

Topic

Readership: primary

Developing young children's creativity: what can we learn from research?

In this article, *Caroline Sharp* of the NFER considers evidence from research and theory as it applies to developing young children's creativity. She explains how creativity is defined, and identifies the implications for staff working in early childhood settings. She also identifies some common myths about developing young children's creativity.

Introduction

In September 2000, the Arts Council of England asked the NFER to summarise recent research and theory on creativity in early childhood. The work entailed a selective review of research and theory published between 1988 and 2000 and resulted in a briefing paper on the subject (1). This article sets out to update the earlier paper and to identify some of the principles involved in helping young children to develop their creativity in early years settings.

How has creativity been interpreted in educational policy?

Creativity has recently been granted official recognition as one of the overarching aims of the curriculum in English schools.

The curriculum should enable pupils to think creatively and critically, to solve problems and to make a difference for the better. It should give them the opportunity to become creative, innovative, enterprising and capable of leadership to equip them for their future lives as workers and citizens (2, p. 11).

The Foundation Stage curriculum is aimed at early years settings, providing for children aged around three to six years. The curriculum is divided into six main areas of learning, one of which is creative development. According to the curriculum guidance for the Foundation Stage in 2000 (3, p.116):

Being creative enables children to make connections between one area of learning and another and so extend their understanding. This area includes art, music, dance, role-play and imaginative play.

These definitions have been welcomed as giving recognition to the importance of creativity and the role of education in encouraging creative development. The appearance of creativity as an aim of the curriculum in England is part of a trend to recognise the importance of creativity internationally (4). However, the above statements also raise many questions, such as: what is meant by the terms 'creative thinking', 'creative development' and 'being creative'? How does creativity relate to curriculum areas? And how should early years staff help children to develop their creative abilities?

Defining creativity

Definitions of creativity are not straightforward, and many writers have contributed to the debate about what constitutes creativity, often hotly contesting different views. However, most theorists agree that the creative process involves a number of components, most commonly:

- imagination
- originality (the ability to come up with ideas and products that are new and unusual)
- productivity (the ability to generate a variety of different ideas through divergent thinking)
- problem solving (application of knowledge and imagination to a given situation)
- the ability to produce an outcome of value and worth.

Where definitions of creativity differ most strikingly is the extent to which their proponents are attempting to identify creativity as a generic human characteristic, or to define what makes highly

creative people special and different from others. This is the distinction between what the Robinson Report (5) calls the 'democratic', as opposed to the 'élite', definition of creativity. Howard Gardner (6), adopts an élite definition of creativity when he argues that truly creative people are those who make a difference to the world (e.g. by moving forward thinking in science, social science, music or art). This type of 'Big C' creativity is reserved for very few individuals. The report (5) of the National Advisory Committee for Creative and Cultural Education, chaired by Professor Ken Robinson, adopted a democratic view of creativity. It argued that this was the most useful way of viewing creativity in relation to education (5, para. 25)

All people are capable of creative achievement in some area of activity, provided that the conditions are right and they have acquired the relevant knowledge and skills.

So is creativity another way of talking about intelligence or talent? Most authorities agree that creativity is different. Creativity has been shown to be distinct from intelligence (children scoring high on intelligence tests are not necessarily highly creative). The concept of 'multiple intelligences' (6) suggests that people may have a particular intelligence (or potential) in relation to a given field of endeavour.

is creativity another way of talking about intelligence or talent?

While this is a more 'inclusive' concept than traditional IQ, it is still essentially distinct from creativity, which may be considered to represent a more generic set of abilities, applicable to a range of domains. Talent usually refers to the possession of a high degree of aptitude and skill in a given area (such as music or mathematics), but would not necessarily imply either a high degree of originality or an ability to demonstrate creative abilities outside the specific area.

Talk to most parents about their children's creativity and they will probably think you are talking about artistic or musical talent. The Robinson Report (5) argues that, while there are strong links between the expressive arts and creativity, viewing creativity as solely or mainly the province of the arts is unhelpful because it can lead to a denial of the role of creativity in other areas, such as science and mathematics.

Creativity in young children

When considering young children, it is appropriate to adopt a broad, democratic definition of creativity. In this way, every child can be considered to have creative potential and to be capable of creative expression.

It is important to consider what might constitute 'originality' in the work of a young child. After all, only a child prodigy could be expected to come up with something new and valuable to society. Instead, each child's creative abilities can be related to his/her personal stage of development. For example, a young child's work may be adaptive and original for that particular child and/or in relation to children in their class or age group (7).

Another suggestion for adapting the notion of creativity to suit young children is to put the emphasis on the creative process, rather than to judge the quality of their 'products'. This is because young children may not have developed all the skills they need to achieve a successful creative outcome (8, 9). A similar point is made by Malaguzzi (10), who says (p. 77):

Creativity becomes more visible when adults try to be more attentive to the cognitive processes of children than to the results they achieve in various fields of doing and understanding.

This is an interesting comment coming from the driving force behind the Reggio Emilia approach, which has impressed so many people with the quality of creative 'products' generated by young children.[†]

How does creativity develop?

Some theorists have studied the way in which creativity develops in children. Most theories of child development view young children as highly creative, with a natural tendency to fantasise, experiment and explore their environment. However, this high level of creativity is not necessarily maintained throughout childhood and into adulthood. For example, Meador (11) presents evidence from the USA that creativity (as measured by divergent thinking tests) declines when children enter kindergarten, at around the age of five or six.

Runco (12) has studied how creativity develops. He explains that longitudinal research on trends in creativity suggests both continuities and

discontinuities throughout an individual's lifespan. In other words, a child identified as highly creative in early life may or may not consistently show creativity later on. He argues that this uneven development may result from the fact that certain traits and talents develop at different rates and are influenced by each individual's environment and life chances.

How does education influence creativity?

Most writers on creativity agree that it is possible to encourage or indeed to inhibit the development of creativity in young children. The finding highlighted by Meador (11), that children are apparently more creative before they enter kindergarten, leads to the question of whether this is a natural consequence of children maturing and becoming constrained by social conventions, or whether their experiences in kindergarten somehow caused the decline.

In order to consider the way in which creativity can be fostered in educational settings, it may be helpful to identify some of the components of creativity in young children. Creativity is closely bound up with an individual's personality and emotional life: there is more involved than just 'thinking skills'.

Russ (13) has developed a model to explain the relationship between creativity and psychological processes. This model suggests that the following three elements are involved:

1. **personality traits**, such as self-confidence, being able to tolerate ambiguity, curiosity and motivation
2. **emotional processes**, such as emotional fantasy in play, pleasure in challenge, involvement in tasks and tolerance of anxiety
3. **cognitive abilities**, such as divergent thinking, ability to 'transform' thinking (for example, by being able to reorder information or shift thinking 'sets'), sensitivity to problems, breadth of knowledge and judgement.

The implication of this model is that, in order for children to express creativity, they need a combination of attributes. Although some children already have the necessary components, others may need help, encouragement and skill development in order to engage in creative activity.

For example, a child may not choose to engage in creative thinking because she lacks self-confidence and does not believe that she has anything of value to offer. Or maybe she becomes anxious when given an open-ended task with several possible solutions. Through observation and conversation, an adult can work out what is causing the child's difficulties and encourage her to work through them.

How can educational settings influence creativity? Mellou (14) suggests that young children's creativity can be nurtured through educational settings in three respects: the creative environment, creative programmes and creative teachers and ways of teaching. A brief overview of recommendations in relation to these three elements is given below.

The creative environment

Fundamental to the **creative environment** is the encouragement of children's play. Play is strongly featured in many of the discussions about creativity in young children. Indeed, older children and adults are often encouraged to be 'playful' in order to facilitate creative thinking. Imaginative play (especially role play) and free choice of activities would seem to be key components of the early childhood setting in relation to creativity (see 9, 13, 15–18). Both creativity and play require imagination, insight, problem solving, divergent thinking, the ability to experience emotion and to make choices (19).

This does not mean that all play involves creativity. Prentice (18) suggests that active involvement is a key feature: 'For creativity to flourish in an educational setting, it is necessary for learners to be actively involved in the process of their own learning' (p. 154). Research has also shown that it is possible for adults to help children improve their imaginative play skills, with apparent positive consequences for their creative abilities (19).

Two other issues have been raised concerning the environment in early childhood settings. The stimulation offered by a child's physical environment is important, as Runco (20) has pointed out. This could include the size and layout of the classroom and outdoor space, the quality of equipment and materials, and access to varied and new environments. A second key issue is the need

Developing young children's creativity

for children to be given sufficient and sustained periods of time in which to develop their creative projects (see 5, 10, 21).

Creative programmes

Can creativity be taught through creative programmes? The results from research in this area would seem to suggest that it is possible to enhance children's creative skills through specific teaching programmes, including arts-based ones (see 22, 23). However, conclusions from two reviews of research into the transferable effects of arts education have concluded that the impact of arts programmes on children's creativity is not yet proven (24, 25). The apparent contradiction probably arises from a lack of sufficient high-quality research, and the possibility that not all arts activities serve to enhance creativity.

Creative teachers and creative teaching

Creative teachers and creative teaching are key components in fostering creativity in young children. Many writers such as Tegano *et al.* (9), Mellou (14), Craft (15), Runco (20) and Edwards and Springate (21), highlight the role of the teacher in providing the optimum balance between structure and freedom of expression for young children. They explain that teachers and other early childhood workers can encourage creativity by behaviours such as:

- asking open-ended questions
- tolerating ambiguity
- modelling creative thinking and behaviour
- encouraging experimentation and persistence
- praising children who provide unexpected answers.

Malaguzzi (10) has made a number of observations about the best conditions for developing creativity in children's daily experience, which include an emphasis on interaction with adults and peers (p. 76)

The most favourable situation for creativity seems to be interpersonal exchange, with negotiation of conflicts and comparison of ideas and actions being the decisive elements.

Runco (7) argues that teachers should show an interest in children's creative potential and encourage children to construct their own personal interpretations of knowledge and events.

Some children may need to learn to stand up for their own ideas, especially when these do not conform to those of the rest of the group. But children also need to learn discretion, so that they can judge when it is appropriate to be divergent and original, and when it is appropriate to conform.



Children are encouraged to use drawings as a 'graphic language'

Adults, therefore, can act as supporters and coaches, facilitators and models of creativity for children. But on the other hand, adults also have the potential to stifle opportunities for creativity by being overly didactic or prescriptive (9, 10). They can limit creativity by discouraging fantasy or by having low expectations about what young children are able to achieve (14, 18). Several elements can conspire against the encouragement of creativity in early years settings, including the pressure for teachers to focus on literacy and numeracy, a lack of training in early years practice, and a tension between meeting the needs of a class and encouraging the interests of an individual (26, 27).

The role of creative professionals

In addition to the three aspects already outlined, the literature contains several references to the potential of creative professionals to help develop children's creativity. For example, the QCA's guidance in 2000 for the Foundation Stage (3) suggests that, in order

to facilitate creative development, young children should have opportunities to work alongside artists and other creative adults.

In the pre-schools of Reggio Emilia, educators enable young children to engage in extended projects. Children are encouraged to use drawings as a 'graphic language' to record their ideas, feelings and observations. A key part of Reggio Emilia settings is the existence of spaces that are 'rich in materials, tools and people with professional competencies' (10, p. 74). These spaces, known as *ateliers*, are designed to be places in which children's different languages can be explored by them and studied by their teachers and others in a peaceful atmosphere.

While there is a body of research into the impact of artists-in-schools schemes, the role of artists in encouraging young children's creativity has not yet been well researched. In other words, although the involvement of professional artists and creative workers has considerable potential to be helpful, we do not have research evidence to say what kinds of involvement may have the greatest impact on creativity. This issue is, however, currently being investigated as part of the Creative Partnerships Programme (See www.creative-partnerships.com/)

Conclusion

Creativity is an important human characteristic. It is perhaps best thought of as a process, requiring a mixture of ingredients, including personality traits, abilities and skills. Early years staff can help young children to develop their creativity by providing a creative environment, helping children to build up their skills through play, behaving creatively themselves and praising children's creative efforts.

Remember that people are creative because they choose to be, so finding out about and encouraging a child's own interests is an important starting point. Some children may find it difficult to express their creativity. Staff can help by observing their behaviour (especially during imaginative play), identifying where the difficulty lies and devising an action plan. But, you may ask, isn't this just a description of good early childhood practice? Well yes, but with a creative twist.

Some myths about creativity

1. **Creativity is limited to arts subjects.**
Although creativity is often associated with 'creative' subjects, such as art and music, creativity is not subject specific. Creativity is a way of approaching problem solving that can be exercised in different areas. On the other hand, creativity does not take place in a vacuum: the way in which children express creativity will be different in different curriculum areas.
2. **Children find it easy to transfer learning from one area/domain to another.**
All the evidence shows that most children find it very difficult to transfer learning from one area to another. Knowledge and skills are so context specific that children may simply fail to recognise that something they had already learned can be applied to a new situation. Adults can help children to make the connection.
3. **The creative process is fun: it should not be taken too seriously.**
Creativity may seem like a fun, self-indulgent activity to counteract the more serious 'work' of the classroom. But the creative process presents many challenges. It requires concentration, persistence and determination to succeed; it may in fact be a frustrating and difficult process. Creativity deserves to be taken seriously.
4. **Creativity is an in-born trait, limited to the talented few. Highly creative people will find their own way, regardless of what happens at school.**
Individuals have a different combination of abilities, personality traits and home experiences that make them more or less able to express their creative potential. The study of highly creative adults shows that some of them insisted on 'being creative' almost in spite of their educational experiences, but this is not an argument for leaving creativity to chance. Some children will miss the opportunity to develop their creativity without encouragement and support in pre-school and school.

5. Children can get all the creative experience they need from free play and unstructured arts activities.

Children do benefit from free play and unstructured arts activities. But left entirely to their own devices, children's play and artwork can become routine and repetitive. Children need stimulation and creative problems to solve. Adults can help children to develop their creative skills through play.

6. You don't need to be knowledgeable or skilful to be creative.

There is a balance to be struck here, because insisting on extensive knowledge and skill development can be stultifying. On the other hand, knowledge and skill are fundamental to creativity. Existing knowledge of the world is a starting point for young children's play. How can people express their creativity without developing the necessary skills? How would you know if your contribution was original or appropriate unless you had some understanding of the area?

Note

† Reggio Emilia is a community in Northern Italy that has pioneered a particular approach to early childhood education, emphasising creative learning.

References

- 1 SHARP, C. (2001). 'Developing young children's creativity through the arts: what does research have to offer?' Paper presented to an Invitational Seminar, Chadwick Street Recreation Centre, London, 14 February [online]. Available: <http://www.nfer.ac.uk/research/papers/creativity.pdf> [13 January, 2004].
- 2 QUALIFICATIONS AND CURRICULUM AUTHORITY (1999). *The National Curriculum: Handbook for Primary Teachers in England Key Stages 1 and 2*. London: DfEE and QCA.
- 3 QUALIFICATIONS AND CURRICULUM AUTHORITY (2000). *Curriculum Guidance for the Foundation Stage*. London: QCA.
- 4 SHARP, C. and LE METAIS, J. (2000). *The Arts, Creativity and Cultural Education: An International Perspective* (International Review of Curriculum and Assessment Frameworks) [online]. Available: <http://www.inca.org.uk/pdf/finalreport.pdf> [13 January, 2004].
- 5 ROBINSON REPORT. GREAT BRITAIN. DEPARTMENT FOR EDUCATION AND EMPLOYMENT. DEPARTMENT FOR CULTURE, MEDIA AND SPORT. NATIONAL ADVISORY COMMITTEE ON CREATIVE AND CULTURAL EDUCATION (1999). *All Our Futures: Creativity, Culture and Education*. London: DfEE.
- 6 GARDNER, H. (1999). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York, NY: Basic Books.
- 7 RUNCO, M.A. (2003). 'Education for creative potential', *Scandinavian Journal of Educational Research*, **47**, 3, 317–24.
- 8 CRAFT, A. (2003). 'Creative thinking in the early years of education', *Early Years*, **23**, 2, 143–54.
- 9 TEGANO, D.W., MORAN, J.D. and SAWYERS, J.K. (1991). *Creativity in Early Childhood Classrooms* (NEA Early Childhood Education Series). West Haven, CT: National Education Association.
- 10 MALAGUZZI, L. (1993). 'History, ideas, and basic philosophy: an interview with Lella Gandini.' In: EDWARDS, C., GANDINI, L. and FORMAN, G. (Eds) *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections*. Second edn. Greenwich, CT: Ablex Publishing.
- 11 MEADOR, K.S. (1992). 'Emerging rainbows: a review of the literature on creativity', *Journal for the Education of the Gifted*, **15**, 2, 163–81.
- 12 RUNCO, M.A. (Ed.) (1996). *Creativity from Childhood through Adulthood: The Developmental Issues* (New Directions for Child Development No. 72). San Francisco, CA: Jossey-Bass.
- 13 RUSS, S.W. (1996). 'Development of creative processes in children'. In: RUNCO, M.A. (Ed.) *Creativity from Childhood through Adulthood: The Developmental Issues* (New Directions for Child Development No. 72). San Francisco, CA: Jossey-Bass.

- 14 MELLOU, E. (1996). 'Can creativity be nurtured in young children?' *Early Child Development and Care*, **119**, 119–30.
- 15 CRAFT, A. (2000). *Creativity across the Primary Curriculum: Framing and Developing Practice*. London: Routledge.
- 16 CRAFT, A. (2002). *Creativity and Early Years Education*. London: Continuum.
- 17 MELLOU, E. (1994). 'The case of intervention in young children's dramatic play in order to develop creativity', *Early Child Development and Care*, **99**, 53–61.
- 18 PRENTICE, R. (2000). 'Creativity: a reaffirmation of its place in early childhood education', *Curriculum Journal*, **11**, 2, 145–58.
- 19 RUSS, S.W. (2003). 'Play and creativity: developmental issues', *Scandinavian Journal of Educational Research*, **47**, 3, 291–303.
- 20 RUNCO, M.A. (1990). 'The divergent thinking of young children: implications of the research', *Gifted Child Today*, **13**, 4, 37–9.
- 21 EDWARDS, C.P. and SPRINGATE, K.W. (1995). *Encouraging Creativity in Early Childhood Classrooms* (ERIC Digest). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education (ED389474).
- 22 SCOPE, E.E. (1999). A meta-analysis of research on creativity: the effects of instructional variables. Unpublished dissertation, Fordham University.
- 23 MURDOCK, M.C. (2003). 'The effects of teaching programmes intended to stimulate creativity: a disciplinary view', *Scandinavian Journal of Educational Research*, **47**, 3, 339–57.
- 24 WINNER, E. and COOPER, M. (2000). 'Mute those claims: no evidence (yet) for a causal link between arts study and academic achievement', *Journal of Aesthetic Education*, **34**, 3–4, 1–65.
- 25 SHARP, C., BENEFIELD, P. and KENDALL, L. (1998). *The Effects of Teaching and Learning in the Arts: A Review of Research*. London: QCA.
- 26 DAVID, T. (2003). *What Do We Know about Teaching Young Children? A Professional User Review of UK Research Based on the BERA Academic Review 'Early Years Research: Pedagogy, Curriculum and Adult Roles, Training and Professionalism'*. Nottingham: British Educational Research Association.
- 27 DOWNING, D., JOHNSON, F. and KAUR, S. (2003). *Saving a Place for the Arts? A Survey of the Arts in Primary Schools in England* (LGA Research Report No. 41). Slough: NFER.

About the author

Caroline Sharp is a Principal Research Officer in the Department of Professional and Curriculum Studies at the National Foundation for Educational Research. Her research interests are in early childhood, arts and creativity and study support.

Address for correspondence

c.sharp@nfer.ac.uk

Copying permitted

The NFER grants to educational institutions and interested bodies permission to reproduce this item in the interests of wider dissemination.

Related websites

www.ncaction.org.uk/creativity

The Creativity website from the QCA is the result of a project to research creativity in schools. It offers practical ideas on how to promote pupil's creativity, thinking and behaviour. The QCA invites schools to contribute to the ongoing work of the project, go to by sending examples and telling them how pupils' creativity has been promoted in the classroom and school.

www.creative-partnerships.com/

Creative Partnerships is a government-funded national initiative, established to develop schoolchildren's potential, ambition, creativity and imagination. The initiative provides school children across England with the opportunity to develop creativity in learning and to take part in cultural activities.

Creative Partnerships does not fund projects but aims to establish collaborative partnerships to enable the development of projects that reflect the interests, specialisms and shared vision of those involved.

www.refocus-cambridge.co.uk

Refocus Cambridge and Cambridge Centre for Curiosity and Imagination in collaboration with the Kaetsu Educational and Cultural Centre host the 100 languages of children exhibition.

ERIC (Educational Resources Information Center, US) publishes digests on all aspects of education. The following may be of interest for further reading on the topic of creativity and young children.

www.ericfacility.net/databases/ERIC_Digests/ed306008.html

Moran, James D., III (1998). Creativity in Young Children. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education (ED306008). This digest explores factors that affect

creativity in children and techniques for fostering this quality. The need to study creativity, and the definition of creativity within a developmental framework, are also discussed. (Original abstract)

www.ericfacility.net/databases/ERIC_Digests/ed389474.html

Edwards, C.P. and Springate, K.W. (1995). Encouraging Creativity in Early Childhood Classrooms. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education (ED389474). This digest considers both teacher-initiated and child-initiated strategies for enhancing young children's self-expression and creativity. It reports on the Reggio Emilia approach to early childhood education, which considers the arts to be one of the 'hundred languages of children'.
