

# [Possibility thinking research](https://assignbuster.com/possibility-thinking-research/)

### Introduction

Most people accept that early years education should aim to develop children's creativity but this raises a number of questions; namely what is creativity? How does it relate to imagination, self expression and intelligence? What ways can creativity be taught and assessed and why is it valuable? Fostering children's creativity involves more than the creative corner in the classroom it involves recognising their creative engagement manifested by young learners. According to Wilson (20. 10. 05) 'It is important that we foster creativity at an early stage so that children are more prepared to lead an active role in their own learning, develop better self-esteem and are more willing to take chances.'

'Possibility thinking' is at the heart of all creativity in young children. (Craft 2002) Possibilities are generated by children in all areas of learning e. g. play, music and scientific enquiry. It allows children to explore imaginative ways to produce a variety of outcomes e. g. is a banana a fruit or is it a telephone? The possibilities to develop children's creative thinking are endless.

'Possibility thinking' has been acknowledged in some educational literature on creativity but it has not been fully accepted by some educationalists (Craft 2001). Jeffrey (2005) believes it is at the core to creative learning and represents the 'being imaginative' part of the current policy framework for creativity in England. Craft and Jeffrey (2004) believe that possibility thinking involves enabling children to find and refine problems as well as solve them.

The aim of this research is to investigate whether possibility thinking is at the heart of creativity in young children. I hypothesise that:

1. Possibility thinking is at the heart of creativity in young children
2. Creativity and imagination allows young children to learn and develop
3. Possibility thinking will only take place if adults give children time and space
4. The resources, environment and available tasks affect the possibilities for creative thinking

### Literature Review

Creativity has been described as 'a voyage of discovery' (Craft 2008). When it comes to creativity in schools the second half of the 20th century can be first seen as a drought following the introduction of the National Curriculum in 1989 which rejected children centred curriculum practices. After 1999 there were numerous opportunities for creativity in terms of curriculum and learning due to a shift in values in educational provision and the landscape of the classroom.

During the end of the 20th and the start of the 21st century creativity has become significant in education due to the advice of the National Advisory Committee on creative and culture education (NACCCE 1999) led by Sir Ken Robinson and researchers such as Woods and Craft (1997) and Harland et al (1998). The key findings from their work was that 'creative learning' involves children experiencing innovation in the classroom, control over activities, together with a sense of ownership in their learning. These features are characteristic of creative teaching (Jeffery and Woods 2003).

The NACCCE saw creativity as 'imaginative activity, fashioned so as to produce outcomes that are original and of value' (NACCCE 1999 pg 29). The approach together with linking creativity with culture saw a shift away from the view that creativity was only attainable by the gifted and a view of 'learning as empowerment in and beyond the classroom' (Jeffrey and Craft 2001, Sefton-Green 2008).

From 2002 the establishment of creative partnerships has promoted creative learning. The most recent curriculum polices of creativity within the early years are the Early Years Foundation Stage (DFES 2007, DCSF 2008) which continues to emphasize the significance of creativity. It encourages student engagement and offers teachers a means of personalised learning (Hargreaves 2008). The message seems to be creativity is for everyone everywhere!

However there are problems as to how creativity is documented, assessed and how progression is supported (Rose 2008). 'Learning through the arts has the potential to stimulate open ended activity that encourages discovery, exploration, experimentation and invention contributing to a child's development' (Bernadette Duffy 2006). Music, dance, and drama enable children to express their feelings. Creativity and imagination in the light of Every Child matters, Sure Start and the Foundation Stage curriculum enables young children to learn and develop whilst expressing their feelings, thoughts and responses.

Anna Craft (2000) introduced and developed the notion of possibility thinking as core to little c creativity. Possibility thinking is means by which intelligence, self-creation, self-expression and know-how are bought together and expressed, It finds a way around a problem by posing questions and finding a problem through identifying a question or topic to be investigated. Fostering young children's possibility thinking involves moving their thinking on from 'what does this do?' to 'what can i do with this? It involves a move from the convergent to more divergent thinking.

The paper 'Pedagogy and Possibility Thinking in the Early Years' (Cremin, Burnard and Craft May 2006) sought to identify what characterises possibility thinking expanded on young children's learning experiences and how teachers pedagogical practices fosters this critical aspect of creativity. Possibility thinking is central to creative learning and at the heart of all creative engagement. A 12 month study carried out in a primary school by University researchers showed that teachers use the practice of 'standing back' whilst giving pupils time and space so as to foster possibility thinking. Studies undertaken by the team (Craft 2001, Burnard et al 2006, Chappel 2006, Cremin et al 2006) suggest that the concept of Possibility thinking has creative engagement across all contexts. Possibility thinking implies attention to impact of ideas and nurtures 'trusteeship' (Claxton 2008).

The Curriculum Guidance for the foundation stage emphasizes that creativity 'begins with curiosity and involves children in exploration and experimentation. They draw upon their imagination and originality. They make decisions, take risks and play with ideas. If they are to be truly creative, children need the freedom to develop and the support of adults' (DFES 2000: 118). The work of researchers such as Craft (2002), Csikszentmhalyi (1997), Fisher (1990) and Lipman (1988) has demonstrated the value of creativity in learning in the early years. In the foundation stage curriculum document creativity is presented as a 'subject' and promoted in areas such as dance, music and stories. However they argue 'young children's learning is not compartmentalised' (DFES: 45). Thus subjects such as mathematics should provide opportunities for creative thinking as teachers need to recognise the importance of creativity throughout the whole curriculum so as to develop children's creative thinking and extend their learning whenever possible. (Worthington and Carruthers 2005)

Given the pace of change in the 21st century 'education needs to be creative whilst enhancing the creativity of both young children and the adults who work with them' (Facer 2007).

### Methodology

The researcher chose to use a combination of both secondary source materials alongside primary sources. The already published literature provided her with a solid base on which she was able to begin to base the investigation as well as providing the researcher with possible areas to explore and correlations to look out for when carrying out her research.

The primary sources enabled her to support the research that already existed and helped to draw balanced conclusions when it came to answering the research question. This made her investigation current and valid but will also aid the researcher's future practice.

'Research in education is a disciplined attempt to address questions or solve problems through the collection and analysis of primary data for the purpose of description, explanation, generalisation and prediction (Anderson et al, 1998).

There are many types of research but they all share the following basic characteristics;

'They are all, or aim to be planned, cautious, systematic and reliable ways of finding out or deepening understanding' (Blaxter et al, 2001, p. 5).

The researcher used a variety of primary methods:

1. Unstructured interviews

Unstructured interviews are a qualitative method of research that provides informal, open ended flowing conversations. The advantage of this method, when discussing a subjective area such as creativity is that it provides in depth information. Interviews provide valid and useful information which will enrich her research and by gathering opinions on possibility of thinking she will gain insight into the benefits and motivation it provides to young children.

1. Participant Observations

The researcher will carry out overt observations in a variety of settings namely a primary school, a playgroup and a residential home. She will use overt observations whereby adults, and children are aware of her presence so as to avoid ethical issues. The researcher chose participant observations so that as a trusted adult she could join in with the creative activities and thus fully understand what was happening in each individual setting. The researcher was also keen to observe how an adult intervention and presence affected the children's creative process.

### Ethics considered

There are research concerns specific to children and young people set out in the British Educational Research Association (BERA) ethical guidelines. Primarily, these are focused upon the informed and valid consent of participants, and ways of assuring that this is attained (Lindsay, 2000). It was ensured that the BERA ethical guidelines were followed. This included, informing the primary school teacher, playgroup leader and childminder what the research entailed and what would be expected of the children included in the sample. In line with ethical issues it was stressed that the data would remain anonymous.

### Empirical chapter 1: Observations

### Introduction

Observations are an interpretivist approach. Interpretivism emphasizes that people have consciousness involving personal beliefs, values and interpretations and these influence the way people out. They do not simply respond to forces outside of them. (K. Browne 2006)

The researcher aims to interpret the values and feelings of both individuals and the group. The information will be in-depth and on a micro scale.

### Aims

1. Participant observations aim to develop an understanding from the view point of the subjects of the research without allowing the researchers own values and prejudices to distort the observation.
2. Children pose questions and find solutions to stimulate creative thinking.
3. If young children are prepared to take risks they are more creative.

### Methodology

### Participant Observation

The first task of any research is to gather information. The researcher will be doing this by carrying out observations so that explanations and correlations can be made. The information generated will provide her with opinions about the extent to which 'possibility thinking 'is at the heart of creativity in young children.

She will carry out three observations the first at a primary school in Stafford where she will observe a year one numeracy lesson. The second at a playgroup in Wolverhampton and finally the third at the residential home of a childminder in Northampton. The observations will be overt and participant. The researcher will be honest with the children and adults so they understand what she is doing. All observations will take place in a non-threatening, safe atmosphere. At both the playgroup and childminders home the children will be either playing or involved in creative activities. At school the year one pupils will be involved in a numeracy lesson. The researcher will use an observation sheet to record information and write the observations up at a later date. She has chosen participant observation as the researcher joins the group being studied and can therefore see things through their eyes.

#### Observation 1

1. Participants

Barnfield Primary school Stafford year one class

25 pupils

14 girls

11 boys

1. Materials

Numeracy lesson plan on shape

1. Procedures

Firstly she wrote to the head to ask permission to carry out the observation and then visited the school on Monday 14th December 2009 for a pre-visit to discuss the observation with the class teacher. She carried out the observation on Tuesday 12th January 2010.

1. Analysis

The data will be written up on the observation sheet and analysed at a later date.

#### Observation 2

1. Participants

Portobello Community Centre pre-school playgroup

8 children

5 boys

3 girls

1. Materials

Cut out reindeers, card

Construction toys

Observation sheet

1. Procedures

Firstly she contacted the play leader by telephone to discuss the observations. She carried out the observations on the 7th December 2009 and the 18th January 2010.

1. Analysis

The data will be written up on the observation sheet and analysed at a later date.

#### Observation 3

1. Particpants

Registered childminders home in Northampton. At present she looks after boys aged seven and five and a girl aged three.

1. Materials

Toys e. g doll house, brio and magnetix

Musical instruments e. g drums and shakers

Observation sheet

1. Procedures

The child minder is a family friend so the researcher made contact by phone. The researcher then visited on Monday 21st December 2009 to carry out the observation.

1. Analysis

The data will be written up on the observation sheet and analysed at a later date.

#### Results from observations

The researcher chose to observe young children in a variety of settings. The children at school were involved in a directed task namely a numeracy lesson about shape. The children at playgroup and at the childminders home were either playing or involved in semi-structured activities which gave scope for creativity and allowed for personal expression, unlike the numeracy lesson the play, art and music tasks excluded the notation for right and wrong.

The children in all 3 settings produced a variety of results and their scope for creativity was dependent upon

* The environment
* The activity
* The resources available
* The level of adult support and intervention

#### Discussion of Playgroup Observation 1

The observations at the playgroup showed three aspects of the process using the Possibility Thinking framework namely:

* Posing questions
* Play
* Immersion and making connections

They also included three aspects of process outcome:

* Being imaginative
* Innovation
* Risk taking

There was little evidence of development or innovation but this was probably due to the fact that the children were aged between two to four. The first observation on 7th December 2009 showed the youngsters involved in a Christmas workshop making cards and 3D reindeers. The children were excited and constantly posing questions about what colours and materials to use. The children were immersed in the activity and the outcomes were imaginative and showed they were happy to take risks. The youngsters were confident and supported by numerous adults thus the level of adult supervision was high.

### Discussion of Playgroup Observation 2

The second observation took place at the playgroup on January 18th 2010. The youngster's were allowed to play in the sand and water, home corner and with construction toys such as bricks and Lego. The boys were more interested in the construction toys, whilst the girls predominately played in the home corner.

All children were immersed in play and asked questions. They were imaginative and took risks; however there was little evidence of innovation or development. The level of adult supervision was quite high however the intervention by the adults was low.

#### Discussion of Childminders Observation

The researcher visited a childminder's home on Friday 18th December 2009 when she was looking after three children. The youngsters played with construction toys, jigsaws, dolls house, and my little ponies. They then played with musical instruments such as a drum set and maracas. The children were thrilled to make music.

The three children constantly chatted to each other. They played together and on their own. The boys were immersed in creating a brio track and Lego models whereas the girl immersed herself in the imaginary world of my little pony.

All three children were imaginative and creative especially when the musical instruments appeared. They discovered different sounds and ways of making music and formed a mini band.

#### Discussion of Numeracy Lesson observation (year one on shape)

The researcher expected the lesson to have limited opportunities for creativity due to space and structure constraints. She views numeracy as a factual, uncreative lesson which focuses on the understanding of set rules. However the researcher was surprised that the pupil's ideas were welcomed and they could pose questions. The children could not really produce original work as there were right and wrong answers although they did explore different methods to get there so were given some ownership for their own learning. There was also some scope for development and innovation in their work.

#### Conclusion of observations

The aim of participant observations is to develop an understanding from the point of view of subjects without prejudice. The researcher achieved this by observing youngsters and their adult supervisors in a variety of settings whilst becoming a full trusted member of the group. All the children posed questions so as to find solutions to stimulate creative thinking. The youngsters at both the playgroup and childminders home had more opportunities to take risks than those in the classroom so had more chance to be creative.

### Empirical Chapter 2: Unstructured Interviews

### Introduction

An unstructured interview is like a guided conversation. The interviewer has the topic to cover but questions are open-ended. The researcher seeks to put the respondent at ease, in a relaxed informal situation and hopefully the questions will trigger further discussion. The interviewer aims to obtain further depth than is possible in a structured interview. Unstructured interviews are from an interpretivist approach and provide qualitative data as they are concerned with people's feelings and views.

### Aims

1. Unstructured interviews provide rich, detailed information where by the respondents can express their feelings about the issue of creativity and possibility thinking.
2. Certain tasks such as art, music, drama and dance are more suitable to creative thinking.
3. The learning environment and teaching strategies need to provide scope for imagination if children are to produce a variety of outcomes and thus accommodate creative learning.

### Methodology

#### Unstructured interviews

The researcher will interview three adults and conduct the interviews like a discussion with open-ended questions. She will be careful not to influence the replies so as to avoid interviewer bias. She will write down the replies on an interview sheet but try not to disrupt the flow of the interviews. The replies will hopefully produce rich, qualitative information and comparisons between interviews can be drawn. The use of interviews, stimulate reflection and critical conversations about possibility thinking as a form of engagement and strategy of creativity and the creative thinking process. The probing questions will allow the adults to focus on what they consider to be significant in the creative learning experiences.

#### Interview 1

1. Particpants

Barnfield Primary School Stafford Year one class teacher.

1. Materials
2. Procedures

The researcher wrote to head to ask permission to interview a class teacher. The researcher visited the school to meet the teacher on Monday 14th December. The researcher carried out the interview on Tuesday 12th January 2010.

1. Analysis

The researcher will write the interview up on the interview sheet and compare the three interviews.

#### Interview 2

1. Particpants

Portobello Community Centre playleader

1. Materials
2. Procedures

The researcher contacted the play leader by telephone to discuss the interview. The researcher then carried out the interview on January 18th 2010.

1. Analysis

The researcher will write the interview up on the interview sheet and compare the three interviews.

#### Interview 3

1. Particpants

Registered childminder who is also a qualified teacher.

1. Materials
2. Procedures

The researcher contacted the childminder by phone to discuss the interview. The interview was carried out on Monday 21st December 2009.

1. Analysis

The researcher will write the interview up on the interview sheet and compare the three interviews.

#### Results from Interviews

The researcher chose to interview the three adults who were involved in her observations. The questions had a focus related to creativity and possibility thinking but were open ended so allowed for development. All adults were interviewed in a quiet environment where they felt at ease.

The three adults all said they used similar strategies to encourage creativity namely standing back and providing a safe environment, with multiple resources that encouraged creative thinking. Two out of three adults were unsure that possibility thinking was central to creative learning but thought strategies such as posing questions and giving children time and space does develop the notation of possibility thinking. All three adults thought the environment was important for creative learning and believed a safe, challenging experience helps to provide opportunities for imaginative experiences. All three adults felt some tasks were more suited to creative thinking such as dance, music and play however the class teacher thought subjects such as maths and science should provide opportunities for creative thinking.

Discussion of Interviews with year one teacher, play leader and registered childminder

All three adults interviewed discussed different strategies they used to encourage children to be creative that included giving youngsters time and space and providing a variety of resources which allowed children to explore activities in imaginative ways. The children were allowed to pose questions and take risks. They felt the environment and the tasks offered were crucial to creative thinking however only the class teacher thought possibility thinking was central to creative learning. They all thought that creativity begins with curiosity and is developed if children are given the opportunity to explore and experiment with different resources and ideas.

#### Conclusion of interviews

The aim of unstructured interviews was to provide rich identical information whereby respondents could express their feelings about creativity and possibility thinking. All three interviewees gave the researcher detailed insight into the adult's views about the research issue. All three interviews felt certain tasks such as art and music were more suitable to creative thinking. They gave a detailed account of how the learning environment and strategies such as giving children time and space provide opportunities for imagination and creative learning.

### Conclusion

NACCCE (1999) argued 'creativity is imaginative actively fashioned so as to produce outcomes that are both original and of value'. According to Craft possibility thinking 'is at the heart of creativity in education.' This idea has implications as the engagement of learners according to Jeffrey (2005) leads to 'engagement with problems'.

'Fostering children's possibility thinking can be seen as building their resilience and confidence and referencing their capabilities as confident explorers, meaning makers and decision makers.' (Craft 2005).

Possibility thinking involves problem finding and solving. Creative teaching may foster learner creativity providing there are co-participative partnerships between teachers and learners, in which they explore issues, pose questions, identify problems and reflect upon their thinking and learning. The key factor being that 'the control has to be handed back to the learner' (Craft and Jeffery 2003).

In seeking to unravel the issues of what constitutes possibility thinking in the learning experiences of young children and how teachers, play leaders and childminder's foster possibility thinking as an aspect of creativity, the researcher carried out observations and interviews. She used probing questions and encouraged the adults to engage in in-depth reflective practice.

Following close observations in each context using the possibility thinking documentation framework and further interviews with the adults in charge, core areas of possibility thinking in children's learning were identified. They included the three aspects of process i. e posing questions, play immersion and inversion. They also included the three aspects of process outcome i. e being imaginative, innovation and risk taking.

The observations were written up in the light of the three-fold-structure. Many of the youngsters were involved in risk taking and were immersed in an activity. On the outcomes there was little evidence of development and the question of taking intentional action was problematic as many of the children were too young. In terms of process outcome the notation of innovation was also difficult as what might be normal for one child in one particular environment may not be normal for another. The separation of process and outcome is not easy during the early years as young children often take risks to move their thinking forward but this may not be an outcome. The integration between creative teaching and learning also seemed to foster possibility thinking. If young children feel safe they gain confidence as with the children in all three observational settings.

The three interviews highlighted the fact that they all tried to foster creativity in their youngsters by providing a stimulating learning environment which allowed the children to pose questions and explore a variety of outcomes in an imaginative way. The adults tried to stand back but felt some tasks were more suited to creative thinking than others.

The aim of the research was to investigate whether possibility thinking is at the heart of creativity in young children. Researchers such as Professor Anna Craft believe it is so as does one out of three of the adults interviewed. Many researchers such as Craft, Jeffrey, Burnard and Chappel all feel creativity and imagination allow young children to learn and develop.

If children are to be creative, adults need to give them freedom to develop. Cremin, Burnard and Craft (2006) found that in a twelve month study carried out in schools; that teachers needed to 'stand back' and give children time and space to foster possibility thinking. The observations and interviews carried out by the researcher reinforced this.

The final hypothesis was that the resources, environment and tasks affect the possibilities for creative thinking. The observations and interviews with adults confirmed this. Deciding whether the motivation of pupils based on the creative setting was difficult to determine as she only carried out observations in three settings and only interviewed three adults, thus her findings were limited.

Possibility thinking does appear to influence creativity but the sample was small and the decisions the researcher made were subjective and not based upon objective scientific testing.

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