

Early Childhood and Creativity: a Scoping Exercise – Key Studies

1. Theories and reviews of early childhood and creativity

Authors	Date	Title	Content
Albert, R.S.	1996	Some reasons why childhood creativity often fails to make it past puberty into the real world	Book chapter in Runco (1996), in which the author argues that there is little research evidence for believing that the type and level of creativity we see in childhood are likely to be observed among adolescents and adults.
Athey, C.	1990	Extending Thought in Young Children: a Parent-Teacher Partnership	Book which discusses early childhood education models such as High Scope, and contains an analysis of 5000+ observations of children's writing and art.
Beetlestone, F.	1998	Creative Children, Imaginative Teaching	This book considers what creativity means in both practical and theoretical terms for children and primary teachers. Contains chapters on creativity and learning, the creative process and product, creativity and the imagination, and creativity and originality.
Berk, L.E.	1994	Vygotsky's theory: the importance of make-believe play	A research review, covering the development and significance of make-believe and imaginative play.
Cane, F.	1999	The artist in each of us	Presents a developmental view of the creative process based on Montessori principles. Discusses the preschool child's need for activity, exploration at an individual pace, and connection between the self and the universe.
Cesarone, B.	1999	Benefits of art and music education	Annotated bibliography of 13 documents and journals from the ERIC database which discuss the benefits of art and music education for children's development and academic achievement. Includes references to art and music education Internet sites.
Dunnahoo, D.E.	1993	Re-thinking creativity: a discipline-based perspective	Reviews the place of creativity in the two major approaches to arts education: creative self-expression, and discipline-based arts education (DBAE). Asserts that critics of DBAE argue that it is dry and does not allow for creative expression. The author rejects this and claims that properly implemented DBAE produces intellectual and emotional excitement among children.
Dust, K.	1999	Motive, Means and Opportunity: Creativity Research Review	Reviews research and theoretical literature on creativity related to the identification of and support for highly creative young people.

Edwards, C., Gandini, L. and Forman, G.	1998	The Hundred Languages of Children: the Reggio Emilia Approach. Advanced Reflections.	Book (Second Edition). H. Gardner and D. Hawkins provide reflections in the first two chapters. Then four major sections. Part One: What can we learn from Reggio Emilia? Part Two: six interviews with RE educators. History, ideas, and basic philosophy, an interview with Loris Malaguzzi. Role of various partners. Part Three: seven essays on theory and practice of RE. Part Four: examines the extension of the RE approach to the USA.
Eisner, E.W.	1986	The role of the arts in cognition and curriculum	In this article, Eisner argues that the arts are cognitive activities. In relation to education, Eisner considers the concept of talent as a dichotomous trait to be unhelpful and serving as an excuse for absent opportunity. Schools should ensure that all pupils have opportunities in all the arts, and should aim to develop pupils' literacy in different forms of expressive representation.
Ellermeyer, D.	1993	Enhancing creativity through play: a discussion of parental and environmental factors	A five page article in Early Child Development and Care. The author is based in Switzerland. NOTE: no further information.
Firlik, R.J.	1994	Reggio Emilia, Italy Preschools: the Synergies of Theory and Practice	Paper which draws on observations from Reggio Emilia and links their practices with the theoretical constructs of Dewey, Susan Isaacs and Howard Gardner. Argues that Dewey's influence shows in RE pre-schools' concern and respect for the individual child. Isaac's influences can be seen in RE's use of movement to interpret learning and express understanding. Gardner's theory of MI is reflected in the emphasis on in-depth student projects and on the development of the self.
Gardner, H.	1993	Frames of Mind: the Theory of Multiple Intelligences	Book in which Gardner sets out his theory of multiple intelligences.
Gardner, H.	1999	Intelligence Reframed: Multiple Intelligences for the 21 st Century	In this book Gardner reports on the development of the theory of MI since the publication of Frames of Mind. He introduces the possibility of three new intelligences (naturalist, spiritual and existential). Gardner distinguishes between someone who is intelligent and someone who is truly creative. Drawing on the work of Csikszentmihalyi, he argues that the label of creativity should be reserved for very few individuals whose contribution has changed a domain ("Big C" creativity").
Gwathmey, E. and Mott, A-M.	2000	Visualizing experience	Book chapter in which the authors discuss children's natural affinity with art and the central role art can play in early education. They argue that the visualisation of experience through art can enrich and deepen children's ability to make meaning from their lives. NOTE: it is not clear whether this is research-based or how it relates to creativity.

Hamblen, K.A.	1993	Theories and research that support art instruction for instrumental outcomes	Describes theoretical rationales for the cognitive transfer from learning in (visual) art. Looks at research findings and programmes that support relationships between art instruction and academic achievement. Concludes that studying art can promote creative behaviours, critical thinking, and academic achievement.
Hill, R.	1992	Finding creativity for children	Paper considering the nature of creativity and how it can be enhanced. Many definitions of creativity focus on two of its aspects, novelty and usefulness. Some definitions stress one or other of these aspects. M. Rhodes (1961) sees four components of creativity: people – their traits and characteristics; the thinking processes they use; the products or outcomes they produce; and the nature of the environment in which creativity occurs. Considers the implications for teachers.
Katz, L.G. and Cesarone, B.	1994	Reflections on the Reggio Emilia Approach. Perspectives from ERIC/EECE	This is a collection of seven papers which discuss the teaching approach of Reggio Emilia. Includes a discussion of the problems faced by US educators trying to adapt the RE approach and a contribution by teachers in St Louis who attempted to implement the approach in their classrooms. Other contributions include: a discussion of the similarities and differences in the ways that teachers in Italy and the US work; the role of graphic ‘languages’ in children’s learning; staff development in RE; a case study of an integrated arts approach in a pre-primary school in RE. The final paper beliefs of teachers in Italy and the US about their roles and the nature of children as learners are compared.
Meador, K.S.	1992	Emerging rainbows: a review of the literature on creativity	This review of research into creativity in preschool children examines: Shmukler’s creative elements model; the importance of play and its relation to creativity; individual differences including gender, play disposition, and language facility; creativity training; and identifies the need for further research. The author concludes that creativity in preschool children is positively affected by opportunities for free play, exploration and imaginative play; and that it is possible to enhance young children’s creative production.
Mellou, E.	1994a	The case of intervention in young children’s dramatic play in order to develop creativity	This author, based at the University of Bristol, reviews research on adult intervention in children’s dramatic play, citing theorists and researchers who believe that intervention is not useful at all. Concludes that most research supports appropriate intervention in children’s dramatic play to enhance creativity.

Mellou, E.	1994 b	The values of dramatic play in children	This article reviews research on dramatic play. The author concludes that dramatic play: provides personal expression and catharsis of inner desires; helps the child to distinguish between reality and fantasy; provides for children's social adaptation; provides a dynamic for learning; and enhances creativity through interaction, transformation and imagination.
Mellou, E.	1996	Can creativity be nurtured in young children?	This article draws on research to demonstrate that creativity can be nurtured in young children. The author argues that schools can achieve this through: a continuous enrichment of their environment; programmes for developing creative thinking; and creative teachers and creative ways of teaching.
Montessori, M.	1995	Creative ability in childhood	A lecture in which Maria Montessori discusses the creative ability of young children, asserting that educators must cultivate children's creative potential. (No further details.)
Prentice, R	2000	Creativity: a reaffirmation of its place in early childhood education	The author, based at the London Institute of Education, looks at the current debate in England. Discusses the definition and nature of creativity, and the conditions for fostering creativity in young children.
Queen, K. and McCallister, C.	1991	Theoretical perspectives on teaching the young creatively gifted or talented child	Outlines a theoretical model for the teaching of gifted young children. The assumptions are: that creativity is continuous, not dichotomous; creativity is a dynamic, interactive, and multidimensional process; creativity may encompass internationality but requires awareness; and creativity is a higher order intellectual process. The aspects of the model which are integral to the creative process are biological; psychological; sociological; and knowledge (both conceptual and strategic), all resulting in a creative product or performance. The application of the model to a disadvantaged preschool setting, called Kaleidoscope, is described.

Rich, M.C.	1997	The influence of cognitive psychology on art education as seen in the work of Howard Gardner and Elliot Eisner	This dissertation examines the influence of educational psychology on art education. The century-old debate in art education between those wanting more scientific methods of teaching and assessment and those wanting a more child-centred education appears in the contemporary work of H. Gardner and E. Eisner. It is the educator, Eisner, who wants more discipline-oriented curricular (DBAE), while the cognitive scientist, Gardner, calls for more child-centred education (Arts PROPEL). Both programmes use the rhetoric of cognitive science, but close examination shows the two programmes to be quite different, with Arts Propel being based on theories found in cognitive science, while DBAE is more closely aligned with behaviourism. The author discusses other points of similarity and difference between the two programmes.
Robinson Report	1999	All Our Futures: Creativity, Culture & Education	Major report of the National Committee on Creative and Cultural Education. Defined creativity as: 'Imaginative activity fashioned so as to produce outcomes that are both original and of value'. Identified four features of creativity: using imagination; pursuing purposes; being original; and judging value. The report argues that creativity is diverse and multifaceted. Teaching for creativity includes encouraging children to become self-directed learners; identifying individual pupils' creative abilities; and fostering creative skills.
Runco, M.A.	1990	The divergent thinking of young children: implications of the research	This short article discusses the impact of divergent thinking and ideational talent research on understanding young children's creativity. The author explains that while divergent thinking is not synonymous with creative thinking, tests of divergent thinking can be used to predict creative performance. Looks at the use of particular topics to stimulate divergent thinking, the influence of the classroom setting, and feedback from adults. Concludes that: unfamiliar stimuli are more likely to stimulate original ideas and that children are more likely to think divergently when intrinsically motivated. Suggests that teachers are powerful models and have a key role in reinforcing divergent thinking; and suggests that teachers and parents should set open-ended tasks, and explicitly encourage strategic thinking, flexibility and originality.

Runco, M.A.	1996	Creativity from Childhood Through Adulthood: the Developmental Issues	The chapters in this book emphasise the different periods of development. There is a argument for the creativity in young children, another for adolescence, and another for adulthood. Continuities and discontinuities across the life span are described, as are numerous developmental issues, such as the role of knowledge and experience, and the relationships between creativity and play. Some theorists argue that individuals do not demonstrate true creativity before adolescence. Cognitive and emotional mechanisms of creative thinking vary in different chronological stages. The conclusion to the book suggests that we must understand the development of creativity or we will not really understand creativity itself.
Russ, S.W.	1996	Development of creative processes in children	This chapter in Runco (see above) reviews the major processes in children that should be predictive of adult creativity. Argues that children's play (especially pretend play) is a key facilitator of creativity. Presents a three-part model of affect and creativity which highlights the contribution of: personality traits (such as tolerance of ambiguity and self-confidence); affective processes (such as tolerance of anxiety and pleasure in challenge); and cognitive abilities (such as divergent thinking and task persistence). The second part of the chapter presents findings from research using the Affect in Play Scale (APS) to measure creativity. The author concludes that developing programmes to help children learn to engage in imaginative play would be a good investment in the creative future of children.
Scope, E.E.	1999	A meta-analysis of research on creativity: the effects of instructional variables	Meta-analysis looking at the effects of instructional variables on increases in creativity in children (pre-school to high school). Variables were: time spent on instruction, reviewing previous lessons, structuring new information, questioning students, responding to questions and comments, and independent practice. The hypothesis was that presence of these variables would increase the creativity scores of the students. Extensive search of the literature produced studies ranging from creativity training, problem solving instruction, computer programming, Computer Aided Instruction, foreign language instruction, art education, puppet play, story telling, and imagery and visualisation. Found an overall positive effect of instruction on creativity. There was a modest positive correlation between independent practice and creativity. The hypothesised links between time on instruction, structuring, reviewing, questioning, and responding were not supported by the data. It is likely that there were additional variables or combinations of variables which accounted for the increases in creativity in this study. A qualitative, exploratory review of

			three outstanding studies included in the meta-analysis revealed that the most successful treatments were developmentally appropriate, had high levels of teacher-student interactions, had high treatment compliance, and were motivating for the students.
Sharp, C., Benefield, P. and Kendall, L.	1998	The Effects of Teaching and Learning in the Arts: a Review of Research.	Review of research literature on the effects of arts teaching and learning. Focuses on 22 studies and reviews. Only one study originated in the UK. Most included school-age children (i.e. five years and over). Few of the studies measured creative thinking, and the research evidence was not strong enough to conclude that involvement in arts activities leads to enhanced creative thinking.
Sternberg, R.J. and Spear-Swerling, L.S.	1996	Teaching for Thinking	Book presenting Sternberg's triarchic theory of thinking and explaining its application in the classroom. The theory proposes that thinking may be categorised into one of three basic kinds: analytical; creative; and practical. Creative students are characterised as liking to come up with their own ideas rather than following directions, and as natural 'ideas' people. Students possessing analytic skills are most likely to achieve high grades at school, but teachers are less likely to recognise and reward students with creative and practical abilities. Argues that teachers should combine elements of didactic (lecture), interactive (fact-based questioning) and dialogical (thinking-based questioning). Dialogical teaching 'best teaches children how to think effectively'.
Tegano, D.W., Moran, J.D. and Sawyers, J.K.	1991	Creativity in Early Childhood Classrooms	Book in the National Education Association Early Childhood series. Considers various definitions and components of creativity in young children, distinguishing creativity from concepts of intelligence and talent. Has a section on research into creativity in schools and offers guidance to teachers on fostering creativity.
Torrance, P.E.	2000	Preschool creativity	Book chapter in which Torrance discusses the importance of testing the creativity of pre-school children. He gives a history of creativity testing, provides a definition of creativity, and compares various tests.
Winner, E. and Cooper, M.	2000	Mute those claims: no evidence (yet) for a causal link between arts study and academic achievement	Meta-analysis of the literature on the effects of arts education and academic achievement, including studies of pupils of various ages (pre-school to college students). Found support for reliable causal links between arts involvement and achievement in three areas (listening to music and spatial-temporal reasoning; learning to play music and spatial reasoning; and classroom drama and verbal skills). Found no reliable causal links in seven areas, including: 'Arts-rich education and creative thinking'.

2. Research studies

Authors	Date	Title	Content
Anderson, A. and Yates, G.C.R.	1999	Clay modelling and social modelling: effects of interactive teaching on young children's creative artmaking	Intervention study in which 28 six-year olds were taught skills involved in artistic claywork using the principles of social modelling and cognitive learning. The study took place in a classroom situation, over a series of six art lessons. A further 28 students, serving as controls, were taught the normal art curriculum. The students' clay models were photographed and judged by three experts (professional artists familiar with children's art work), blind to the treatment conditions. The cognitive social learning group showed strong gains on measures of creativity as defined by approximation to a three-dimensional form: technical competence; decorative competence; and aesthetic appeal. The control group failed to show significant change in their rated creativity.
Angeloska-Galevska, N.A.	1996	Children's Creativity in the Preschool Institutions in Macedonia	This research project investigated the conditions related to creativity development in preschools in Macedonia, with a hypothesis that optimal conditions for such development have not been achieved there. Categories of creative conditions were: the curriculum, teaching style, available materials, social relations between teachers and children, and teachers' attitudes towards creativity. Content analysis, observation and a survey confirmed the hypothesis.
Baltzer, S.	1988	A validation study of a measure of musical creativity	Study looked at the reliability of the Measures of Creativity in Sound and Music (MCSM), a test developed by Celia Wang. Compares the MCSM scores with children's academic achievement scores (by sex and age) and with teachers' ratings of the children's creativity. Concludes that research is still needed to define a theory of musical creativity, define its components, and create measuring instruments. NOTE: no ages of children given, apart from elementary, so may be outside our age-range.

Berti, A-E. and Freeman, N.H.	1997	Representational change in resources for pictorial innovation: a three-component analysis	The authors argue that representational development can be assessed by whether children can break routine procedures to draw something novel. In five interventions, a total of 259 children aged 5 to 9 years were given an open-ended challenge to alter their pictorial routines e.g. draw a man who doesn't exist, a man with something missing. They were also given specific tasks e.g. draw a two-headed man, a man who is both a man and an animal etc. Found that older children 1) made spontaneous innovations that were obtainable from younger children under specific instructions. 2) were relatively self-reliant, whereas younger children relied more on external models. 3) did more advanced planning. 4) monitored more closely their emerging drawings. It has been suggested that there are two resources for innovation: early capacity to be reactive to external models, and later flexibility enabling children to be proactive in the absence of models. The authors suggest a third resource resides in the child's use of their framework theory of possible objectives. The results of the experiments suggest that the use of external models plays an early inspirational role but also masks the extent of an internal resource.
Cacciari, C., Levorato, M-C. and Cicogna, P.	1997	Imagination at work: conceptual and linguistic creativity in children	The authors examine two aspects of preschoolers' and 5 th graders' creative functioning: drawing imaginary objects/processing existing idioms, and coining new figurative expressions. Looked at whether an imaginal activity, such as drawing imaginary artefacts and animals, is constrained by and predicable on the basis of everyday categorisation processes, or whether children are able to go beyond the everyday world and imagine alternative scenarios. NOTE: Details of results are not given in the abstract.
Catchings, M.H. and MacGregor, K.	1998	Stoking creative fires: young authors use software for writing and illustrating	This study investigated the effects of computer paint programs. The authors observed two groups of 1 st and 4 th graders: one using crayons and word processors; the other using a paint program and word processors. The paper discusses student collaboration, visual/verbal literacy, creativity, and the advantages and disadvantages of various paint programs.

Daugherty, M. and Logan, J.	1996	Private speech assessment: a medium for studying the cognitive processes of young creative children	Intervention study which examined the relationship between private speech metacognitive content and creativity in 22 children aged 5 and 6 years. The children were assessed using the Torrance Test of Thinking Creatively in Action and Movement on four attributes of creativity: fluency, imagination, originality, and an average score. Their private speech during sorting/categorisation tasks was categorised into off-task, and a range of task behaviours. Results supported previous work by the author and showed that 'solving' speech strongly predicted outcomes on the creativity test in the areas of fluency, originality, and average creativity abilities.
Doxey, C. and Wright, C.	1990	An exploratory study of children's music ability	US study which examined the relationship between children's musical ability and the physical and social environments of their homes and school, as well as the child's characteristics of creativity and cognition. Sixty children aged 4-6 and their parents participated in the study.
Figueiredo, E.L. and Sisto, F.F.	1997	Opening of schemes and the expression of knowledge structures in the construction of novelty: a developmental study of Brazilian and American children	This study set out to examine the evolution of creative thought in children. The data came from 200 students from the United States and 200 from Brazil. Each of the 10 age groups (from 4 to 13 years old) consisted of 40 subjects. Students were selected on their involvement in a problem-solving musical activity that led to the construction of a story. They were studied individually in sessions that lasted no longer 45 minutes. Analysis of the interviews showed how various observable responses were interwoven. Three distinct levels or phases were defined, based on the descriptions of movements noticed: Initial (Level 1); Intermediate or Transitional (Level 2); and Final (Level 3). From this phase analysis, the characteristics that defined creative functioning were identified. In both cultures there were fundamental mechanisms that led to the production of novel ideas in the logical problem-solving process. Creativity was defined as the evolution of creative thought itself. Phase criteria were universal and independent of cultural interference, and results indicate that the subjects' behavior was not structured by the environment, but by the subjects themselves.
Louis, B.	1984	Cognitive development through art instruction	This article describes studies designed to identify art and art-related experiences which enhance cognitive development among kindergarten and first grade children. The studies focus on conceptual thinking through transfer of image, creative thinking through working with clay, oral language through painting, and letter recognition and writing through the manipulation of 3-D letterforms.

Meador, K.S.	1994	The effect of synectics training on gifted and nongifted kindergarten students	Comparison of 107 kindergarten children who were either in a gifted program, or not, and received, or did not receive special training in synectics (a strategy to facilitate creative thinking). Found significant improvement in creativity scores for the experimental synectics group but not the control groups. No significant differences were found between the gifted vs. non-gifted children.
Mendecka, G.	1996	Development of creativity through performing arts	Intervention studies carried out by two kindergarten teachers using the performing arts. In the first experiment the imagination of 25 children (aged six) was stimulated by puppet theatre performed for them in kindergarten. The children were given free access to the props for play. The second experiment worked with 20 children aged five and 6 years old and examined the effect of music on their artistic expression. The results showed that there was a substantial increase in the children's ability to fantasise. The effect of the music was expressed in art, and the children who had heard the music drew more colourful and detailed objects.
Ogletree, E.J.	1991	Creativity and Waldorf Education: a Study	Study of Waldorf schools and public schools in Germany, Scotland and England. 1165 students from 3 rd through 6 th grades took the Torrance Test of Creative Thinking Ability which measures fluency (the number of ideas produced), flexibility (the different categories), originality, and elaboration (the development of an idea). Waldorf students had higher creativity scores than pupils in mainstream schools. NOTE: at least some of these pupils were older than our target age-range.
O'Neill, S. and Shallcross, D.	1994	Sensational thinking: a teaching/learning model for creativity	An evaluation of a five-step intervention, called 'Sensational Thinking' which incorporates: readiness; reception; reflection; revelation; and re-creation activities. Worked with four kindergarten classes. Experimental groups showed increased creativity over the control groups in solving paradoxical problems. The authors argue that this study supports the premise that every person has creative potential.

Plucker, J.A.	1999	Is the proof in the pudding? Reanalyses of Torrance's (1958 to present) longitudinal data	This study investigated the predictive validity of divergent thinking tests for creative achievement by reanalysing the data from the elementary school longitudinal study (1958 to 1999) by Torrance. The sample comprised 212 elementary students with an average IQ of 121. Results suggest that just under half the variance in adult creative achievement is explained by divergent thinking test score, with the contribution of divergent thinking being more than three times that of intelligence quotients. However, comprehensive longitudinal models of creative achievement based on current creativity and cognitive theory have yet to be empirically validated. NOTE: the children appear to be older than our target age-group, but this may be useful as background theory.
Rostan, S.M.	1997	A study of young artists: the development of artistic talent and creativity	The author explored the development of talent and creativity in a group of 60 children aged from kindergarten to 5 th grade. The children were videotaped while they created solutions to two artistic and three puzzle-like activities. Their behaviour provided scores on problem finding, evaluation and ideation. Three artists scored the drawing tasks on knowledge and ideation. Age was correlated with knowledge in the drawing situations, but the relations between age and problem finding, ideation, and evaluation depended on the variable used, the problem situation, or both.
Seitz, J.A.	1997	The development of metaphoric understanding: implications for a theory of creativity	Cross-sectional study assessing the development of the ability to comprehend and use metaphor in 40 children (aged four years) and 40 (aged six years). Children were presented with a match-to-sample metaphor comprehension task. This comprised six different types of metaphorical relations in both pictures and words (colour, shape, physiognomic, cross-modal, psychological-physical and taxonomic matches). Two hypotheses were tested: 1) that metaphoric comprehension develops from a reliance on biologically constrained categories to a dependence on more socially constructed ones, and 2) that pictures would aid the comprehension of metaphor over words in the younger group. Overall, younger children did significantly better in the pictorial medium, suggesting a picture superiority effect for the more perceptual metaphorical relations (perceptual, physiognomic), whereas older children showed a word superiority effect for more conceptual metaphors (psychological-physical, taxonomic). The implications for a theory of creativity are discussed.
Simpson, P.	2000?	Arts Provision for Under-Fives in England	This unpublished report describes the results from a survey of 96 arts organisations

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Ulfarsdottir, L.O. and Erwin, P.G.	1999	The influence of music on social cognitive skills	<p>Intervention study by researchers at University College Northampton, carried out in Iceland. Looked at the effects of music therapy on alternative solutions thinking (AST) and consequential thinking (CT), both of which are thought to underpin social adjustment. Experimental group were 27 pre-school children receiving short-term music therapy. Two control groups: 33 children receiving no treatment, and 16 in a pre-school with an established musical enrichment programme. All children completed a pre-school interpersonal problem solving test. Results showed no significant differences between the control and the intervention groups on either the pre- or post-test assessments. However, a seven month follow-up showed significantly greater improvements in the AST and CT scores for the children who had music therapy compared with the non-treatment controls. The children who had attended the musically enriched pre-school had highly significant differences in the improvement of both AST and CT scores compared with the non-treatment group and the music therapy intervention group.</p> <p>NOTE: population may be children with special educational needs.</p>
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3. Theory into practice

Authors	Date	Title	Content
Cadwell, L.B.	1997	Bringing Reggio Emilia Home: an Innovative Approach to Early Childhood Education	Author was one of three US educators who spent a year in Reggio Emilia. This book reports on how she incorporated her experiences into a kindergarten in St Louis over a four year period.
Craft, A.	2000	Creativity Across the Primary Curriculum: Framing and Developing Practice	Book in which the author sets out to encourage teachers to foster imagination and creativity in all aspects of children's learning. Chapter 1 places 'possibility thinking' at the heart of creativity. Subsequent chapters include: a discussion of the nature of creativity; the opportunities for creative development in different subject areas; personal and professional development for teachers; developing a vision for change in education; and the need for education to foster compassion and humanity alongside autonomy and creative decision-making.
David, T.	1999	Teaching Young Children	A book of papers by practitioners from the Centre for International Studies in Early Education, at Christ Church, Canterbury. Includes a paper on imagination, play and the arts.
Duffy, B.	1998	Supporting Creativity and Imagination in the Early Years	This book uses examples of young children's development and their growing competence to show their creativity and imagination. Sections include: 'What are creativity and imagination and why are they important?', 'How do they develop?' and 'Theory into practice'.
Edwards, C.P. and Springate, K.W.	1995	Encouraging Creativity in Early Childhood Classrooms	An ERIC digest which describes teacher and child initiated strategies for enhancing young children's self-expression and creativity. Argues that young children are: capable of higher-level thinking skills; need to express ideas through different expressive avenues and media; learn through meaningful activities integrating different subject areas; and benefit from in-depth and long-term projects.
Gillespie, C.W.	2000	Six Head Start classrooms begin to explore the Reggio Emilia approach	Six classrooms in Iowa adopted some of the methods used in Reggio Emilia. The research project reported here documented the process of change. The initiative involved 21 staff and 100 children and was conducted over six months. Staff attended a series of workshops. Areas which staff explored and developed included the environment, the daily schedule, documentation, child-initiated projects, and collaboration. Head Start and RE approaches are described and the report gives details of what was changed in the Head Start Centres and why.

Gura, P., Selleck, D., Penn, H., Drummond, M.J. and Pound, L.	1997	Reflections on Early Education and Care Inspired by Visits to Reggio Emilia, Italy	Set of papers by a group of English educators after visiting the infant and pre-schools of RE. Includes a contribution by D. Selleck on baby art. NOTE: No further information.
Northern Arts	1998	“If The Eye Jumps Over the Wall...”. Notes, Documents, References from the Northern Arts Early Years Conference, Hexham, June 1998	A 46 page conference report from Northern Arts. This conference was part of a two-year programme of developing creativity with children under five. Key note speakers included Peter Dixon, Pauline Tambling, and Fred Segwick. Workshops included one on the RE pre-schools, and one by Dorothy Selleck on babies as artists.
Phillips, L.	2000	Storytelling: the seeds of children’s creativity	The author argues that storytelling is an effective educational tool that features in all cultures, but today it is rarely heard in conventional learning environments. The paper describes an Australian educational programme in which three- to five-year-olds explored the value and potential of storytelling over a four-week period.
Schiller, W.	1993	Issues in expressive arts curriculum for early childhood – an Australian perspective	Whole issue of Early Child Development and Care (Vol. 90) NOTE: it is not clear how much of this is relevant to creativity – no further information.
Siraj-Blatchford, J.	1996	Creativity, problem solving and constructivism	A five-page report from a workshop at the International Early Years Conference, Warwick University. The group shared examples of good educational practice, and several vignettes of constructivist educational interactions between young children and teachers are given. NOTE: difficult to know how much information is given in this short article.