What do Young Children understand by ‘learning’ and how does this impact upon them in the classroom?

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Recent research has emphasised the importance of nurturing young children’s positive learning dispositions and the importance of listening to, understanding and taking action based on young children’s early experiences and views has been taken seriously. (Lancaster and Broadbent, 2003; Clarke and Moss 2001, 2005, 2010)

This paper asserts that despite the encouragement of ‘student voice’ initiatives in schools and young children’s capacity to tell us much about how they perceive the learning process, their views are not always systematically or automatically included in the design and conduct of classroom research and practice. In order for practitioners and teachers to support children and enable them to learn most effectively, we need to understand what perceptions of learning exist within settings.

The author takes the view that if we understand what perceptions exist, we can begin to understand the effect of our current practice upon the learners within the setting and therefore increase their chances of being successful learners at school. The paper explores a case study which provides an insight into the perceptions of a group of children at one school in the South East. The ages of the children were 4, 5 and 6. (Reception Year and Year 1).

The research concludes that young children are able to reflect on their learning and that when children talk about their learning, they talk in highly perceptive ways. It suggests that through utilising this research method that class teachers are potentially able to understand more about the way that children view learning within the setting therefore enabling them to scaffold children’s metacognition and ways of thinking even more effectively.

Children’s perspectives in research

In 1992, the UK signed the convention for the rights of the child; ‘Children have the right to say what they think should happen, when adults are making decisions that affect them, and to have their opinions taken into account.’ (Article 12 UN
Convention on the Rights of the Child) Our culture these days is a nod towards the rights of the child but in reality, as teachers, we don’t always have the opportunities or time to consult with children with the demands of assessment and the National Curriculum. In a recent study, Janzen (2008, p294) concluded that there is a notable absence of children’s perspectives in research in the UK. Janzen maintains that this is for cultural reasons, that we as a society maintain constructs of children that are lesser than that of adults. Within a co-constructivist paradigm, where learning is through active engagement with the subject matter, the ability to reflect on and talk about one’s learning is valued. Wood and Attfield (2005, p69) refer to this process of metacognition as the ‘self-conscious participation and intelligent self-regulation in learning and problem-solving situations.’ They suggest that one can actively reflect upon the processes that are taking place in one’s own brain. The question of whether 4, 5 and 6 year olds are cognitively able to reflect upon their learning and discuss their perceptions is explored in this paper.

What do young children understand by the term learning?

As researcher, I wanted to know more about what young children understand by the term ‘learning’ and explore how this impacted upon them in the classroom. Goswami and Bryant (2007, p14) concluded that children do not gradually become ‘all purpose learning machines and that their meta-cognitive processes are present from very early on. There is no doubt that young children have the ability to learn from their earliest existence. Gopnik, Melzoff and Kuhl (2001),

My research aimed to uncover the thoughts and perceptions of young children regarding their learning. To what extent they need support and encouragement to do so is worthy of debate. Hood’s research (2008) has suggested that at the age of eight or nine years, pupils are very capable of talking and writing about their perceptions of a variety of aspects of being a learner. There seems to be limited but relevant research to suggest that younger pupils are able to do so. Whitebread (2005) has established that young children are capable of taking on far more responsibility for their own learning than was previously thought (Cambridgeshire Independent learning project). This study showed a wealth of evidence of the abilities of young children in the 3-5 age range to self-regulate their learning.

The educational system in the UK does not encourage as much emphasis on the actual process of learning but far more on the end product. The notion of listening to children is not a new concept for teachers but actively seeking children’s opinions on matters concerning their metacognition does not seem to be a common occurrence in classrooms. ‘Listening to and recording children’s perspectives of learning in classrooms is not common practice in classrooms with young children in the UK’ (Flutter and Rudduck, 2004) and there are many reasons for this. Not insignificantly pressures of the curriculum and time. However, it requires a belief that it is a worthwhile activity that will benefit the learning process.

It could be said that the absence of opportunity for young children to discuss their learning is more of a reflection upon the culture of the classrooms.
environment than the ability of the children to converse with an adult about their learning. The culture of the classroom is an important factor in the learning process. Yelland et al, (2008) state that traditional approaches frequently silence and disempower children as learners. They discuss the notion of the adult child binary and discuss how having a positive view of the child as capable, knowledgeable and autonomous challenges this notion and dismisses the traditional hierarchical relationships that exist between adults and children which continue to be pervasive within educational contexts. Indeed a respect for the influences of peers needs to be present.

Reunamo (2007, p368) has cited the work of Bodrova and Leong (2006) who make the point that for children to be able to develop self-regulation, they need to engage in regulating others too. By discussing and planning, children engage in both self and other regulation. Hall (1995) has stated that teachers and other key people involved in education need to broaden children's conceptions of learning and place greater emphasis on raising the status of talk and discussion in pupil's minds. There seems to be a perception that learning (through discussion) in school can occur in a situation in which the teacher is not only present but involved in the discussion and that pupils cannot learn much from each other. My research seeks to understand more about what young children consider learning to be and in addition to this, to begin to consider what messages there are for us as teachers.

Methodology
The view that children are capable of providing expert testimony of their experiences is shared by Thomson (2008), Chapparo and Hooper (2001), Flutter and Rudduck (2004) and Morgan (2007). Children's views can offer unique insights into their personal worlds and enable us to understand more about how their experiences and interpretation affect their actions. The methodological perspective from which this investigation was approached was an interpretive one based upon visual methods. I wanted the children to be placed as an ‘expert’ in their own world focussing on their own meaning making.

The use of a digital camera allowed the children to select their own subjects within their familiar environment and to photograph learning according to their perceptions. The capture of the photograph provided an opportunity for the children to process the learning and the opportunity to communicate this visually gave them a tool for communication. The significance of the images that were selected by the children was discussed as soon as the children had finished the photography. My role was to try to engage with their meaning-both visually and aurally in order to interpret it. Such an approach would also seek to engage children's creative tendencies and include them in an intrinsically motivating activity using technology. Although much of the data was analysed qualitatively, a proportion was analysed using quantitative techniques.

My research was a case study approach based in three reception classes (Year R) and one year one class (Year 1). One of the settings, a year R class in my own school (I was teaching Y1 at the time) formed the basis of a pilot study. The pilot study highlighted the difficulties in methodological design which enabled me to
refine my methods for the main research. Some of these difficulties included the level of technical skill demonstrated by the children with an unfamiliar camera, the joining up of the photograph with the interview and the level of background noise but it provided some useful insights into learning in this setting that enabled me to consider some perspectives. Mainly surrounding the location of learning. The main body of research was conducted in a school in which I was not known for being a teacher. I felt that there may have been issues of objectivity. I did not want my status as a teacher to bias or influence their responses. ‘Voice is very dependent on the social context in which it is located. Being able to say what you think, in the ways that you want, is highly dependent on what you are asked, by whom, about what and what is expected of you.’ (Thomson 2008, p6). I wanted the research to be a ‘pure’ as possible. The children were not given a time limit but were asked to simply ‘photograph children who were learning’ and to bring the camera back to me when they had finished. Upon doing so, we reviewed the photographs together in order to strengthen the meanings and these conversations were recorded using a digital voice recorder. All data was logged carefully for future reference.

My intention for the data was to analyse the photographs according to themes that become explicit through careful content analysis and analysis of the conversations that followed. I decided that a visual approach would allow children who have difficulty with words an alternative means of expression: ‘images communicate in different ways than words. They quickly elicit aesthetic and emotional responses’. (Thomson, 2008, p11) The discussion afterwards was as open ended as possible to allow the children ownership of the image and conversation. The immediacy of the technology would afford children the opportunity to talk about the process straight away. Morgan’s research findings (2007, p222) show an appreciation of the difficulty of a time difference between recording the image and subsequent discussion, which are solely reliant on children’s memories.

Findings and analysis

Interpretation of the photographs is based upon a subjective view that cannot fail to be influenced by my own experiences of learning and teaching. Prosser (1998, p98) cites the work of Silverman (1993) who states that the analysis of images raises ‘complex methodological and theoretical issues’. (Prosser, 1998, p98) Prosser’s concern is that the act of image making unacceptably alters the object in the frame and therefore the objective content and subjective meaning of the image is compromised. My study hoped to minimise some of these issues as I sought to gain more of an insight into the meanings and thought processes behind the image through the use of follow up interviews which took place as close to the capturing of the image as possible.

In order to make sense of the data, I scanned the photographs and transcript data for recurrence of themes. I identified these through establishing ‘units of talk’ (McNaughton, Rolfe and Blatchford, 2001, p30). This process enabled me to establish the variety of images that had been presented to me and to begin to question possible reasons why the children had taken the image that they had.
One of the challenges of placing the children as ‘an expert in their own world, focussing on their own meaning making’, (Thompson, 2008, p51) was that it was not possible for me to completely appreciate the perspectives or social meanings that underpinned the social interaction in the image although the interview following closely behind enabled me to begin to unpick those meanings. These meanings, although not big enough to draw general conclusions about learning and young children, are valuable within the context of the setting and provide us with an insight into the perceptions of learning that children in one setting have about learning.

Findings

The following themes emerged as a consequence of a process of content analysis: Technology and its role in the learning process, gender, friendships and the learning process and the classroom environment.

The images show that out of 141 Year R photographs, 18% show evidence of ICT. Out of 37 Year 1 photographs, 41% show evidence of ICT. It needs to be borne in mind that the YR photographs are a reflection of teacher initiated and child initiated activities whereas the year 1 photographs show purely teacher initiated activities. Some of the photographs show the computer on its own possibly conveying the message that the computer is seen as a teacher of skills alongside their own teachers as well as emphasising the reciprocal nature of learning and teaching. These photographs convey the huge role that ICT has in children’s learning lives and that ICT teaches them things.

We can see from the number of smiling faces as they sit next to the computer that they clearly enjoy using ICT and this is evidenced in the choices that they make to use the computer during child-initiated times. There did not appear to be a distinction between the number of girls and boys that enjoyed ICT. This choice could be a reflection of the way that technology permeates their lives and as such, schools have adapted as a consequence.

The view that computers are positive influences upon the learning process is supported by Kirkorian, Wartella and Anderson (2008, p9) ‘Early exposure to age appropriate programs designed around an educational curriculum is associated with cognitive and academic enhancement’. Although, they do not cite the research to support their claim, it is clear that the UK government has supported this view through investment into ICT within schools in more recent years. This investment could be seen to be a consequence of the view that the priority for the future is on gaining access to facts and knowledge rather than knowing facts and having knowledge.

Technology enables individuals to gain information quickly rather than rely on memory alone. When the children in my study were asked what activities they do in school, technology was given a high priority. The children saw the computer as teaching them things as this child demonstrates;

Interviewer ‘Can you learn things on the computer?’
Child ‘Yes, and you can learn games’
Interviewer ‘So who teaches you how to do them?’
Child ‘You just try and learn. You can learn games like races.’
Interviewer ‘Can you learn things when you haven’t got a teacher?’
Child ‘Yes’

Yelland et al (2008) cite the work of Kalantzis et al (2005) who share the view that new learning environments encourage sharing and communication of ideas using multimodal methods and the use of new technologies. The use of whiteboards within the classroom environment encourages the sharing of new information as everyone can see and interact with the content that is in front of them. Smart boards also encourage adults and children to quickly access and manipulate information in ways that can be seen by the audience. Many children in the research chose to photograph the whiteboard. One child spoke of the whiteboard as a person with a character: they referred to the whiteboard as ‘being a bit naughty because the whiteboard keeps changing when Mrs. K does something to it’. One child stated that ‘we were learning when we were sitting around counting the team points’, showing an understanding that the computer is a tool that assists with their learning. One child took a photograph of the wires that connect up the smart board and explained that the wires help you learn because ‘they connect up the smart board and they help you to enjoy the learning’, a recognition that learning can be an enjoyable experience.

I was interested to know whether gender had any influences on the learning choices that the children in the study made. Laevers and Verboven (2000) have highlighted the differences between boys and girls and have stated that they get even more articulated as they evolve in the school system. ‘Girls’ favourite activities will be drawing and role play and boys’ play is more exhuberant. The construction area and physical activity are their favourites.’ (Laevers and Verboven, 2000, p27) From an analysis of the photographs, I could see that during child-initiated time, one girl and fifteen boys were engaged in building and construction type activities. This finding supports Laevers’ and Verboven’s research (2000) but writing activities were not restricted to girls alone: 11 boys and 11 girls were writing. As I reflected upon this, I realised that this was a reflection of teacher directed activities. A closer analysis of child-initiated writing showed evidence of 4 girls and 1 boy. Much of the interview discourse centred on the act of writing. For example:

Interviewer ‘What sorts of things do you learn at school?’
Child L ‘I learn doing some writing’
Interviewer ‘what do you learn C?’
Child C ‘Write letters and write whiteboard and I’m really good at them’
Interviewer ‘So what do you enjoy learning when you are at school?’
Child C ‘err letters’

These responses are perhaps unsurprising given the emphasis that some UK schools have placed on improving writing, boys’ writing in particular.

Children appeared to enjoy their learning and a close analysis of the pictures shows a high percentage of happy, smiling children. This could be a reaction to the fact that someone is taking a photograph of them and have asked them to look up as they take the shot. The natural reaction in such circumstances is to
smile however, it needs to be said that the children were generally happy and well motivated on the days that they research took place. They were in control of their own learning and as such appeared to be intrinsically motivated. The photographer reports that she is smiling but that she is also learning ‘writing’, if smiling is an indication of inner happiness then this would be an acceptance that she is enjoying what she is doing.

Two of the photographs showed a child learning alone. When I asked what this picture shows, the response was that he was ‘learning ships’. I followed this up with a question about who is teaching him. And the response was ‘No-one’. These examples show an acceptance that one can learn things alone without the input of another child or adult. When I asked a pair of children whether you could learn things without a teacher, they replied ‘yes’. I then asked how you learn things when you haven’t got a teacher, one of the pair replied, ‘erm you can just sort it out in your head’.

It became apparent that the children were not familiar with talking about their learning in this way. Often they hesitated but were able to recall the activity in which the object of their photograph was engaged. One child was able to talk about learning by describing it as, ‘where you are working really hard.’ In one instance, I asked whether children can learn when they are playing tennis. The response was ‘if they can’t do it and they practice, they get better.’ Another child passed comment about one child who was at the computer stating, ‘he’s working on the computer, erm, doing some number shark because he doesn’t do it quite well’.

These views of learning conveyed an acceptance that they are novices or apprentices of learning and that they will improve with practice. That learning is assessed and evaluated according to levels of competence. The children recognised that learning is not location based but many children conveyed an activity based perception of learning which focussed on the process. For example; learning how to plant, practicing letters, learning how to play tennis. Interestingly, one child’s holiday photos raised an interesting question for me about the timing of perceived learning. This particular child shared their recent holiday photographs on the IWB during snack time and when I asked what the children were learning in the photographs, the response was that they were not learning anything. Further research about the timing of learning with regard to classroom routines is needed.

One photograph shows a happy face on the whiteboard with a ‘thumbs up’ sign. The response shows an appreciation of the link between behaviour and learning. ‘If (people) have being good then they go on the happy face.’ I asked what do children learn from this? And the child responded with ‘being good’. Flutter and Rudduck (2000, p85) have suggested that the regimes of school shape pupils’ attitudes to learning and it would seem that the child above has already begun to appreciate that behaviour has an important role in the learning process. One of the children in year 1 stated that children don’t just learn when they have got a teacher. They sometimes have to work independently and that they learn then too. This perception may have been the result of a YR activity based perception of learning.
Conclusions
The visual approach was successful in allowing children to recall their experiences of watching other children learn and talk about it. It was a useful way in for children to talk about and discuss their perceptions of learning as well as being a valuable data gathering method, particularly appropriate for this age group who may have found discussing their learning difficult. In addition, it also appealed to their technological interests. Allowing some time for familiarity with the camera was beneficial. When using this technique it is important that the following issues were considered; the length of time between the taking of the digital image and its subsequent analysis, pairing children to allow for reflection and discussion with familiar friends as the process was taking place and allowing time for each photograph to be discussed.

The research has shown how much of an influence the class teacher has upon the setting and ultimately upon the learning that happens within the environment. The child conforms to a certain code of learning that is largely unspoken by the teacher but subject to many codes of unwritten behaviour and influences upon it from the individuals that make up the class. In this case, the emphasis that the teacher had placed on the activities and their relation to learning was clear to see through the photographs.

When children talked about their learning, they made it clear that they can talk about this in highly perceptive ways. They realised that they learn in all sorts of ways and from different people as well as themselves. They have already taken on the responsibility of learning from this young age. The general perception was an activity-based perception (Hall, 1995).

The children gave the impression that they saw computers as teachers that are there to impart information to them. They were not actively pursuing knowledge from them perhaps because they are not yet encouraged to use the internet for reasons of safety.

Opportunities for further research would be to analyse the views of children about the timing of learning with regard to classroom routines. It would have been useful to know whether the children perceived that they can learn things at snack time or playtime, indoors and out of doors.

Unless we begin to explore what children’s perceptions of learning are, we may continue to assume that they are experiencing learning according to our perceptions. We need to find out what they think. This research suggest that the use of a digital camera is a potentially valuable way of approaching this issue. This study has reinforced the importance of technology in children’s learning lives. As teachers, we need to embrace the technology that is available to us in order to enhance the communication between children and adults which, in turn, will allow us to listen to the messages that young children are trying to tell us about their cognitive processes.
Bibliography


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