are often overstated' and a study by Arzi et al. (1984) also noted that there was no direct correlation between student interest and volume of practical work, this point being well illustrated when assessing pupils' post-16 options. Biology is undoubtedly the favoured of the three core science subjects and, as noted by Osbourne and Collins (2003:1051), this has led to its becoming classified as the 'leading science of the late twentieth century'. Taking this into account you may be mistaken in assuming that biology is the science that entails the largest amount of practical work. However, as noted by Abrahams (2007:10), 'biology offers the least amount of practical work of any of the three sciences'. This is not to suggest that motivation should be disregarded as an aim of practical work, but as Gott and Duggan (1996:792) highlight:

Motivation. . . is undoubtedly an important aspect of science education but it can hardly form the basis for curriculum planning.

Motivation has proved to be a questionable area in terms of the purposes of conducting practical work, yet multiple research studies (Donnelly, 1998; Swain et al., 1999; Price et al., 2005) have shown that for some teachers, practical work is used solely as a motivator in their lessons (Price et al., 2005:6).

I will do a prac. I know the kids won't actually understand, just to keep their interest, teach practical skills and for motivation.

The above quotation is just one of many responses which should be making science educators question the emphasis placed on practical work, and accept that in many instances practical work is being used in our schools for the sheer fun of it, with no intention of worthwhile learning taking place. Some may argue that a little enjoyment

is necessary to retain interest: 'enjoying science is occasionally a valid sole objective for a science practical' (Bunyan, 2007:8). It must be emphasised that 'occasionally' is the key to that statement, with contradiction lying in the fact that so many research studies have shown that teachers use practical work as a motivator in a large proportion of their lessons (Swain et al., 1999; Price et al., 2005). It would be unfair to suggest that all teachers and all practical activities are solely for enjoyment, however the extent to which practical activities can enhance pupils' learning has proved debatable.

In 1992 the International Assessment of Educational Progress conducted a comparative study whose results included aspects of practical science. The study showed that in England and Scotland more than 80 percent of pupils reported conducting practical activities at least once a week (Lapointe et al., 1992:46-48), however when assessing the results of pupils learning, Scotland and England were not among the high performers. In fact, in Korea where students answered an average of 78 percent of questions correctly, 35 percent of pupils never do practical work. This is compared to an average score of 69 percent for British pupils where only 2 percent report to have never done practical work (Lapointe et al., 1992). The results of this study do not bode well for the extensive use of practical work in science, however it must be noted that the examination of the effects of practical work on student learning was not the main focus of the study.

A huge area of dispute surrounding the true value of practical work to pupils' learning is the issue of 'cookbook exercises' (Hodson, 1996:685). Can pupils really be learning or linking theory to practical if they are ultimately just copying a set of instructions from a methodology? Nott and Wellington (1996) believe that this constitutes a form of indoctrination and poses no purpose within the classroom. Even if pupils are provided with a more flexible framework within which to work (i.e. an investigative project), which could be paralleled with a form of discovery learning, in many instances 'the chance is very small that they will see what they ought to see' (Kirschner and Huisman, 1998:665). Whichever of the two techniques above is adopted, cookbook methodological exercises or discovery learning techniques, it too frequently results in a class distracted by the details of the practical. Amidst the excitement and confusion, the concept the teacher had been attempting to demonstrate bypasses the students.

Regardless of the type of practical activity carried out in a science classroom, there may be at least one student's practical that does not work. With wide acceptance of the fact 'practicals continuously go wrong' (Nott and Wellington, 1996:808) a number of research papers address how methods such as 'talking your way out of it', 'rigging it' and 'conjuring' (Nott and Smith, 1995:399; Rigano and Ritchie, 1995, Hodson, 1993) are all used as methods of ensuring that anomalous results and unexpected outcomes do not damage the reputation of practical work in schools. In spite of 'black box' methods described by Nott and Wellington (1996) and all attempts by those in the science education system to design fool proof experiments which will always provide the desired results, the question must be asked, how damaging is it for pupils when practical work goes wrong? Wellington (1998:11) emphasises the need for pupils to be made aware that a few anomalous results 'do not lead to the abandonment of theory – it takes a lot more than that'. This may be the case for scientists who have a full understanding of the nature of science, however, as discussed by Fairbrother and Hackling (1997:890-891) when teachers acknowledge that the practical work has produced the wrong results and simply advise a student to copy their neighbour's results as it will suffice for the nature of the task, are they not crushing that pupil's

perception of the value of practical work in science? This is an issue addressed by Bunyan (2007:8) who returns back to his teaching career and anguishes over times when:

...if their own attempt [practical activity] failed, they were to copy results from a more successful neighbour. Where was the enjoyment, or indeed, what was the learning?

The volume of literature in various aspects of practical work in science is vast, but in spite of this, the empirical evidence base for the effect of practical work on pupils' learning is relatively thin. One of the major reasons for this can be accounted for by the multiple aims and purposes placed on practical work, with individual teachers and educational researchers having their own ideological view of the purposes of practical work. This literature review has highlighted that both positive and negative results can arise from the use of practical work in schools, and Hodson's conclusion appears to be the most adequate in answering the question of the true benefit of practical work to students' learning at this stage (Hodson, 1993:96-97).

It seems that it can safely be concluded . . . that some teachers are able to use practical work successfully, with some students, to achieve some of their goals.

Practical work cannot be seen as the grand panacea for all the problems posed by the science National Curriculum; in fact the overuse of practical work may act to cause greater damage to the image of school science than teachers could begin to imagine. After highlighting the main issues arising from a review of literature into practical work in science, the next chapter discusses the methodology used to address the research questions.

Methodology

The frequent use of Kerr's (1963) ten-aim inventory for carrying out practical science suggests it provides a well grounded list of purposes from which to begin a study into practical work in science. The current study has however identified features of Kerr's (1963) inventory, which are somewhat dated and not relevant to the purpose of this study. Inventory numbers two and six have been adapted to include the aims: 'to motivate' and 'to give a varied learning experience'. The researcher felt that these two aims were wholly more appropriate when taking into account recent focus on both the motivation of pupils as discussed by Abrahams (2007) and the need for a varied style of teaching in science as promoted by the DfES (2002). The science department teaching staff were required to rank the ten aims in order of importance, producing a comprehensive set of purposes against which pupils' perceptions could be analysed (Table 1).

**Table 1. Showing the list of ten inventory aims teachers were asked to rank.
(Adapted from Kerr 1963)**

List of ten inventory aims for the purposes of practical work in science.
1. To encourage accurate observation and careful recording
2. To motivate
3. To develop manipulative skills
4. To give training in problem-solving
5. To fit the requirements of practical examination regulations
6. To give a varied learning experience
7. To verify facts and principles already taught
8. To be an integral part of the process of finding facts by investigation and arriving at principles
9. To arouse and maintain interest
10. To make biological, chemical and physical phenomena more real through actual experience

As highlighted earlier, when discussing Kerr's (1963) inventory, this method of data collection produces limitations in the sense that it relies heavily upon the truthfulness of the respondents. All efforts were made to ensure teachers who completed the survey were aware that their responses were confidential, yet this factor must be considered in analysis.

Having taken into consideration the limited research that has focused primarily on pupils' perceptions of how practical work affects their learning, a questionnaire was distributed to thirty pupils in a year eleven class. This age group was chosen due to the nature of the questions, which required pupils to assess their own learning and it was felt by the researcher that younger pupils might not be able to assess their learning to an adequate degree.

The age of the sample being used resulted in multiple adaptations being implemented in response to the pilot questionnaire. The majority of the questions posed were in the form of closed questions. This type of question, as Bell (2005:137) notes, is more structured and therefore 'the easier it will be to analyse' while also providing data which lends itself to quantitative analysis. There is much criticism surrounding the use of 'open' questions, as their use in questionnaires often leads to unwillingness to participate (Denscombe, 2007:166), and in the light of this, the questionnaire was altered to contain a limited number of open questions, also easing the task of analysis.

The primary goal of this research was to evaluate the true benefit of practical work to pupils' understanding. In order to achieve this goal, a split lesson was designed for pupils in two groups, one year seven group and one year eleven group. Within the class, the pupils were divided into two groups; one group approached the task using a solely theoretical application, in comparison to the other group whose learning was structured around a practical activity. For both of the sessions the learning outcomes for both sets of pupils were the same. The pupils' learning was assessed at the end of the session by a short test. A detailed account of the lessons can be found in tables 2 and 3.

Table 2. A detailed account of the activities provided for year seven session 'Cells as the building blocks of life'.

<p><u>Learning Outcomes:</u> To able to locate the different parts of a cell (Level 4a) To be able to describe similarities and differences between plant and animal cells (Level 5b) To know the function of each part of the cell (Level 5a) To be able to explain why there are differences between plant and animal cells (Level 6)</p>
<p><u>Practical Activity:</u> Pupils should be directed to make a model of a plant and animal cell. The following equipment is available; Plastic wallets (5 cm x 10xm), jelly, plasticine, tie wraps, template of a cube on transparent card.</p>
<p><u>Theoretical Activity:</u> Pupils should be directed to the worksheet 'Cells for Life'. The worksheet contains all the information necessary to answer questions one to seven.</p>
<p><u>Assessment:</u> Both sets of pupils should be given worksheet 7Ab/7 Plant and Animal cells from AQA Exploring Science pack. All pupils should answer this worksheet independently without the aid of textbooks or previous lesson work. A time limit of fifteen minutes should be allowed for all pupils. Pupils are not categorised into 'setted' groups, therefore marks will be assessed against the criteria and a level awarded, this level will then be compared to the pupils current level of attainment, and a value of unit disparity will be used to compare the two sets of data.</p>

Table 3. A detailed account of activities provided for year eleven session 'Ionic, Covalent and Metallic bonding'.

<p><u>Learning Outcomes:</u> To know the differences between ionic, covalent and metallic bonding. To be able to describe the properties of substances dependent upon their bonding.</p>
<p><u>Practical Activity:</u> Pupils should investigate the properties of the following four substances: magnesium strips, wax, sodium chloride and magnesium nitrate. Pupils should investigate the properties of these compounds and deduce the type of bonding present by answering the following questions: Does it dissolve in water? Does it conduct electricity when in water? What is its melting point? What is its boiling point?</p>
<p><u>Theoretical Activity:</u> Pupils are to work from pages 123-124 in textbook (AQA Science) and complete the table relating the bonding properties.</p>
<p><u>Assessment:</u> The end of the session pupils will be read a list of ten questions in relation to bonding, pupils must answer these questions without the aid of textbooks or class work. As pupils are 'setted' in ability groupings assessment will involve the comparison of the number of correct answers from each group.</p>

Results of the formal end of session tests were compared using the Student T-test, allowing an accurate analysis of any significant difference between the learning of pupils, dependent upon the activity used to approach the task. In spite of the advantages of the method, limitations arose in the fact that some pupils stated a clear preference for the style they wished to learn, but in hindsight the methodology should have allowed pupils to take part in different activities, both practically and theoretically, in order to eliminate any errors created by this bias. However, the limited size and scale of this study could not allow the methodology to be extended. The research from this study has provided data that is both quantitative and qualitative. However, due to the small sample size, the researcher wished to increase the reliability and validity of the study by using observation to incorporate the process of 'triangulation' into the project (Denscombe, 2007:138). The researcher opted to use a structured non-participant observation technique to assess the amount of time spent on task in each activity. An 'observation schedule' (Table 4) as discussed by Bell (2005:188) was seen as the most appropriate method to monitor pupils on task time at five minute intervals during the activities.

Table 4. Observation Schedule to show the number of pupils off-task at five-minute intervals throughout the duration of the activity.

Aim	1	2	3	4	5	6	7	8	9	10
Mean Rank	8.0	3.0	7.9	5.9	7.7	4.6	5.1	5.3	2.9	4.3
Aim Order	10	2	9	7	8	4	5	6	1	3

In order to answer the three research questions posed at the outset, this chapter aims to draw together findings from the study and analyse them in an attempt to provide

detailed conclusions about the role practical work now plays within the twenty-first century secondary science classroom.

Presentation and Analysis of Findings

Initially, analysis of teachers' perceptions of the purpose of practical work in science, as originally conducted by Kerr (1963), provides an insight into the changes that have taken place over recent decades. The results of the teacher questionnaire can be found in table 5, which identifies the final rank given to each aim as a result of responses.

Table 5. A Summary of Mean ranks and order of aims for 'all' respondents.

Time	12.35	12.40	12.45	12.50	12.55	13.00	13.05	13.10	Total number of off-task incidents
Practical									
Theory									

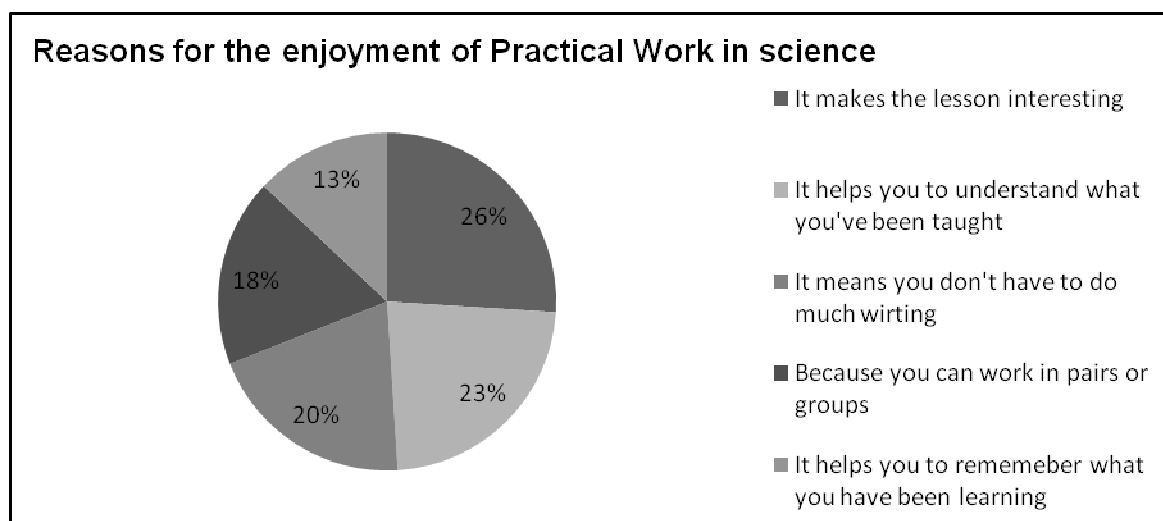
(Table Format as presented by Beatty and Woolnough 1982:23)

In comparison to the original study (Kerr, 1963) and subsequent studies which have followed (Beatty and Woolnough, 1982; Swain et al., 1999) the purposes proposed by teachers have changed very little. Aim number two 'to arouse and maintain interest' has featured in the top three aims in all studies cited. In contrast, Kerr's original study aim number one, 'to encourage accurate observation and careful recording' ranked in third position, was ranked in last position by the teachers in this study. This can be accounted for by the change in approach to practical work since the 1970s. As Wellington (1998:5) highlighted, the 1970s was an era that focused its purpose of practical work on the promotion of manipulative skill, whereas Jenkins (1999:27-28) suggests that:

It is important to ask whether the manipulative skills that practical work in science often seeks to promote are skills that anyone is likely to need.

Since the late 1990s the fall in the number of pupils opting for science post-16 has become a great concern for science educators, and as a result the necessity of an aim such as 'to motivate' has increased due to the perceived likelihood that by raising motivation, interest too will also be raised. This aim ranks highly with teachers in this study despite the fact that many educationalists (Gott and Duggan, 1996; Donnelly, 1998; Swain et al., 1999; Bunyan, 2007) are opposed to using practical work solely to motivate pupils, predominantly because any activity carried out in school should, in some way result in a form of learning taking place. This study aimed to highlight pupils' perceptions of practical work, an area absent from much literature. By analysing pupils' reasons for enjoying practical work, a comparison can be made between pupil and teacher perceptions of the purposes of carrying out practical work (Figure one).

Figure 1. A summary of pupil responses for their reasons for enjoying practical work in science.



From analysis of pupil responses it is clear that the two main reasons highlighted by pupils for enjoying carrying out practical work, are indeed also ranked highly on the aims of teachers. More alarmingly, however, it must be highlighted that for 20 percent of pupils to enjoy doing practical work because it means they do not have to do much writing undermines the notion that in all instances it helps to further pupils' understanding. From analysis of pupil responses to the questionnaire it is clear that although the majority of pupils enjoy the opportunity to carry out practical work, this is not the case for all pupils. So why do some pupils not value the experience provided by practical work, and who are the pupils who most enjoy the opportunity to carry out practical activities? Table 6 categorises the response of pupils by gender and by whether they will be continuing their study of science post-16.

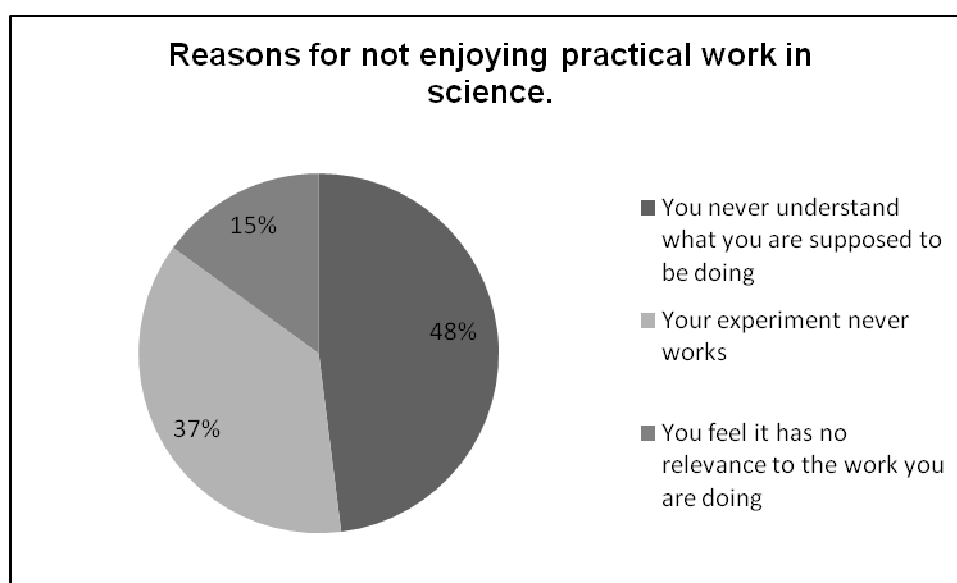
Table 6. Summary of pupils' levels of enjoyment of practical work in science. (Expressed as percentages of the full sample)

Level to which pupils enjoy practical work	Gender		Continuing science to A-level	
	Female	Male	Yes	No
Yes	25	83	40	75
Sometimes	75	17	60	25
No	0	0	0	0

The results of this study highlight a clear disparity between genders, with males being more likely to enjoy practical work in contrast to females. This could be accounted for by the results in Figure One, which highlighted the fact that pupils' enjoyment of practical work was enhanced by the expectation that it involves less writing. As Younger et al. (2005:9) note, there is evidence which shows that a large attainment gap in literacy exists between boys and girls, and they state this is 'essentially because many

boys do less well than girls in reading and particularly in writing'. In this instance, analysis of data has revealed that from the 20 percent of pupils who stated that they enjoyed practical work because they do not have to do writing, 76 percent of those were males. This data supports the Younger et al. (2005) report, and highlights the fact that males are much more likely than their female counterparts to enjoy the practical aspect of science. As highlighted in Table Four, not all pupils always enjoy the opportunity to do practical work; Figure Two highlights the main reasons why pupils did not enjoy practical work.

Figure 2. A summary of pupil responses for their reasons for not enjoying practical work in science.



It must be noted that within the questionnaire the category 'you are just copying instructions off a sheet' was included in an attempt to explore the phenomenon Hodson (1996:685) labelled 'cookbook exercises'. In the light of the sample of pupils chosen, it became clear that pupils were not typically subject to this form of practical work, predominantly being left to investigate the principles via a form of 'discovery learning'. This perhaps accounts for the large proportion of pupils who noted that their main deterrent from doing practical work was the fact that too often they 'never understood what they were supposed to be doing'. In this instance the role of practical work becomes redundant, as Kirschner and Huisman (1998) emphasised. If pupils are not aware of the facts, principles or phenomena they are supposed to be exploring, the likelihood of any real learning taking place will diminish. Nott and Wellington (1996) discuss the notion of when practical activities go wrong, and despite Wellington's (1998) belief that this can do little to damage a pupil's perception of science, this study has shown adverse affects. In fact 37 percent of pupils noted their dislike for practical work as being a result of instances where their practical work did not produce the results they desired. In relation to this theory, Bunyan (2007:8) emphasised an important and unfortunately frequent issue of 'copying' results. One aim of this study was to identify the extent to which 'rigged' results were common practice within the science classroom. The table below summarises the results from the study.

Table 7. A table to show the frequency of pupils altering or copying results of practical work which has 'gone wrong'. (Expressed as a percentage of the full sample)

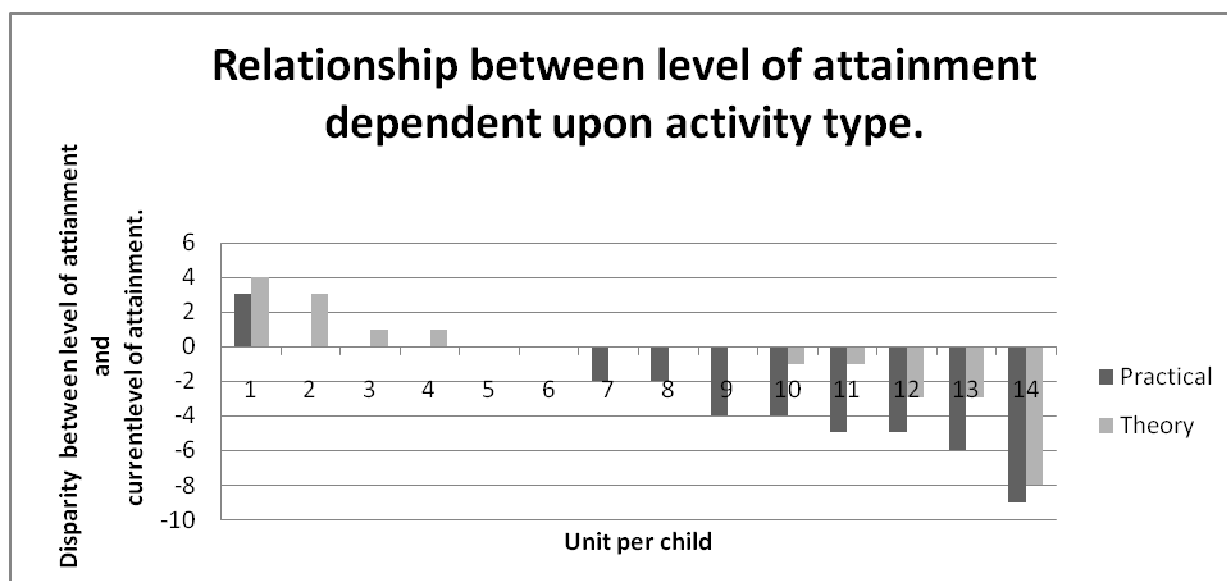
Frequency of Incidents	Never	Sometimes	A lot of times
Incidents of copying results when limited time has resulted in an incomplete set of results	6	83	11
Incidents of altering results to ensure the 'correct' outcome	26	55	19

The results above illustrate that the phenomenon of 'rigging results' appears to be a widespread issue within the science classroom as noted by Nott and Smith (1995). The majority of pupils commented that when incidents of 'copying' results occur, this is predominantly due to insufficient time being given to complete the activity. The results indicate that pupils feel that achieving the 'correct' result is a feature of practical work within science, with 74 percent of pupils stating that they have altered results in order to get what they believe to be 'the right result'. This creates a misconception about the nature of science, and more specifically the nature of scientific enquiry. These results indicate that the true nature of scientific enquiry is not being conveyed to pupils in our schools, suggesting that pupils believe that getting the 'right result' is the purpose of conducting a practical activity, with little acknowledgement of limitations and errors and the purpose of experimentation to explore and challenge current theory.

The main purpose of this study was to determine the extent to which practical work benefited pupils' understanding. From the analysis of teachers' perceptions of the purposes of practical work, it appears that the aim 'to verify facts and principles already taught' is not seen as one of the main purposes for the majority of teachers who took part in this study, with the aim having an overall ranking of fifth. However, pupils appear to perceive this as an important part of the role of practical work, with 23 percent of pupils noting that it helps them to understand what has been taught. Yet, the question still remains, to what extent does practical work enhance pupils learning?

In order to assess pupils' learning dependent upon the activity they participated in, the data from the Year Seven group was subject to a comparison between the pupils' level of attainment at the end of the session, and the pupils' current level of achievement. Results are displayed in Figure Three.

Figure 3. Difference in level of attainment of year seven pupils' in relation to their current level of attainment.



In this instance it appears that a solely practical approach to this topic did not result in enhanced learning. In fact it may be seen to have hindered the learning of many pupils, with 57 percent achieving below their target. In spite of the low levels of attainment achieved by the practical group, the question still remains as to whether these pupils will be able to remember the information they learnt more easily, a reason given by thirteen percent of pupils for enjoying practical work. The Student T-test was used to assess whether or not there was a significant difference between the results of pupils dependent upon their activity type. The results of these statistical tests show $0.05 < p < 0.10$ indicating that there is no statistically significant difference between the results of pupils whether they approach a given task practically or theoretically. However, this session was also used to establish how beneficial practical work is in terms of time on-task. The results of a non-participant observer are displayed in table eight.

Table 8. Record of the number of off-task incidents dependent upon activity type.

Time	12.35	12.40	12.45	12.50	12.55	13.00	13.05	Total number of off-task incidents
Practical	4	8	6	5	6	8	5	42
Theory	9	6	2	2	3	1	2	25

The results show that although the pupils who took part in the theoretical activity spent a larger proportion of their time off-task for the initial five minutes of the activity, this rapidly diminished, and ten minutes into the activity almost all pupils were seen to be working on task. This is compared to instances where almost 60 percent of pupils taking part in the practical activity were off task. The results of this observation probe the question of whether an activity resulting in so many pupils being distracted from the main body of the task can really benefit pupils' learning. In this instance the

use of practical activity has been shown to create distraction from the central objective of learning, which has inevitably resulted in a larger proportion of pupils not achieving their current level of attainment.

In order to address the extent to which practical work can benefit pupils learning across the secondary age range, the results of a Year Eleven class were assessed. The Student T-test was used in order to identify whether or not there was a significant difference between pupils' results dependent upon activity type. The results from this statistical analysis indicate there was a significant difference between the pupils' results dependent upon the activity they took part in, with $p < 0.0005$. One reason for the difference between the year seven and year eleven results is the depth of knowledge required. A discussion with five pupils highlighted that they felt that practical work did not allow the depth of knowledge they required for the subject at GCSE level. The results of this study have indicated that in this instance the depth of knowledge required by the pupils was not sufficiently met by the practical activity, resulting in pupils who took part in the practical activity attaining significantly lower levels of understanding than those who took part in the theoretical activity.

The statistical analysis of data has presented a set of results which are contradictory, with the practical activity undertaken by Year Seven pupils resulting in no statistically significant difference, yet still resulting in more pupils attaining below their target grade when taking part solely in practical based learning, compared to a statistically significant difference for Year Eleven pupils. Thus the results of the analysis cannot be used as a sole indicator of the benefit practical work has to pupils' learning. The results have in fact been reflective of the small sample of thirty students who undertook this activity. This study has provided a basis from which pupils' learning via practical work can be assessed, yet the limitations highlighted here must be acknowledged in the next chapter, which addresses the conclusions and implications of the results of this research study.

Conclusions and implications

This study has shown that although pupils welcome the opportunity to participate in practical work, evidence of the effect of practical work upon pupils' understanding is inconclusive. The inability to draw any definite conclusion concerning the true benefit of practical work to pupils' understanding from this study has been a result of its limited scale, creating instances where statistical analysis of data was not conclusive due to sample size.

Conclusions from this study should inform further studies in the light of the fact that evidence has shown that in some instances the use of practical work did not ultimately lead to as great an understanding as that which could be achieved by the use of theory. In relation to levels of attainment, a larger majority of pupils failed to achieve their current level as a result of solely practical based application. However, this result can be closely related to the notion that a larger proportion of time is spent 'off task' when pupils undertake practical activities.

The motivational aspect of practical work still ranks highly in teachers' perceptions of its purpose, as indicated in studies carried out by Kerr (1963); Beatty and Woolnough (1982); and Swain et al. (1999). However this study has indicated that in instances

where pupils are striving for a higher level of understanding, the motivational aspects of practical work are often overstated.

In closing, it must be noted that the literature base surrounding practical work in science is vast, however very few attempts have been made to assess the true benefit it has to pupils' understanding. Nott (1997:60) questions this notion:

Why do we do so much practical work in science in English schools? Perhaps because there are so many laboratories.

The results of this study suggest that practical work does not always have a detrimental affect upon pupils' learning. However, the need for activities to be well-structured and achievable within the set time frame are major determinants of its success or failure. It must be acknowledged that although the true benefit of practical work to pupils' learning has been presented as questionable from the results of this study, it is clear that (Jenkins, 1999:27):

Laboratory work is being burdened with responsibilities it cannot realistically hope to meet.

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