#### RESEARCH ON CURRICULUM AND PEDAGOGY FOR THE EARLY YEARS

Beecher, B. & Arthur, L. 2001, *Play and Literacy in Children's Worlds*, Primary English Teaching Association, Newtown, Australia.

This book shows how educational settings can extend learning through play by recognising the literacy dimensions inherent in different types of play, and by building on the unique understandings that children develop in their homes and communities. Early childhood educators are offered new ways to organise environments and routines in support of play-based literacy learning; primary teachers are alerted to the potential of children's own interests to provide the literacy-rich contexts that motivate deep investigation and learning.

Bertram, T. & Pascal, C. 2002, "Early Years Education: An International Perspective", Qualifications and Curriculum Authority, UK (webpage) <a href="http://www.inca.org.uk/pdf/early\_years.pdf">http://www.inca.org.uk/pdf/early\_years.pdf</a> [accessed 12 December 2005].

The Qualifications and Curriculum Authority (QCA) has responsibility in England to monitor and evaluate the early years curriculum and, as part of this program, commissioned an international review of the early years curriculum in 20 countries. The review was in two parts: firstly, the production of an interim report which formed the basis for a discussion of key issues across the participating countries at an international seminar; and secondly, the production of a final report, which summarises international perspectives on the early years curriculum and presents an agenda for future action.

The interim report and the international seminar highlighted four key areas, which each have issues for further reflection and development: Curriculum; Pedagogy, qualifications and staffing; Continuity; Quality assurance and assessment.

Bredekamp, S., Knuth, R.A., Kunesh, L.G. & Schulman, D.D. 1992, "What does research say about early childhood education?" *NCREL*, Oak Brook, <a href="http://www.ncrel.org/sdrs/areas/stw\_esys/5erly\_ch.htm">http://www.ncrel.org/sdrs/areas/stw\_esys/5erly\_ch.htm</a> (webpage) [accessed 12 December 2005].

This article examines developing a program that includes curriculum and assessment based on the needs of young children. The authors look at ways schools can change to become ready for children, and the conditions necessary for change. Suggestions are made for how teachers, parents and community members can work together to meet children's needs. Underpinning the suggestions are the principles of Piaget, Vygotsky, Erikson and other early childhood theorists. This article also discusses how uniform age-related expectations can limit curriculum and learning.

#### Copley, J. 2000, The Young Child and Mathematics, NAEYC & NCTM, USA.

This book offers classroom vignettes that exemplify children engaging with mathematical ideas as well as activities and strategies that teachers have found useful to promote mathematical learning in the early years.

Dahlberg, G., Moss, P. & Pence, A. 1999, *Beyond Quality in Early Childhood Education and Care: Postmodern Perspectives*, Routledge, Falmer, Taylor and Francis Inc., Philadelphia.

Working with postmodern ideas, *Beyond Quality in Early Childhood Education and Care* questions the search to define and measure quality in the early-childhood field, and its tendency to reduce philosophical issues of value to purely technical and managerial issues of expert knowledge and measurement. The book relates issues of early childhood to the sociology of childhood, philosophy, ethics, political science and other fields, and to an

analysis of the world we live in today. It places these issues in the global context and draws on work from Canada, Sweden and Italy, including the nurseries in Reggio Emilia.

Department of Education, Training and Employment (DETE), South Australia 2002, School entry assessment: Planning for learning: For learners in South Australian public schools — English literacy and numeracy, part A: Information for educators, Revised edition, DETE Publishing, South Australia

This booklet provides information about the baseline assessment in literacy and numeracy. It is one component of the School Entry Assessment resource package to be read in conjunction with the learner record. The document supports educators to collect information about the knowledge, skills and understandings children bring to school and to use this information as they plan programs to meet the needs of each child.

Department of Education, Training and Youth Affairs (DETYA) Indigenous Education Branch 2001, *Preschool Profile: notes for early childhood educators to assist in monitoring and reporting on the literacy and numeracy skills of children in the preschool/kindergarten/child care centre years*, JS McMillan, Melbourne.

The Preschool Profile is a guide that preschool teachers can use to measure the literacy and numeracy awareness and understanding of Indigenous and non-Indigenous preschool children, and therefore ascertain their level of preparedness for school in these particular areas.

Department of Education, Training and Youth Affairs (DETYA) 1998, 100 children go to school: Connections and disconnections in literacy development in the year prior to school and the first year of school: Volume 1, Clearinghouse for Children's Literacy Research, Griffith University Campus, Brisbane, Australia (available at <a href="http://www.gu.edu.au/school/cls/clearinghouse/content\_1998\_100children.html">http://www.gu.edu.au/school/cls/clearinghouse/content\_1998\_100children.html</a> [accessed at 12 December 2005]).

The activities, findings and recommendations of the project, Connections between literacy development in the year prior to school and the first year of schooling, are outlined in a three-volume report. Volume 1 provides the project overview, case summaries and descriptions of what five-year-old and six-year-old children know and are able to do regarding literacy. The summary of volume 1 describes children's connections and disconnections during their transitions from home to school.

Diaz, Jones, Arthur & Beecher, 2000, *Multiple literacies in early childhood*, paper delivered at The Australian Association for Research in Education (AARE), Sydney University.

This paper argues that "early childhood educators need to go beyond developmentalist and constructivist models of literacy to fully embrace more contemporary frameworks of poststructural and critical theory, which emphasise literacy as social and cultural practice". This paper also examines the impact of popular culture on children's everyday experiences.

Dockett, S. & Perry, R. 2001, "Starting School: Effective Transitions", *Early Childhood Research and Practice*, vol. 3, no. 2.

This paper reports on the Starting School Research Project based at the University of Western Sydney. The project investigated the perceptions and expectations of all those involved in young children's transition to school — children, parents and educators. An important finding was that: what the adults (parents and educators involved in the transition to school) considered important varied considerably from what the children considered important. Young children focus mainly on rules, disposition toward school and friendships. The table below describes the different categories of perceptions and expectations.

Children	Parents	Early childhood educators
Rules	Social adjustment	Social adjustment
Disposition	Educational environment	Disposition
Social adjustment	Disposition	Skills
Knowledge	Physical	Educational environment
Physical	Family	Physical
Skills	Skills	Knowledge
	Rules	Family
	Knowledge	Rules

The authors state that the transition to school is a community issue and a community responsibility. The authors put forward guidelines for the effective transition of children to school. The theoretical bases for the guidelines are provided in the paper.

The researchers warn against measuring children's performance on a series of isolated skills in order to gauge their readiness for school. There is growing research evidence that successful transitions to school are based substantially on social skills and responsive relationships. A positive disposition toward school by all adults and children has been identified as one of the key factors in successful transitions to school. Children should be actively involved in planning for the transition to school.

# Dunn, J. 2005, "Building drama worlds – Four steps to creating literacy rich dramatic play environments", *Every Child*, vol. 11, no. 2.

This brief article provides teachers with four steps and strategies to create dramatic play spaces with children that incorporate the structures and strategies of drama education. This is a practical and useful article for enhancing dramatic play in the classroom.

### Eggers, T. 2004, "Hands-on science for young children", Earlychildhood.com, www.earlychildhood.com (website) [accessed 12 December 2005].

This article details how fundamental scientific concepts and skills develop, and how informal learning experiences can be developed into teachable moments. The natural integration of science and mathematics in early childhood learning is discussed briefly. The importance of encouraging the inquiry process is highlighted and supported by the perspectives of some early childhood theorists.

### Fleer, M. 2002, "Sociocultural Assessment in Early Years Education – Myth or Reality", *International Journal of Early Years Education*, vol. 10, no. 2.

Fleer writes about the mismatch between the sociocultural perspectives of teaching and learning and those of assessment, especially in early years education. She states that assessment has not had the same level of conceptual change, and while approaches to teaching have moved towards a sociocultural approach, assessment still remains within a Piagetian framework.

Fleer suggests that assessment in a sociocultural context should focus on the child's processes of learning or ability to interact with a more competent adult. She refers to research done in Aotearoa, New Zealand, where assessment of children's achievements developed into *learning stories* and *learning narratives*. Where it was assumed that interaction followed a typical Western schooling context, Fleer found that essential teacher—child interactions were missing from the narratives.

She states that learning is more than an individual construction and this must be represented in the assessment practices. The practices *must be framed to map the transformation of* 

understanding, not some end-point. They must also include teacher interaction and involvement (mediation) as the community of learners move *through* understanding. Fleer concludes that the assessment paradigm must be seen as a dynamic organism that includes the educational setting and its rituals and practices, the values and systems of knowledge which shape children and their views of the world, and the interactional processes (mediation) between children, teachers, objects and systems.

This paper has much to offer on the subject of transition folios.

# Goffin, S. 2000, *The Role of Curriculum Models in Early Childhood Education*, ERIC publications.

This digest discusses the role of curriculum models in early childhood education. The digest discusses comparative evaluations of models and points out that research suggests that models do affect child outcomes. It is suggested that there may be potential negative consequences associated with highly structured, academic preschool programs.

### Hammond, J. 2001, Scaffolding: a focus on teaching and learning in literacy education, PETA, Sydney.

In this easy-to-read publication, chapter 1 defines *scaffolding*, which is essential for early years curriculum perspectives. Hammond suggests that teachers find the concept of scaffolding appealing, as it resonates with their conceptions of successful intervention. She quotes Wood, Brunner and Ross, who were the first to use the term in 1976 as a metaphor to capture support and guidance in learning. Hammond suggests that scaffolding requires clearly articulated goals and learning activities that are structured so learners can extend existing levels of understanding.

Hammond clearly states that Vygotsky never used the word *scaffolding*, but its theoretical base lies within a Vygotskian framework, learning being a social process and occuring in interactions between individuals. Vygotsky's zone of proximal development (ZPD) is central to the notion of scaffolding, Hammond argues, because when students are working within the ZPD, teachers' responses to student activity is more likely to be internalised. Vygotsky's ZPD is the zone between actual development and potential development under adult guidance, or collaboration with peers. It is implied that learning occurs within this zone.

### Henderson, R. 2002, Queensland Year 2 Diagnostic Net and teachers' explanations of literacy failure, ACER, Melbourne.

This article reports research into the ways that early childhood teachers in three schools used narratives of blame as part of the theorisation of literacy failure in relation to the Queensland Year 2 Diagnostic Net. The teacher's narratives clustered into three groups:

- blaming families
- blaming children
- explanation that moved beyond blame and focused instead on teaching.

Henderson argues that despite the range of explanations all teachers involved in the study based their pedagogical decisions on a deficit model of literacy learning. She suggests that a reconceptualisation of literacy that views it as a social practice might assist teachers to rethink intervention.

High/Scope Educational Research Foundation, 2005, "Preschool Child-Initiated Learning Found to Help Prevent Later Problems" (webpage), http://www.highscope.org/Research/curricfactsheet.htm [accessed 12 December 2005].

The High/Scope Preschool Curriculum Comparison Study assesses which of three theoretically distinct preschool curriculum models works best. Conducted by the High/Scope Educational Research Foundation since 1967, the study has followed the lives of 68 young

people born in poverty who were randomly assigned at ages three and four to one of three groups, each experiencing a different curriculum model.

By age 23, the High/Scope and nursery-school groups both had significant advantages over the direct-instruction group.

The findings constitute evidence that early childhood education works better to prevent problems when it focuses not on scripted, teacher-directed academic instruction but rather on child-initiated learning activities. The findings suggest that the goals of early childhood education should not be limited to academic preparation for school, but should also include helping children learn to make decisions, solve problems, and get along with others.

Kagan, S.L., Moore, E., & Bredekamp, S. (eds) 1995, "Reconsidering Children's Early Development and Learning: Toward common Views and Vocabulary", The National Education Goals Panel (webpage),

http://govinfo.library.unt.edu/negp/Reports/child-ea.htm, [accessed 12 December 2005].

This paper extensively examines the five areas for children's early success in school identified by the Technical Planning Group of the United States of America National Education Goals Panel:

- 1. physical wellbeing and motor development
- 2. social and emotional development
- 3. approaches toward learning
- 4. language development
- 5. cognition and general knowledge.

McCain, Hon. M. & Mustard, F. 1999, "Chapter 1: Neuroscience and Early Child Development", *Reversing the real brain drain: Early years study*, Children's Secretariat, Toronto, ON, Canada. (also at <a href="http://www.innocents.ca/earlyyears.htm">http://www.innocents.ca/earlyyears.htm</a> [accessed 12 December 2005])

Chapter 1 of the report to the Ontario Government in 1998 discusses the link between the way a child's brain develops in the early years and the neurological and biological pathways that affect learning, behaviour and health throughout life. Some key points are:

- Early brain development is interactive, rapid and dramatic.
- During critical periods, particular parts of the brain need positive stimulation to develop properly.
- The quality of early sensory stimulation influences the brain's ability to think and regulate bodily functions.
- Negative experiences in the early years have long-lasting effects that can be difficult to overcome later.

While the chapter focuses mainly on brain development in the first three years, it explains the mechanisms by which brain structures develop through the stimulation of sensory receptors. The chapter also comments on the importance of active learning involving sensory pathways for later success in schooling.

MacNaughton, G. 2000, Rethinking Gender in Early Childhood Education, Allen and Unwin, Sydney.

Chapter 11 of this book discusses the reconceptualising of early childhood pedagogies. MacNaughton argues that traditional early childhood discourses mitigate against gender equity in early childhood education. She discusses the discourses by revealing the "truths" through which they are constructed. The truths are constructed at sites through the:

- teacher's gaze
- teacher's reading of the child
- teacher's strategies, including organisation of space and materials
- colleague's gaze
- academy's gaze

- parents' gaze
- teachers' self-gaze.

If early childhood pedagogies are to be reformed, MacNaughton argues, reformation must take place at these sites. The chapter continues to reconceptualise each of the gazes in reasonable, clear ways. While the text is predominately about gender equity, and how feminist poststructuralist concepts and ideas can contribute to reconceptualising gender equity, this chapter in particular has much to say about issues of diversity in early childhood education.

### MacNaughton, G. 1999, "Saris and Skirts: Gender Equity and Multiculturalism", ACECA Research in Practice, Canberra.

MacNaughton's booklet is about how to achieve gender equity in a culturally diverse country, such as Australia, and discusses the challenges. She begins by discussing three not uncommon dilemmas — "That's women's work" (notions about what women do and what men do), "Not my son" (notions of what is appropriate boy behaviour), and "Your pants are showing" (notions of what is not appropriate girl behaviour).

MacNaughton states that three approaches have implications for curriculum practice and can be interrogated to reveal ways they may be reformed:

- Gender tokenism can be replaced with depth, breadth, and complexity in how we talk with children about gender in multicultural contexts.
- Gender homogeneity can be replaced with information for children about multiple ways in which gender and culture are embodied and displayed by people, including the dilemmas this brings.
- Gender alterity can be replaced with replaced with information that gender is problematic in all cultures and not just in non-Anglo-Australian cultures.

She maintains that there are three goals that can help teachers achieve gender equity:

- moving the margins to the centre
- recovering silenced histories and lifestyles
- exposing oppressive, non-democratic practices.

MacNaughton concludes that working respectfully with parents across cultural boundaries is also as important as wanting gender equity in the classroom.

MacNaughton, G. & Williams, G. 1998, *Techniques for teaching young children:* choices in theory and practice, Addison Wesley Longman Australia, Frenchs Forest, NSW.

This excellent book is a practical guide to the effective current teaching practice in early childhood education. The book provides teachers with a broad and diverse range of teaching techniques. The organisation of the book allows teachers to dip in and dip out, trying out different strategies. The techniques range from simple methods, such as describing and listening, to complex techniques like scaffolding. The authors also explore approaches such as the Reggio Emilia Approach, the anti-bias curriculum, High/Scope preschool program, and a strategic approach used in the Department of Early Childhood Studies (University of Melbourne) Children's Centre.

Margetts, K. 2002, "Childcare arrangements, personal, family and school influences on children's adjustment to the first year of schooling", University of Melbourne research paper.

Margetts' study found that there were variations, associated with their child-care histories, in measures of children's adjustment to school. The more out-of-home childcare that children had experienced, the better they were able to adjust to school. Margetts found that children's personal characteristics, family and school factors in the first year of schooling could explain different aspects of social adjustment in the first year of schooling.

National Council of Teachers of Mathematics 2000, *Principles and standards for school mathematics* (webpage), http://www.nctm.org/standards/, [accessed 12 December 2005].

This book describes the standards for mathematics learning in America from preschool through to Year 12. It has detailed information about principles for school mathematics: equity principle, curriculum principle, teaching principle, learning principle, assessment principle and technology principle.

Olsen, A. & Sumison, J. 2000, "Early Childhood teacher practices regarding the use of dramatic play in K-2 Classrooms", The Australian Association for Research in Education (AARE) Conference, Sydney (also at <a href="http://www.aare.edu.au/00pap/ols00513.htm">http://www.aare.edu.au/00pap/ols00513.htm</a> [accessed 12 December 2005].

This is a paper presenting research in investigating dramatic play in a kindergarten classroom in NSW. Dramatic play is defined in the study as a process by which "children assume an identity in role enactment, relating to other persons or objects as if they are other than themselves, or altering time and space in the form of situational transformations" (Johnson, 1998, p. 148). Four teachers were informants for the study, two who used dramatic play and two who rarely used it in their classrooms.

The study found the factors influencing decisions about dramatic play were:

- survival lack of confidence
- control maintaining order
- · commitment to learning rather than teaching
- ability to reflect on practice
- breadth of perception of dramatic play
- perceived time constraints
- perceived Space constraints
- · amount of collegial support
- provision of appropriate resources
- composition of class and children's abilities to be creative, including behaviourmanagement issues
- · expectations of principals
- perceptions of curriculum requirements
- perceived parental expectations.

The study showed that given commitment, a sense of self-efficacy and organisational skills, it is possible to implement play in the early years.

### Pianta, R.C. & La Paro, K. 2003, "Improving early school success", *Educational Leadership*, April.

This paper critiques the use of readiness assessments that are based on children's demonstration of discrete skills. It examines the findings of a national survey of more than 3500 kindergarten teachers. The survey asked the teachers to identify what made the transition to school difficult for some children. The authors conducted a large-scale analysis of whether preschool readiness assessments accurately predict later functioning.

The results "provided little support for the usefulness of preschool assessments as predictors of later functioning". Pianta and La Paro also studied classroom qualities and teaching practices and found that the relationships that children have with adults and other children in families, child care and school programs provide the foundation for their success in school.

Pinnell, G.S. 2001, "Good First Teaching: Making the critical difference for all students", *Successful Reading Instruction*, National Invitational Conference, November 12–13, 2001, Washington DC (also at

http://www.temple.edu/lss/LivingDocuments/PDF/pinnell\_draft.pdf [accessed 21 November 2005])

Gay Su Pinnell provides a succinct but useful guide to effective approaches to early literacy instruction. The paper discusses:

- early understandings needed for literacy
- instructional approaches for early literacy
- effective professional development for good first teaching.

Advice is presented in order of importance. Extracts quoted come from the section on early understandings.

- 1. Children must learn early that written language is meaningful, purposeful, and enjoyable.
- 2. Early readers need to explore many print concepts before they can decode words.
- 3. Essential to early reading is grasping the alphabetic principle that letters represent sound units. In speech, sound units are not isolated; this makes it hard to learn the phonological structure of words.

The paper is useful in providing a clear, sensible overview of teaching beginning readers.

### Pope Edwards, C. & Wright Springate, K. 1995, "Encouraging Creativity in Early Childhood Classrooms", *ERIC/EECE Publications*, December 1995.

This digest looks at teacher-initiated and child-initiated strategies that enhance self-expression and creativity. It looks at the model of Reggio Emilia preschools and how they encourage young children to explore their world, represent their ideas and communicate them to others. Suggestions are made for the use of time, space, materials, climate and occasions.

### Potter, G. & Briggs, F. 2003, "Children talk about their early experiences at school", *Australian Journal of Early Childhood*, vol. 28, no. 3, September.

This paper reports on how 100 children aged five to six years first experienced school. The first section explores some of the literature relevant to starting school and the emerging international research trend to giving children a voice in matters that concern them. The second discusses the research methodology and findings. These indicate that, while most children settle in well to school, many have concerns about the affective domain of the school environment, the fear of punishment, being bored, and the lack of choice. While just over half of the children liked school most of the time, 83 per cent of them said they did not like school work, which they clearly defined in their own words.

# Raver, C. 2002, "Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness: Social Policy", Report of the Society for Research in *Child Development*, vol. 16, no. 3.

Raver asserts that from the last two decades of research, it is clear that children's emotional and behavioural adjustment is important for their chances for early school success. She feels that educators' emphasis on cognition and on children's academic progression continues to overshadow the importance of social and emotional development for early school readiness. Raver argues that while young children's emotional problems are costly, these problems are identifiable early, are amenable to change, and can be reduced over time. The article reviews relevant research from developmental, clinical, and educational psychology, evaluating recent empirical evidence on which the above assertions are made.

Raver asserts that educational policy makers should consider support for young children's school readiness by making a range of investments in their emotional adjustment as well as their academic skills. She states that policy professionals should consider the following options as ways to strengthen children's school readiness:

- 1. Target children before they enter school as well as in the first year of school.
- 2. Broaden early educational mandates for school readiness to include emotional and behavioural adjustments.
- Consistently assess young children's emotional adjustment in childcare and early educational settings as well as during their transition through the first years of schooling.
- 4. Support young children with interventions that span a range of programmatic intensity.
- 5. Pay close attention to issues of quality assurance and attrition by implementing innovative interventions.
- Integrated, comprehensive services should be provided to the small number of children (and their families) who need them so that the school readiness of those children can be realised.

Other recommendations concern improvements in young children's emotional development being worthy targets of intervention and being key benchmarks of success; and economic security being necessary for families and children to be emotionally healthy and ready for school.

Scweinhart, L. & Weikart, D. 1997, "The High/Scope Preschool Curriculum Comparison Study Through Age 23", *Early Childhood Research Quarterly*, 12, pp. 117-143.

The High/Scope preschool curriculum comparison study was designed in the late 1960s to assess which preschool curriculum models worked best for young children living in poverty.

The research hypothesis was that these young people would achieve greater success and greater social responsibility if they attended a High/Scope or traditional nursery-school preschool program rather than a direct-instruction preschool program. School models were based upon Kohlberg's and Mayer's premise that early childhood education traditions were based upon how much child-initiated instruction there was:

- direct instruction: represented programmed learning, with little child initiation
- nursery school: represented child-centred learning with a permissive atmosphere and some child initiation
- High/Scope: representing much child initiation and an open framework.

The study emphasises that curriculum models based upon child-initiated learning activities are essential if preschool programs are to produce lasting benefits. Further information about this study was published in High/Scope Educational Research Foundation, 2005 "Preschool Child-Initiated Learning Found to Help Prevent Later Problems" (webpage), http://www.highscope.org/Research/curricfactsheet.htm [accessed 12 December 2005].

The High/Scope Preschool Curriculum Comparison Study assesses which of three theoretically distinct preschool curriculum models works best. Conducted by the High/Scope Educational Research Foundation since 1967, the study has followed the lives of 68 young people born in poverty who were randomly assigned at ages three and four to one of three groups, each experiencing a different curriculum model.

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The findings constitute evidence that early childhood education works better to prevent problems when it focuses not on scripted, teacher-directed academic instruction but rather on child-initiated learning activities. The findings suggest that the goals of early childhood education should not be limited to academic preparation for school, but should also include helping children learn to make decisions, solve problems, and get along with others. To read the findings in detail, access the website listed above.

Sharp, C. 2002, "School Starting Age: European Policy and Recent Research", paper presented at LGA Seminar, London, 1 November (also at <a href="http://www.nfer.ac.uk">http://www.nfer.ac.uk</a> [accessed 12 December 2005]).

This paper presents the findings of research on school starting ages in Europe and discusses the effects of the various compulsory starting ages on children later in life.

The paper reveals that the early starting age in the UK was decided upon in 1870 to protect children from unfavourable conditions at home and on the street. This meant that children also left school earlier, which appeared employers.

The discussion, summary and conclusion provide interesting reading on the effects of schoolentry age, including the impact of school-entry age on academic achievement.

Snow, C.E., Burns, M.S. & Griffin, P. (eds) 2001, *Preventing Reading Difficulties in Young Children*, National Research Council, National Academy Press, Washington, USA (also at http://www.nap.edu/readingroom/books/prdyc/index.html).

This book was the result of a study conducted by the National Academy of Sciences in the USA on the effectiveness of interventions for children at risk of developing reading difficulties.

The book provides a valuable source of information for educators on the teaching and learning of reading.

Wolfe, P. 2003, "Brain Research and Education: Fad or Foundation?" Mind Matters (webpage), http://www.patwolfe.com/index.php?pid=94 [accessed 12 December 2005].

This is an overview of what research on brain development has to offer to education. The article also provides guidelines for judging whether particular research is applicable to education.

Wright, S. 2001, "Guiding Learning Processes in the Integration of the Arts", *Contemporary Issues in Early Childhood*, vol. 2, no. 2.

This article introduces the importance of the arts in contemporary society and how people learn how to learn through music, dance, drama/play and the visual arts. It describes how the arts can involve ways of knowing about the world through thought, emotion, and action, providing a window into the past and allowing people to express views of the future. Finally, an example of an integrated arts workshop illustrates ways in which a supportive learning environment can enhance learners' sense of ownership through cooperation, while providing them with opportunities to experience high-standard, artistic processes that apply to the teaching of young children.