



Rapid Response—Early Childhood Education Curricula and Programs for PreK Students

Date	July 31, 2008
Number	00066
Request	A state department of education (SDE) served by the Southeast Comprehensive Center has requested a list of research-based early childhood education curricula and programs for preK students (3- to 5-year-olds) that address both reading and math readiness. The department also requests a list of organizations (other than the What Works Clearinghouse and Florida Comprehensive Center for Reading Research) that systematically review curricula for these students.
Summary	In response to this request, the Southeast Comprehensive Center (SECC) contacted a number of individuals and organizations whose work involves early childhood education research and information dissemination. SECC also conducted a literature search and reviewed numerous resources and publications to obtain information on this topic. The results are summarized below.

INTRODUCTION

Over one million children attended state-funded preschool from 2006–2007 at a cost of more than \$3.7 billion, according to the National Institute for Early Education Research (NIEER, 2007). This huge investment in early childhood education underscores the importance of efforts to close the achievement gap between high- and low-performing students of all socioeconomic levels, as mandated by Title I of the No Child Left Behind Act of 2001 (U.S. Department of Education, [ED] 2002).

The NCLB Act requires participating states to identify and employ educational interventions, such as practices, curricula, strategies, and programs that are supported by scientifically rigorous evidence. Consequently, when selecting curricula for use in preK programs, decision-makers need to evaluate whether or not the intervention is backed by evidence of effectiveness. According to a user guide on identifying evidence-backed educational practices, prepared for ED’s Institute of Education Sciences (IES), the quality of studies needed to establish “strong” evidence would be randomized controlled trials that are well-designed and implemented. In addition, the quantity of evidence needed would be trials showing effectiveness in two or more school settings, including a setting similar to that of the decision-maker’s schools and classrooms (IES, 2003). The guide stated that, “The study should clearly describe 1) the intervention, including who administered it, who received it, and what it costs; 2) how the intervention differed from what the control group received; and 3) the logic of how the intervention is supposed to affect outcomes.” (IES, 2003, p. 5) The guide also provided recommendations for evaluating whether an educational intervention is backed by “possible” evidence of effectiveness.

IES coordinates the What Works Clearinghouse (WWC), which provides reviews, publications, reports, and other resources on what works in education. The WWC is currently conducting a systematic review to evaluate evidence of the effectiveness of ECE interventions—curricula or practices—which it defines as follows:

Curriculum—a set of activities, materials and/or guidance for working with children in classrooms that has a clearly identified name, includes a thorough write-up/description, and can be replicated by others based on written guidance, staff training or technical assistance.

Practice—a named approach to promoting children’s development that staff implement in interacting with children and materials in their classroom. The named approach must be clearly described and commonly understood in the field and literature (IES WWC, ECE Abstract, n.d.).

The WWC indicated that programs, such as Head Start and state-supported preK programs, are not considered interventions for its review. (Additional information on the WWC review is provided in the next section). Since the WWC review protocol indicates that interventions (curricula or practices) are the focus in terms of efficacy, the remainder of this report will emphasize information related to preK curricula, rather than curricula and programs.

In its 2007 state preschool yearbook, NIEER provided a comprehensive review of the status of preschool programs on a national and state level, including funding, enrollment, standards, and quality benchmarks. NIEER reviewed national and state-level data for 2002–2007 and developed individual profiles for 38 states that have preschool programs. The report stated that the following 12 states did not have preschool programs: Alaska, Hawaii, Idaho, Indiana, Mississippi, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Wyoming. Of the states served by SECC that have preschool programs—Alabama, Louisiana, Georgia, and South Carolina—all had comprehensive early learning standards, and all met seven or more of the 10 quality benchmarks established by NIEER. Only two states—Alabama and North Carolina—met all 10 of the quality standards.

In addition to state profiles, Appendix A of the NIEER report provided Web addresses for the statewide early learning standards and descriptions of the preK initiatives and programs implemented in each state. Besides early learning standards, some states provided specific information on their Web sites, such as curricula standards and recommendations (Florida), approved curricula for use in their preK programs (Alabama), and preK program standards that include criteria for preK curricula (New Mexico).

There are a number of factors that decision-makers should consider when evaluating preK curricula to ensure that the intervention is appropriate for the students as well as the preK program. “Curricular decisions should take into account children’s ages, behavior or learning needs, linguistic and cultural backgrounds, and economic status, as well as teachers’ prior training and experience and need for ongoing professional development.” (Frede & Ackerman, 2007, p. 1) The authors also said that assessment systems should be designed to determine if learning objectives were met, engage students in meaningful tasks, and document progress over time.

In Connecticut’s guide to early childhood program development, Lawrence et al. (n.d.) identified several critical components that should be considered when planning preschool curricula:

- Performance standards or objectives for students
- Ongoing assessment of students’ skills, abilities, and development
- Content in language and literacy, mathematics concepts, and scientific inquiry
- Processes and experiences in a learning context that stimulate curiosity
- Interaction that balances teacher-directed and student-initiated behaviors and strategies
- Organization of the learning environment, schedule, and materials

In addition to the above criteria, decision-makers are encouraged to make sure that the curriculum is research-based, emphasizes teachers’ active engagement with children, and focuses attention on children’s social and regulatory skills

(Klein & Knitzer, 2006). The importance of selecting a curriculum that focuses on regulatory skills, such as language, was underscored in the majority of the resources reviewed by SECC. Concerning the achievement or readiness gap of preschoolers, Klein and Knitzer (2006) said, “One of the most dramatic gaps has to do with the use of language, which is highly predictive of school success. Many studies have recorded and analyzed the verbal interactions of children from different socioeconomic levels from the time they were 10 months old until they were age 3 years . . . A child growing up in a family on welfare could have heard 32 million fewer words than a classmate growing up in a professional family by the time of kindergarten entry.”

Effectiveness of a curriculum relates to whether or not it is meeting the established goals and providing observable and measurable results. According to the National Association for the Education of Young Children (NAEYC, 2003), decision-makers should consider the following key indicators to determine the effectiveness of a curriculum: children are active and engaged; there are clearly defined goals that are shared by all; the curriculum is evidence-based and is organized in accordance with the principles of child development and learning; the content allows children to learn through play, exploring, inquiring, and thinking; there are professional standards to validate the subject matter content; and research and other evidence indicates that the curriculum, if implemented with fidelity, will likely have beneficial effects.

Another key factor that decision-makers should consider when reviewing preschool curricula is alignment with state and national early learning standards as well as regulatory requirements, such as those from the U.S. Department of Education, NAEYC, NIEER, National Head Start Association, and other entities.

EVIDENCE-BASED EARLY CHILDHOOD EDUCATION CURRICULA FOR PREK STUDENTS

To obtain specific information on evidence-based preK curricula that focus on both reading and math readiness, SECC reviewed numerous publications and resources and contacted individuals and organizations whose work focuses on ECE. Sources included

- Douglas Clements, PhD, Distinguished Professor, and Julie Sarama, PhD, Associate Professor, University of Buffalo, State University of New York
- Beth Phillips, PhD, Assistant Professor, Florida Center for Reading Research
- Albert Wat, State Policy Analyst, Pre-K Now
- Center for Early Learning Literacy
- Children’s Learning Institute, University of Texas Health Science Center
- National Center for Children in Poverty
- National Child Care Information and Technical Assistance Center
- National Institute for Early Education Research
- Preschool Curriculum Evaluation Research Consortium
- What Works Clearinghouse

Dr. Phillips, one of the individuals contacted, did not have any current information on research-based curricula for ECE (B. Phillips, personal communication, June 18, 2008). In addition, the Children’s Learning Institute and the Center for Early Learning Literacy could not provide any current information on the topic. Pre-K Now analyst Albert Wat indicated that he had not done a comprehensive review of preK curricula nor had he seen a review of this kind. However, he provided information on several resources that proved to be beneficial (A. Wat, personal communication, June 16, 2008).

Dr. Clements and Dr. Sarama, researchers and developers in the field of ECE, provided several articles on a series of studies that they conducted on a mathematics curriculum entitled Building Blocks (D. Clements, personal communication, June 2, 2008). The model for this research-based math software includes specification of mathematical ideas (computer objects or manipulatives) and process skills (software tools or actions), as well as extensive field-testing through large summative evaluation studies. The initial results from field-testing indicated that the approach could result in significant assessed learning gains in accordance with the Principles and Standard for School Mathematics of the National Council of Teachers of Mathematics (Sarama & Clements, 2004).

Clements and Sarama also conducted an evaluation of the Building Blocks curriculum using the Curriculum Research Framework (Clements & Samara, 2008). In this study, 36 preschool classrooms were assigned to the experimental group (Building Blocks), and the comparison group received a different preschool mathematics curriculum or control conditions. The results of this study supported the hypothesis that the research-based Building Blocks curriculum can be implemented with acceptable fidelity in multiple, diverse classrooms. The results also supported the hypotheses that high-quality implementation can increase both quality of the classroom environment and teaching as well as preschoolers' mathematics curriculum, even when compared to another intensive preschool mathematics curriculum.

Upon review of the material collected for this report, SECC identified the following organizations that conduct research on ECE curricula or serve as clearinghouses for information on this topic:

National Center for Children in Poverty

Founded in 1989, the National Center for Children in Poverty (NCCP) is a division of the Mailman School of Public Health at Columbia University. NCCP is a public interest research organization that focuses on issues related to America's low-income families and children. The NCCP Web site (www.nccp.org/) contains various publications on early childhood and learning as well as early childhood profiles for the nation and each state, which provide data on policies related to families and children.

National Child Care Information and Technical Assistance Center

The National Child Care Information and Technical Assistance Center (NCCIC) is a division of the U.S. Department of Health & Human Services, Administration for Children & Families. NCCIC serves as a technical assistance center and clearinghouse for child care information resources. NCCIC's Web site (<http://www.nccic.org/>) contains resources for reviewing early learning guidelines, research and statistics on child care topics, and a list of curricula/teaching approaches for early childhood education (<http://www.nccic.org/poptopics/curricula-ece.html>).

National Institute for Early Education Research

The National Institute for Early Education Research (NIEER) provides objective, research-based information in support of early childhood initiatives. NIEER was established at the Rutgers University Graduate School of Education with a grant from The Pew Charitable Trusts. NIEER's Web site (<http://nieer.org/>) contains several research documents on preschool programs, annual state preK reports, facts and figures on assessments and standards, as well as its 2007 state preschool yearbook (<http://nieer.org/yearbook/pdf/yearbook.pdf>).

Pre-K Now

Pre-K Now is a public education organization that provides support for voluntary pre-kindergarten education for 3- and 4-year-olds. Pre-K Now receives support from The Pew Charitable Trusts and is a project of the Institute for Educational Leadership. Pre-K Now's Web site (www.preknow.org/) contains a resource center that provides information on research-based curricula, best practices, and standards. The research-based curricula page includes a list of curricula (<http://www.preknow.org/educators/resource/curricula.cfm>) and a description of each as well as access to state lists of the curricula that they have approved for use in their preK programs.

Preschool Curriculum Evaluation Research Consortium

The Preschool Curriculum Evaluation Research (PCER) program provides funding for research to determine whether specific curricula can improve children's school readiness. Mathematica Policy Research Inc. is the coordinator for the PCER 2003 group of grantees, overseeing data collection and conducting cross-site analyses of projects implemented by participating universities and foundations. PCER was established by the U.S. Department of Education in 2002 to enhance the educational success of children in low-income families. Information on school readiness, early childhood policy, publications, and research studies is available on Mathematica's Web site (<http://www.mathematica-mpr.com/earlycare/PCER.asp>).

In July 2008, the PCER Consortium released a 446-page report entitled *Effect of Preschool Curriculum Programs on School Readiness*, which was prepared for the National Center for Education Research, IES, ED. The report summarizes

the findings of a comprehensive review of 14 preschool curricula that began in 2003. The review, conducted by the PCER initiative, focused on the impact of the intervention curricula on the reading and pre-reading, phonological awareness, early language, early mathematics knowledge, and behavior (including social skills and language skills) of preschool students. The initiative consisted of 12 research teams that conducted rigorous efficacy evaluations of the 14 preschool curricula. The research teams implemented one or two curricula in preschool environments that served predominantly low-income students under an experimental design. The research sites were located in the following states California, Florida, Georgia, Kansas, Missouri, New Hampshire, New Jersey, New York, North Carolina, Tennessee, Texas, Virginia, and Wisconsin.

Classrooms were randomly assigned to use the treatment or control curricula. The intervention curricula that were evaluated by PCER are listed in Figure 1. The researchers evaluated the 14 curricula utilizing a common set of 27 measures with the cohort students starting preschool in summer through fall 2003. The research team used five major data collection methods 1) a child assessment, 2) a teacher report, 3) classroom observation, 4) a teacher interview or questionnaire, and 5) a parent interview.

Figure 1. Intervention Curricula Reviewed by the PCER Consortium

Bright Beginnings	Doors to Discovery	Pre-K Mathematics supplemented with DLM
Creative Curriculum	Early Literacy and Learning Model	Early Childhood Express Math software
Creative Curriculum with Ladders to Literacy	Language-Focused Curriculum	Project Approach
Curiosity Corner	Let's Begin with the Letter People	Project Construct
DLM Early Childhood Express supplemented with Open Court Reading Pre-K	Literacy Express	Ready, Set, Leap!

Note. Adapted from the PCER Consortium (2008)

The report's executive summary provided an overview of study findings by outcome and by curriculum (for preK and kindergarten students); detailed evaluations were provided for each curriculum in the body of the report, chapters 2–13. The findings were provided by both student-level outcomes (table H) and classroom-level outcomes (table I). Some of the key findings by outcome as indicated in the report were

Two of the 14 intervention curricula had impacts on the student-level outcomes for the prekindergarten year (table H). *DLM Early Childhood Express supplemented with Open Court Reading Pre-K* positively affected reading, phonological awareness, and language. *Pre-K Mathematics supplemented with DLM Early Childhood Express Math software* curriculum positively affected mathematics. In the kindergarten year, four of the curricula had impacts on the student-level outcomes though three of these did not have impacts during the prekindergarten year (table H). *DLM Early Childhood Express supplemented with Open Court Reading Pre-K* continued to have positive effects on reading, phonological awareness, and language in kindergarten as it did in prekindergarten.

In addition, eight of the 14 treatment curricula had a positive effect on the prekindergarten classroom-level outcomes—*Bright Beginnings*, *Creative Curriculum*, *Creative Curriculum with Ladders to Literacy*, *Curiosity Corner*, *DLM Early Childhood Express supplemented with Open Court Reading Pre-K*, *Doors to Discovery*, *Let's Begin with the Letter People*, and *Literacy Express*—as described in table I. Findings by curriculum were described for each intervention in terms of 1) student-level outcomes in prekindergarten, 2) student-level

outcomes in kindergarten, and 3) classroom-level outcomes in pre-kindergarten.

The PCER Consortium report is available for download on the IES Web site at the following link:

<http://ies.ed.gov/ncer/pubs/20082009/index.asp>

What Works Clearinghouse

Established in 2002 by the U.S. Department of Education, the Institute of Education Sciences What Works Clearinghouse (WWC) provides intervention/topic reports, practice guides, technical assistance, technical working papers, and other information.

For its early childhood education intervention review, which is currently underway, WWC provided an overview of each curriculum, the research conducted, whether or not the curriculum met the organization's evidence standards, and a statement indicating the effectiveness of the curriculum. For example, WWC reviewed the studies conducted on the *Building Blocks for Math* curriculum but determined the extent of evidence for the curriculum to be small for mathematics achievement (IES WWC, Intervention: SRA Real Math Building Blocks for PreK, n.d.). Intervention review information is available on the WWC Web site.

WWC's review of ECE interventions focused on well-conducted randomized trials, well-controlled quasi-experimental designs, and empirical studies published in English in 1985 or later that focused on the effects of center-based ECE interventions on children's school readiness (IES WWC, Review Protocol, n.d.). Refer to Table 1 for more information on the intervention reports that are available on the WWC Web site.

See Table 2 of this report for additional information on a few of the curricula that were reviewed by the PCER Consortium as well as other preK curricula that focus on both reading and math readiness for preK children.

Table 1. WWC Intervention Reports: Early Childhood Education

Name	Link to Report
Building Blocks for Math (SRA Real Math)	http://ies.ed.gov/ncee/wwc/reports/early%5Fed/sra%5Fprek/
Curiosity Corner	http://ies.ed.gov/ncee/wwc/reports/early_ed/curious/
DaisyQuest	http://ies.ed.gov/ncee/wwc/reports/early_ed/daisyquest/
Dialogic Reading	http://ies.ed.gov/ncee/wwc/reports/early_ed/dial_read/
Direct Instruction	http://ies.ed.gov/ncee/wwc/reports/early_ed/dir_instruct/
Doors to Discovery	http://ies.ed.gov/ncee/wwc/reports/early%5Fed/doors2disc/
Interactive Shared Book Reading	http://ies.ed.gov/ncee/wwc/reports/early_ed/isbr/
Let's Begin with the Letter People	http://ies.ed.gov/ncee/wwc/reports/early_ed/lblp/
Literacy Express	http://ies.ed.gov/ncee/wwc/reports/early_ed/lit_express/
Phonological Awareness Training	http://ies.ed.gov/ncee/wwc/reports/early_ed/phono_aware/
Phonological Awareness Training plus Letter Knowledge Training	http://ies.ed.gov/ncee/wwc/reports/early_ed/phono_awareplus/
Pre-K Mathematics	http://ies.ed.gov/ncee/wwc/reports/early_ed/prek_math/
Shared Book Reading	http://ies.ed.gov/ncee/wwc/reports/early_ed/share/
Sound Foundations	http://ies.ed.gov/ncee/wwc/reports/early_ed/sound_found/
Waterford Early Reading Level One™	http://ies.ed.gov/ncee/wwc/reports/early_ed/werlo/
Words and Concepts	http://ies.ed.gov/ncee/wwc/reports/early_ed/words/
Note. Adapted from the IES What Works Clearinghouse (http://ies.ed.gov/ncee/wwc/reports/topic.aspx?tid=13).	

Table 2. ECE Curricula That Focus on Reading and Math Readiness for PreK Students

Name	Description	Contact Information
Active Learning	The Active Learning series has volumes targeted to specific age groups—infants, 1-year-olds, 2-year-olds, 3-year-olds, 4-year-olds, and 5-year-olds, as well as children with disabilities. The curriculum includes a planning guide and guidebooks. Pennsylvania has approved this curriculum for its preK programs (Pre-K Now, 2008).	Frank Porter Graham Child Development Institute University of North Carolina at Chapel Hill 919-966-2622 www.fpg.unc.edu/~ecers/rw_als.htm
Bank Street Developmental Interaction Approach	The Bank Street Developmental Interaction Approach recognizes that there are different development levels for different children. Teachers can use research and practice to choose topics and design experiences that will engage and challenge children. The curriculum guide covers curricula for children from 3 years through lower school, middle school, and high school. Areas covered in the curriculum are social studies, literacy, mathematics, science, Spanish and French, art and shop, music, library, and physical education. Seven states have approved this curriculum for their preK programs—Alabama, Georgia, Illinois, North Carolina, New Jersey, New Mexico, and Tennessee (Pre-K Now, 2008).	212-875-4400 www.bankstreet.edu/sfc/developmental_interaction.html
*Bright Beginnings	Bright Beginnings provides a child-centered, literacy-focused curriculum to ensure that all children entering kindergarten are ready to learn. The program is a full-day, literacy-based initiative for 4-year-olds whom have identified educational needs. North Carolina has approved this curriculum for its preK programs (Pre-K Now, 2008).	Student, Family, and Community Services Charlotte-Mecklenburg Schools 980-343-5950 www.cms.k12.nc.us/programs/PrekServices/index.asp
*Curiosity Corner	Curiosity Corner emphasizes language and literacy as well as physical, emotional and interpersonal development, math, science, social studies, music, movement, and art. Its thematic units are aligned with state and national early learning guidelines. Two states have approved this curriculum for their preK programs—Arkansas and New Jersey (Pre-K Now, 2008).	Success for All Foundation 800-548-4998, ext. 2319 http://successforall.com/early/early_curiosity.htm

Table 2. ECE Curricula That Focus on Reading and Math Readiness for PreK Students

Name	Description	Contact Information
HighReach® Learning	The HighReach curriculum, designed for children ages 12 months to 5 years, emphasizes a combination of teacher-facilitated and child-initiated activities. The monthly theme-based curriculum programs integrate language, literacy, mathematics, science, creative arts, physical, health, and social/emotional domains while addressing children's approaches to learning and individual learning styles. The curriculum provides training for teachers and materials to facilitate documentation of student learning. Georgia has approved this curriculum for its preK programs (Pre-K Now, 2008).	800-729-9988 http://www.highreach.com/Scripts/default.asp
High/Scope	High/Scope is a comprehensive, research-based system that includes child instruction, staff development, and accountability assessment. High/Scope is compatible with state standards for program implementation and early childhood learning as well as with Head Start Performance Standards and Child Outcomes. The focuses on language and literacy, mathematics and science, social-emotional development, physical development, and the arts. The center of the High/Scope approach is the <i>plan-do-review sequence</i> in which children make choices, carry out their ideas, and reflect on what they learn. Thirteen states have approved this curriculum for their preK programs—Alabama, Arkansas, Georgia, Illinois, Michigan, Missouri, North Carolina, New Jersey, New Mexico, Pennsylvania, South Carolina, Tennessee, and Vermont (Pre-K Now, 2008).	High/Scope Educational Research Foundation 734-485-2000 http://www.highscope.org/Content.asp?ContentId=63
Houghton Mifflin Pre-K	Houghton Mifflin Pre-K is a hands-on, minds-on curriculum that is based on scientific research. The curriculum is aligned with key Pre-K learning goals. Arkansas has approved this curriculum for its preK programs (Pre-K Now, 2008).	800-733-282 http://www.eduplace.com/marketing/prek/
Learninggames	Learninggames is a home-based, center-based, or parent groups' curriculum for children from birth through 5 years. Activities are derived from developmental milestones in the domains of social/emotional development and cognitive/creative development, language, and motor skills. The games provide educators with examples of how to enhance child development. The curriculum includes a users' guide and an assessment instrument.	MindNurture, Inc. 919-967-0126 http://mindnurture.com

Table 2. ECE Curricula That Focus on Reading and Math Readiness for PreK Students

Name	Description	Contact Information
Mediated Learning Curriculum	The Mediated Learning Curriculum supports children ages 2 to 7-years-old in inclusive settings. The model has been implemented in early childhood special education settings and in Head Start programs. It has been rigorously evaluated over a 15-year period and has shown to be effective with children who have developmental delays and children who are developing typically.	Washington Learning Systems 206-310-7401 mmaddox@wlearning.com www.wlearning.com/index.html
Opening the World of Learning (OWL)	Opening the World of Learning is a comprehensive literacy-based curriculum for use with preschoolers that covers all domains of early learning (i.e., language and literacy, mathematics, social studies and science, the arts, physical development, and social and emotional development). The curriculum includes six units, each which provide 4 weeks of activities. OWL includes an assessment tool. Four states have approved this curriculum for their preK programs—Arkansas, Georgia, Pennsylvania, and Tennessee (Pre-K Now, 2008).	Pearson Learning Group 800-526-9907 www.pearsonearlylearning.com/products/curriculum/owl/index.html
*Project Construct	Project Construct is derived from constructivism, the theoretical view that learners construct knowledge through interaction with physical and social environments. Students using this model have “hands-on, minds-on” experiences, attain deep understandings in the core content areas, and learn to work collaboratively with adults and peers. The Project Construct approach incorporates theory-based curricula that are linked to state and national curriculum frameworks and standards. Missouri has approved this curriculum for its preK programs (Pre-K Now, 2008).	Project Construct National Center 800-335-7262 www.projectconstruct.org
*Ready, Set, Leap! Program	The Ready, Set, Leap! Program is a comprehensive preK curriculum that provides a full year of instruction and incorporates academic, music, visual arts, and social/emotional development skills to address the needs of all students. It incorporates award-winning, multisensory technology into each lesson. It supports a theme-based, literature-based teaching approach, and provides detailed lesson plans and ongoing assessment tools. The program is aligned with the goals and research requirements of the National Association for the Education of Young Children and the National Head Start Association. It also is available in English and Spanish editions.	800-883-7430 http://www.leapfrogschoolhouse.com/do/findsolution?detailPage=overview&id=readyssetleap

Table 2. ECE Curricula That Focus on Reading and Math Readiness for PreK Students

Name	Description	Contact Information
Scholastic Early Childhood Program	The Scholastic Early Childhood Program is a comprehensive, yearlong curriculum that provides explicit instruction in early language, reading, and math skills using 10 themes. Scholastic includes both English and Spanish resources. The program includes an in-depth formal and informal assessment system. It is based on the Pre-Kindergarten Curriculum Guidelines. Four states have approved this curriculum for their preK programs—Arkansas, Georgia, Tennessee, and Texas (Pre-K Now, 2008).	800-SCHOLASTIC http://teacher.scholastic.com/products/secp/index.htm
*The Creative Curriculum [®] for Preschool	The Creative Curriculum focuses on how children learn, what children learn, as well as the roles of parents and teachers. The curriculum is aligned with the Head Start Performance Standards and Child Development Associate credential requirements. The curricula are available in English and Spanish. Thirteen states have approved this curriculum for their preK programs—Alabama, Arkansas, Georgia, Illinois, Michigan, Missouri, North Carolina, New Jersey, New Mexico, Pennsylvania, South Carolina, Tennessee, and Vermont. The District of Columbia also has approved this curriculum (Pre-K Now, 2008).	Teaching Strategies Inc. 800-637-3652 www.TeachingStrategies.com
Tools of the Mind	Tools of the Mind is a comprehensive curriculum that is based on psychologist Lev Vygotsky’s socio-cultural theory of development. This curriculum builds the foundation for later learning by helping young children develop the ability to regulate their emotions, activities, and actions using language and other forms of representation, which include drawing, scribbling, and writing. Daily activities provide developmentally appropriate learning in all areas including cognitive, language, social, emotional, problem-solving and motor skills. New Jersey has approved this curriculum for its preK programs (Pre-K Now, 2008).	Metropolitan State College of Denver 303-556-2400 http://www.mscd.edu/extendedcampus/toolsofthemind/
We Can!	We Can! is a comprehensive and integrated early-childhood program that helps teachers to prepare children for elementary school through meaningful learning experiences in language and literacy, math, science, social studies, and other areas. It provides multilingual instruction that honors diversity and encourages literacy development in English, Spanish, and American Sign Language. Texas has approved this curriculum for its preK programs Texas (Pre-K Now, 2008).	Sopris West Educational Services 800-547-6747 http://store.cambiumlearning.com/ProductPage.aspx?parentId=019004842&functionID=009000008&site=

Note. Adapted from the National Child Care Information and Technical Assistance Center (2007), Pre-K Now (2008), and Web sites of organizations that sponsor the above curricula. *Curricula were reviewed by the PCER Consortium (2008).

REFERENCES

- Barnett, S., Hustedt, J., Friedman, A., Boyd, J., & Ainsworth, P. (2007). *The state of preschool 2007: State preschool yearbook*. Retrieved June 20, 2008, from <http://nieer.org/yearbook/pdf/yearbook.pdf>
- Barnett, W. S., Kwanghee, J., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R. & Burns, S. (In press). Educational effects of the Tools of the Mind curriculum: A randomized trial. *Early Childhood Research Quarterly*. Retrieved June 20, 2008, from <http://nieer.org/resources/research/ToolsoftheMind.pdf>
- Clements, D., & Samara, J. (2008). Experimental evaluation of the effects of a research-based preschool mathematics curriculum. *American Educational Research Journal*, 45 (2), 443-494.
- Frede, E. & Ackerman, D. (2007, March). Preschool curriculum decision-making: Dimensions to consider. *NIEER policy brief* (Issue 12). New Brunswick, NJ: National Institute for Early Education Research. Retrieved July 24, 2008, from <http://nieer.org/resources/policybriefs/12.pdf>
- Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, U.S. Department of Education. (2003). *Identifying and implementing educational practices supported by rigorous evidence: A user friendly guide*. Retrieved July 29, 2008, from http://ies.ed.gov/ncee/pubs/evidence_based/evidence_based.asp
- IES What Works Clearinghouse. (n.d.). *Early childhood education abstract*. Retrieved July 29, 2008, from http://ies.ed.gov/ncee/wwc/reports/early_ed/abstract.asp
- IES What Works Clearinghouse. (n.d.). *Intervention: SRA Real Math Building Blocks PreK*. Retrieved July 29, 2008, from <http://ies.ed.gov/ncee/wwc/reports/early%5Fed/sra%5Fprek/>
- IES What Works Clearinghouse. (n.d.). *List of all intervention reports*. Retrieved July 29, 2008, from <http://ies.ed.gov/ncee/wwc/reports/topic.aspx?tid=13>
- IES What Works Clearinghouse. (n.d.). *WWC evidence review protocol for early childhood education intervention*. Retrieved July 29, 2008, from http://ies.ed.gov/ncee/wwc/PDF/ECE_protocol.pdf
- Klein, L., & Knitzer, J. (2006). Effective preschool curricula and teaching strategies. *Pathways to early school success* (Issue Brief 2). New York: National Center for Children in Poverty. Retrieved on June 2, 2008, from http://www.nccp.org/publications/pdf/download_100.pdf
- Lawrence, T., Childs, S., Fiore, S., Onibokun, Y., Synodi, M., Flinter, P., Coleman, G., & Rowell, G. (n.d.) *Early childhood: A guide to early childhood program development—State of Connecticut*. Retrieved June 2, 2008, from http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Early/early_childhood_guide.pdf
- National Association for the Education of Young Children. (2003). *Position statement with expanded resources: Early childhood curriculum, assessment, and program evaluation—Building an effective, accountable system in programs for children birth through age eight*. Washington, D.C.: Author. Retrieved June 2, 2008, from <http://www.naeyc.org/about/positions/pdf/CAPEexpand.pdf>
- Pre-K Now. (2008.) *Pre-K Now. Pre-K Teachers Resource Center. Research-based Curricula*. Retrieved June 20, 2008 from <http://www.preknow.org/educators/resource/curricula.cfm>

Preschool Curriculum Evaluation Research Consortium. (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office. Retrieved July 28, 2008, from <http://ies.ed.gov/ncer/pubs/20082009/index.asp>

Samara, J., & Clements, D. (2004). Building blocks for early childhood mathematics. *Early Childhood Research Quarterly*, 19, 181-189.

U.S. Department of Education. (2002). No Child Left Behind Act of 2001. Washington, DC: Department of Education. Retrieved July 28, 2008, from <http://www.ed.gov/policy/elsec/leg/esea02/index.html>

RESOURCES

Bodrova, E., & Leong, D. (2001). *Tools of the mind: A case study of implementing The Vygotskian Approach In American early childhood and primary classrooms*. Innodata Monographs – 7. Geneva, Switzerland: UNESCO – International Bureau of Education. Retrieved on July 24, 2008, from http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/innodata/inno07.pdf

High Scope. (2008). *The High/Scope® Preschool educational approach: A prospectus for pre-kindergarten programs*. Ypsilanti, MI: Author. Retrieved on July 24, 2008, from <http://www.highscope.org/file/EducationalPrograms/EarlyChildhood/UPKFullReport.pdf>

Lambert, R. (n.d.). *The developmental continuum assessment system for ages 3 to 5: The assessment component of The Creative Curriculum® for preschool*. Technical Report. Retrieved July 24, 2008, from http://www.teachingstrategies.com/content/pageDocs/Dev_Continuum_Technical_Report.pdf

Morrell, C. *Foundations of education and instructional assessment/edition 2/table of contents/chapter 9/9.2.2. 9.2.2 Early intervention: Is pre-k the answer?* Retrieved on July 24, 2008, from http://en.wikibooks.org/wiki/Foundations_of_Education_and_Instructional_Assessment/Edition_2/Table_of_Contents/Chapter_9/9.2.2

New Mexico Child Development Board. (2008.) *New Mexico preK: Invest a little get a lot—New Mexico's preK program standards for 2008-2009*. Retrieved July 30, 2008, from <http://www.ped.state.nm.us/EarlyChildhood/dl08/preK/NM%20PreK%20Program%20Standards.pdf>

Tools of the Mind: Pre-K, Preschool. (n.d.) Metropolitan State College of Denver. Retrieved July 24, 2008, from [http://www.mscedu.com/extendedcampus/toolsofthemind/assets/pdf/Preschool%20Brochure%20\(acrobat\).pdf](http://www.mscedu.com/extendedcampus/toolsofthemind/assets/pdf/Preschool%20Brochure%20(acrobat).pdf)

Yelton, B., Driscoll, L., Logue, M., & Miller, S. (2003). *The effect of participation in HighReach Learning pre-kindergarten curriculum on students' kindergarten assessment scores*. Retrieved July 24, 2008, from <http://www.highreach.com/pdfs/2003RSFull.pdf>

Rapid Responses are customized reports that are prepared to fulfill requests for information by the departments of education of the states served by the Southeast Comprehensive Center at SEDL. The responses address topics on current education issues related to the requirements and implementation of the No Child Left Behind Act of 2001. For additional information, visit the SECC Web site at secc.sedl.org.

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