

Child Care & Early Education RESEARCH CONNECTIONS

A partnership of the National Center for Children in Poverty, the Inter-university Consortium for Political and Social Research, the Office of Child Care, and the Office of Planning, Research, and Evaluation

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Play and Learning In Early Care and Education Settings A Key Topic Resource List

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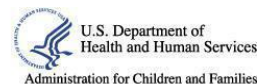
Research Connections conducted a comprehensive search of its collection for resources focused on play and early learning. This Key Topic Resource List includes a listing of selected resources on the role of play in early development and learning.

From the many results, *Research Connections* selected a limited number of resources of various types including reports and papers, executive summaries, and reviews. Selection criteria included topic relevance and relatively recent publication (from the years 2000 through 2010). The full results came from the following basic search: play teacher math literacy.

Search results are grouped into the following broad areas:

- Play and development
- Play and early literacy
- Play and early math
- Play and children with disabilities
- Teachers' perceptions and use of play

Within each category, resources are organized according to publisher type and publication date. *Research Connection's* one-sentence description is included for each resource on the following list. For complete citations, which include abstracts and full text for some resources, click on the titles.



Overview:

In recent years the emphasis on academic accountability and focus on children's cognitive skills has led to a decline in the occurrence of play in early education settings. Research, however, documents the importance of play on several areas of children's school readiness including: academic competencies, social-emotional development, and physical development.

Some studies have shown that certain types of play can help engage children in learning, influence their motivation to learn, improve self-regulation, and focus their attention. Research also indicates that play that is both teacher guided and child initiated is most beneficial for children. Research on playful learning can help inform early education program standards, learning standards, curriculum choices, and classroom assessment practices.

Research questions in the current literature include:

- How does play influence child outcomes?
- What types of play best support children's development?
- How do literacy enriched dramatic-play contexts contribute to print knowledge, concepts, and oral language? How does supportive adult participation in play contribute to gains in children's literacy and language?
- How do play-based curricula such as Tools of the Mind affect children's learning?
- What is the function of play for children with disabilities?
- Is teacher-directed play more effective than children's free play?

Acknowledgements:

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PLAY AND EARLY DEVELOPMENT

Journals

Gmitrova, Vlastava; Podhajecka, Maria; Gmitrov, Juraj. (2009) [Children's play preferences: Implications for the preschool education](#) Early Child Development and Care, 179(3), 339-351
A study of boys' and girls' preferences for pretend or constructive play based on a study 8801 incidents of play in the mixed-age and gender classrooms of 123 kindergartens in the eastern Slovak Republic

Gupta, Amita. (2009). [Vygotskian perspectives on using dramatic play to enhance children's development and balance creativity with structure in the early childhood classroom](#) Early Child Development and Care, 179(8), 1041-1054
A discussion and description of the implementation of Vygotskian based curriculum in a New York City prekindergarten classroom

Kagan, Sharon Lynn; Frelow, Victoria Stebbins; Scott-Little, Catherine. (2009) [Linking play to early learning and development guidelines: Possibility or polemic?](#) Zero to Three, 30(1), 18-25
A discussion of potential role of play in early learning guidelines

Zigler, Edward F.; Bishop-Josef, Sandra J. (2009) [Play under siege: A historical overview](#) Zero to Three, 30(1), 4-11
A discussion of the importance of play to child development, an historical perspective of the relationship between play and cognitive development, and an argument for the importance of hands-on play based learning and developmentally appropriate instruction of academic skills in early childhood and elementary education

Barnett, W. Steven, Jung, Kwanghee; Yarosz, Donald J.; Thomas, Jessica; Hornbeck, Amy; Stechuk, Robert A.; Burns, M. Susan. (2008) [Educational effects of the Tools of the Mind curriculum: A randomized trial](#) Early Childhood Research Quarterly, 23(3), 299-313
An evaluation of the impact of the Tools of the Mind curriculum on the cognitive, self-regulation, and language skills of preschoolers at a public preschool in a low-income neighborhood

Goouch, Kathy. (2008). [Understanding playful pedagogies, play narratives and play spaces](#) Early Years: An International Journal of Research and Development, 28(1), 93-102
A description of the place of playful pedagogies such as storying in early education classrooms in the United Kingdom

Katz, Lilian. (2008). [\[Review of the book Play and learning in early childhood settings: International perspectives\]](#) International Journal of Early Childhood, 40(2), 147-149
A review of a collection of studies examining the role of play as a learning activity in the early childhood settings of seven countries

Schulz, Laura E., Bonawitz, Elizabeth Baraff. (2007). [Serious fun: Preschoolers engage in more exploratory play when evidence is confounded](#) Developmental Psychology, 43(4), 1045-1050
An experimental investigation of the relationship between exploratory play and preschool children's methods of learning cause and effect relationships, based on observations of free play amongst 64 preschool children

Fantuzzo, John W.; Sekino, Yumiko; Cohen, Heather L. (2004.) [An examination of the contributions of interactive peer play to salient classroom competencies for urban Head Start children](#) *Psychology in the Schools*, 41(3), 323-36

A journal article on the relationship of urban Head Start children's peer play competence to emotional regulation, autonomy, receptive language skill, and later cognitive, social, and motor outcomes

Ginsburg, Kenneth R. (2007). [The importance of play in promoting healthy child development and maintaining strong parent-child bonds](#) *Pediatrics*, 119(1), 182-191

A discussion of the diminished role of play in child care and education environments, and a presentation of guidelines to which pediatricians can refer in the course of advocating for children and helping families, schools, and communities to appreciate the benefits of play to child development

Spinrad, Tracy L., Eisenberg, Nancy; Harris, Elizabeth; Hanish, Laura; Fabes, Richard; Kupanoff, Kristina; Ringwald, Staci; Holmes, Julie (2004). [The relation of children's everyday nonsocial peer play behavior to their emotionality, regulation, and social functioning](#) *Developmental Psychology*, 40(1), 67-80

A short-term longitudinal study on the relationship between pre-school children's nonsocial play behavior to their emotionality, regulation and social functioning

Youngquist, Joan. (2004) [Revisiting "play": Analyzing and articulating acts of inquiry](#) *Early Childhood Education Journal*, 31(3), 171-178

An article on the importance of play in early childhood curricula

Lloyd, Bronwen; Howe, Nina. (2003). [Solitary play and convergent and divergent thinking skills in preschool children](#) *Early Childhood Research Quarterly*, 18(1), 22-41

An examination of the relationship between multiple forms of solitary play and convergent and divergent thinking, based on a sample of 72 children

Robinson, Clyde C.; Anderson, Genan T.; Porter, Christin L.; Hart, Craig H.; Wouden-Miller, Melissa (2003). [Sequential transition patterns of preschoolers' social interactions during child-initiated play: Is parallel-aware play a bidirectional bridge to other play states?](#) *Early Childhood Research Quarterly*, 18(1), 3-21

An analysis of the patterns of preschoolers' stages of social play within natural classroom settings, based on a sample of 167 middle- and lower-income 4-year-olds

Elias, Cynthia L.; Berk, Laura. (2002). [Self-regulation in young children: Is there a role for sociodramatic play?](#) *Early Childhood Research Quarterly*, 17(2), 216-238

An observational study testing Vygotsky's theory that sociodramatic play encourages the development of self-regulation in young children

Coolahan, Kathleen; Fantuzzo, John W.; Mendez, Julia; McDermott, Paul. (2000) [Preschool peer interactions and readiness to learn: Relationships between classroom peer play and learning behaviors and conduct](#) *Journal of Educational Psychology*, 92(3), 458-465

An inquiry into the role of peer play in the development of both learning and problem behaviors in children, based on a sample of 556 low-income children and 43 teachers from 14 Head Start centers in a northeastern city, evaluated using the Penn Interactive Peer Play Scale (PIPPS), and the Preschool Learning Behaviors Scale (PLBS) or the Conners Teacher Rating Scale (CTRS)

University and Research Organizations

Sutterby, John Alan. (2002). [Todos somos amigos: Cross-cultural and cross-linguistic play interactions in a two-way immersion prekindergarten classroom](#) Unpublished doctoral dissertation, University of Texas at Austin

A study of the cross-linguistic and cross-cultural play interactions of children during free play

Bergen, Doris, (2001). [Pretend play and young children's development](#) (ERIC Digest No. EDO-PS-01-10). Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.
A brief defining key concepts related to play and cognition, and highlighting research on the role of play in children's social and linguistic competence

Other

Miller, Edward, Almon, Joan. (2009). [Crisis in the kindergarten: Why children need to play in school](#) College Park, MD: Alliance for Childhood.

A review of research on the decline of play and the rise of teacher-directed activities and instruction in kindergarten, with a discussion of the implications for children's development and recommendations for increasing play in kindergarten

Hirsh-Pasek, Kathy; Golinkoff, Roberta M.; Berk, Laura; Singer, Dorothy. (2008). [A mandate for playful learning in preschool: Applying the scientific evidence](#) New York: Oxford University Press

An overview of research on the role of play in the learning experiences and social development of young children in preschool settings

Bay Area Early Childhood Funders. (2007). [Play in the early years: Key to school success](#) El Cerrito, CA: Bay Area Early Childhood Funders.

An examination of the contribution that play makes to early childhood learning and development

Hewes, Jane. (2006). [Let the children play: Nature's answer to early learning](#) Montreal, Quebec, Canada: Early Childhood Learning Knowledge Centre.

An overview of the importance of play opportunities, including those in early childhood settings, for children's early learning and development

Hughes, Fergus P. (2003). [Spontaneous play in the 21st century](#) In Contemporary Perspectives on Play in Early Childhood Education (pp. 21-39). Greenwich, CT: Information Age Publishing.

A study of spontaneous play, examining its facilitation of child development and its dependence on a sociocultural context for support

Saracho, Olivia N., 2003. [Young children's play and cognitive style](#) In Contemporary Perspectives on Play in Early Childhood Education (pp. 75-96). Greenwich, CT: Information Age Publishing.

Overviews of the topics of cognitive style and play, and studies that explore their relationship

PLAY AND HOME-BASED CARE

Other

Organizational Research Services. (2006). [Summary of mid-year Play & Learn participant results: January-July 2006](#) Seattle, WA: Child Care Resources.

A summary of preliminary findings from an outcome evaluation of Seattle, Washington, Play & Learn Groups, facilitator-led play groups for children and adults to foster early learning skills, based on participant-reported outcomes

PLAY AND EARLY LITERACY

Journals

Hanline, Mary Frances. (2009). [The relationship between preschool block play and reading and maths abilities in early elementary school: A longitudinal study of children with and without disabilities](#) Early Child Development and Care, 1-13

A longitudinal investigation of the predictive correlation between symbolic representations in block play in preschool and children's reading and math skills in elementary school, and a comparison of this relationship in groups of children with and without disabilities, based on a sample of 51 children in an inclusive program followed from preschool until early elementary school

Moon, Kyunghee, Reifel, Stuart. (2008). [Play and literacy learning in a diverse language pre-kindergarten classroom](#) Contemporary Issues in Early Childhood, 9(1), 49-65

A study of one teacher's opinions about the use of play-based activities in her literacy curriculum in a public prekindergarten classroom composed of both English as a second language (ESL) and native English speaking children

Saracho, Olivia N., (2004). [Supporting literacy-related play: Roles for teachers of young children](#) Early Childhood Education Journal, 31(3), 201-206

A research study investigating teacher roles in children's literacy-related play

Saracho, Olivia N. (2002). [Teachers' roles in promoting literacy in the context of play](#) Early Child Development and Care, 172(1), 23-34

An observational study of the roles (discussion leader, storyteller, examiner, decision-maker) that kindergarten teachers take on in order to promote literacy during children's play

Saracho, Olivia N. (2001). [Teachers' perceptions of their roles in promoting literacy in the context of play in a Spanish-speaking kindergarten](#) International Journal of Early Childhood, 33(2), 18-31

A study on the role and perceptions of teachers promoting literacy during periods of play for Spanish-speaking children in the southwest United States

Other

Morrow, Lesley M., Schickedanz, Judith A. (2006). [The relationships between sociodramatic play and literacy development](#) In D. K. Dickinson & S. B. Neuman (Eds.), *Handbook of early literacy research* (Vol. 2, pp. 269-280). New York: Guilford Press

A review of studies on the interaction between children's dramatic play and literacy development, including the role of adult engagement, in the context of evolving theoretical perspectives on play

PLAY AND EARLY MATH

Journals

Edo, Meque; Planas, Nuria; Badillo, Edelmira. (2009). [Mathematical learning in a context of play](#) *European Early Childhood Education Research Journal*, 17(3), 325-341

A study of children's responses to a symbolic play activity for the improvement mathematical thinking, carried out with a group of 26 pupils aged five and six at a public urban school near to Barcelona, Spain

Ginsburg, Herbert P.; Ertle, Barbrina (2008). [Mathematics education for young children: What it is and how to promote it](#) *Social Policy Report*, 22(1), 1-23

An examination of children's abilities, early education curricula, and teacher readiness in the subject of early mathematics, and a presentation of policy recommendations for teacher training, curricula, and research related to the subject

Park, Boyoung, Chae, Jeong-Lim; Boyd, Barbara Foulks. (2008). [Young children's block play and mathematical learning](#) *Journal of Research in Childhood Education*, 23(2), 157-162

A qualitative study of the geometric shape knowledge of two boys aged 6 and 7 from low-income families

Pramling, Niklas; Samuelsson, Ingrid Pramling (2008). [Identifying and solving problems: Making sense of basic mathematics through storytelling in the preschool class](#) *International Journal of Early Childhood*, 40(1), 65-79

A case study examining a teacher's use of storytelling as a method to integrate play and learning while teaching division to six year-old preschool children in Sweden

Ramani, Geetha B., Siegler, Robert S. (2008). [Promoting broad and stable improvements in low-income children's numerical knowledge through playing number board games](#) *Child Development*, 79(2), 375-394

An experiment measuring the effects of numerical board games on the numeracy of low income preschoolers from Head Start programs

Whyte, Jemma Catherine; Bull, Rebecca. (2008). [Number games, magnitude representation, and basic number skills in preschoolers](#) *Developmental Psychology*, 44(2), 588-596

An experiment to determine the effects of linear number board game play on the development of numeracy skills in a small sample of preschool-age children from Aberdeen, Scotland

Hansen, Laurie E. (2005) [ABCs of early mathematics experiences](#) *Teaching Children Mathematics*, 12(4), 208-212

A discussion of how concepts in mathematics can be introduced through life experiences in preschool classrooms and at home, such as in activities involving nature, money, playing, bathing, and cooking

Other

Ginsburg, Herbert P., Ertle, Barbrina (2008). [Knowing the mathematics in early childhood mathematics](#) In *Contemporary perspectives on mathematics in early childhood education* (pp. 45-66). Charlotte, NC: Information Age Publishing

An exploration of the role of mathematical knowledge in early education, an overview of children's methods of learning mathematics, an examination of preschool mathematics curriculum materials, and a discussion of the mathematical knowledge required by preschool teachers when implementing a complex mathematics curriculum

Kersh, Joanne E., Casey, Beth; Young, Jessica Mercer. (2008) [Research on spatial skills and block building in girls and boys](#) In *Contemporary perspectives on mathematics in early childhood education* (pp. 233-251). Charlotte, NC: Information Age Publishing

An overview of research on the relationship of block play to the spatial and mathematics skills of young children, with a focus on gender differences

Ginsburg, Herbert P. (2006). [Mathematical play and playful mathematics: A guide for early education](#)

In D. Singer, R. M. Golinkoff & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 145-165). New York: Oxford University Press

An exploration of the relationship between children's play and early mathematics education, and a discussion of methods to incorporate mathematical play into early childhood education and care settings

Uttal, David H. (2003). [On the relation between play and symbolic thought: The case of mathematics manipulatives](#) In *Contemporary Perspectives on Play in Early Childhood Education* (pp. 97-114). Greenwich, CT: Information Age Publishing.

A study of the advantages and disadvantages of using manipulatives, concrete objects (rods, blocks, etc.) designed to facilitate children's mathematical development, to help children gain insight into mathematical concepts

PLAY AND CHILDREN WITH DISABILITIES

Journals

Bray, Paula, Cooper, Rodney. (2007). [The play of children with special needs in mainstream and special education settings](#) Australian Journal of Early Childhood, 32(2), 37-42

An observational study of the free play behavior of a sample of 12 children with special needs in both special education and mainstream settings

Pierce-Jordan, Sandra, Lifter, Karin. (2005). [Interaction of social and play behaviors in preschoolers with and without Pervasive Developmental Disorder](#) Topics in Early Childhood Special Education, 25(1), 34-47

An investigation of the relationship between social and play behaviors of preschool children with and without pervasive developmental disorder (PDD)

Brett, Arlene C.; Valle-Riestra, Diana M.; Fischer, M.; Rothlein, Liz C.; Hughes, Marie T. (2002). [Play in preschool classrooms: Perceptions of teachers and children](#) Journal of Early Childhood Teacher Education, 23(1), 71-80

A study of perceptions of play and play practices among 102 Pre-Kindergarten teachers, 61 Pre-Kindergarten with disabilities teachers, and 72 4-year-old children in a United States urban school district

Harper, Lawrence V.; McCluskey, Karen S. (2002). [Caregiver and peer responses to children with language and motor disabilities in inclusive preschool programs](#)

Early Childhood Research Quarterly, 17(2), 148-166

An examination of child care providers' responses to young children with special needs as compared with typically developing children, using a sample of four different groups of children (motor impaired, speech impaired, modest motor/speech impairments, and typically developing) who attended one of two child care programs

Neeley, Phyllis M., Neeley, Richard A.; Justen, III, Joseph E.; Tipton-Sumner, Carla. (2001). [Scripted play as a language intervention strategy for preschoolers with developmental disabilities](#) Early Childhood Education Journal, 28(4), 243-246

An examination of the effect of using a verbal script to teach sociodramatic play on the free play sophistication levels of preschool children with special needs

Bishop, Alison; Swain, John; Bines, Hazel. (1999). [Seizing the moment: Reflections on play opportunities for disabled children in the early years](#) British Journal of Educational Studies, 47(2), 170-183

A discussion of a theoretical framework for aligning British policies, research, and practice in terms of child care and early education and early identification of young children with special needs

Hanline, Mary Frances; Fox, Lise; Phelps, Pamela. (1998). [Community child care inclusion: The development of two children](#) *International Journal of Disability, Development and Education*, 45(4), 469-488

An analysis of the progression of children with severe disabilities within a child care setting using a play-based curriculum

Universities & Research Organizations

Gregory, Samantha R. (2009). [Inclusion vs. exclusion: A study of play and social interactions of children with disabilities](#) Unpublished master's thesis: University of Arkansas, Fayetteville

An investigative comparison of play and social interaction of 3 children with disabilities in inclusive settings and 3 in exclusive child care settings

TEACHER PERCEPTIONS AND USE OF PLAY

Journals

Cutter-Mackenzie, Amy; Edwards, Susan; Fler, Marilyn. (2009). [Investigating the environmental scientific concepts in children's play: How do children and teachers interpret play-based learning?](#) *Journal of Australian Research in Early Childhood Education*, 16(1), 49-61

An examination of the interplay between cognition and play as well as an examination of the beliefs and assumptions of two preschool teachers' views and practices of the nature of play and learning in two kindergartens located in separate municipalities within metropolitan Melbourne

Smith, Deborah J. (2007). [Teacher perception of play: In leaving no child behind are teachers leaving childhood behind?](#) *Early Education and Development*, 18(2), 271-303

An exploration of teacher perceptions of the role of play in learning and the implications for practice, using qualitative data from a study of 4 first-grade teachers from 2 diverse socioeconomic school settings

Sandberg, Anette, Samuelsson, Ingrid Pramling. (2005). [An interview study of gender differences in preschool teachers' attitudes toward children's play](#) *Early Childhood Education Journal*, 32(5), 297-305

A study of female and male preschool teachers' perspectives on play through analyses of opinion statements about play in teachers' childhood and in the present

Cooney, Margaret H. (2004). [Is play important? Guatemalan kindergartners' classroom experiences and their parents' and teachers' perceptions of learning through play](#) *Journal of Research in Childhood Education*, 18(4), 261-277

A study taking place in Guatemala that considers the discrepancy between parent and teacher beliefs regarding the benefits of learning through play and kindergarten children's actual classroom experiences

Saracho, Olivia N. 2004. [Supporting literacy-related play: Roles for teachers of young children](#) *Early Childhood Education Journal*, 31(3), 201-206

A research study investigating teacher roles in children's literacy-related play

Gmitrova, Vlastava; Gmitrov, Juraj. (2003) [The impact of teacher-directed and child-directed pretend play on cognitive competence in kindergarten children](#) *Early Childhood Education Journal*, 30(4), 241-246

An observational study on the effects of different forms of pretend play on children's cognitive and affective performance in the Slovak Republic

Sanagavarapu, Prathyusha; Wong, Margaret. (2003). [An exploratory study of early childhood educators' views on culture and play](#) *Journal of Early Childhood Teacher Education*, 24(4), 303-310

An investigation into the attitudes of early childhood educators on the relationship between culture and play, based on interviews with 14 early childhood educators in Sydney, Australia

Sandberg, Anette; Samuelsson, Ingrid Pramling. (2003). [Preschool teachers' play experiences then and now](#) *Early Childhood Research & Practice*, 5(1)

An exploration of teachers' remembrances of their childhood play and their perceptions on children's play today, based on interviews with 20 preschool teachers in Sweden

Taylor, Satomi Izumi; Rogers, Cosby Steele; Dodd, Arleen T.; Kaneda, Toshiko; Nagasaki, Iku; Watanabe, Yasuhiro; Goshiki, Toru. 2003 [The meaning of play: A cross-cultural study of American and Japanese teachers' perspectives on play](#) *Journal of Early Childhood Teacher Education*, 24(4), 311-322

An investigation into the meanings of play to early childhood educators, based on a survey of 41 Japanese teachers and 41 American teachers

Brett, Arlene C., Valle-Riestra, Diana M.; Fischer, M.; Rothlein, Liz C.; Hughes, Marie T. (2002). [Play in preschool classrooms: Perceptions of teachers and children](#) *Journal of Early Childhood Teacher Education*, 23(1), 71-80

A study of perceptions of play and play practices among 102 Pre-Kindergarten teachers, 61 Pre-Kindergarten with disabilities teachers, and 72 4-year-old children in a United States urban school district

Wood, Elizabeth; Bennett, Neville (2000). [Changing theories, changing practice: Exploring early childhood teachers' professional learning](#) *Teaching and Teacher Education*, 16(5-6), 635-647

An examination of how nine early childhood teachers changed their teaching practices and theories after being involved in a study analyzing their theories of play and how the theories relate to the teachers' classroom practices

Kontos, Susan, 1999. [Preschool teachers' talk, roles, and activity settings during free play](#) *Early Childhood Research Quarterly*, 14(3), 363-382

An observational study examines preschool teachers' involvement with their students during free playtime, looking at the use of activity settings, talk, and role and if these components are interrelated

McLane, Joan B. (2003). ["Does not." "Does too.": Thinking about play in the early childhood classroom](#) (Occasional Paper No. 4). Chicago: Herr Research Center.

A longitudinal study of early childhood teachers' attitudes regarding the educational value of play

Other

Spodek, Bernard, Saracho, Olivia N.(2003). [Early childhood educational play](#) In Contemporary Perspectives on Play in Early Childhood Education (pp. 171-179). Greenwich, CT: Information Age Publishing.

A study of the nature of play in early childhood education, with a focus on the role of the teacher

Lillemyr, Ole Fredrik. (2003). [Play in school--the teacher's role: Reforms and recent research](#) In Contemporary Perspectives on Play in Early Childhood Education (pp. 53-73). Greenwich, CT: Information Age Publishing.

An analysis of the increasing role of play in the first years of school and resulting changes in teacher's roles in Norway and several other Western nations

To suggest additions to this Key Topic Resource List, please email us at contact@researchconnections.org.