

What Works Clearinghouse



The Creative Curriculum® for Preschool

Program Description¹

The Creative Curriculum® for Preschool is a project-based early childhood curriculum designed to foster the development of the whole child through teacher-led small and large group activities. The curriculum provides information on child development, working with families, and organizing the classroom around

11 interest areas. Child assessments are an ongoing part of the curriculum, and an online program provides record-keeping tools to assist teachers with the maintenance and organization of child portfolios, individualized planning, and report production.

Research²

One study of *The Creative Curriculum®* meets What Works Clearinghouse (WWC) evidence standards, and two studies meet WWC evidence standards with reservations. The three studies included a total of 844 children from 101 classrooms in more than 88 preschools located in Tennessee, North Carolina, and Georgia.³

Based on these three studies, the WWC considers the extent of evidence for *The Creative Curriculum®* to be medium to large for oral language, print knowledge, phonological processing, and math. No studies that meet WWC evidence standards with or without reservations examined the effectiveness of *The Creative Curriculum®* in the early reading and writing or cognition domains.

Effectiveness

The Creative Curriculum® was found to have no discernible effects on oral language, print knowledge, phonological processing, or math.

	Oral language	Print knowledge	Phonological processing	Early reading and writing	Cognition	Math
Rating of effectiveness	No discernible effects	No discernible effects	No discernible effects	na	na	No discernible effects
Improvement index⁴	Average: +3 percentile points Range: -6 to +9 percentile points	Average: +3 percentile points Range: -7 to +8 percentile points	Average: -2 percentile points Range: -4 to +1 percentile points	na	na	Average: +4 percentile points Range: -5 to +8 percentile points

na = not applicable

1. The descriptive information for this program was obtained from a publicly available source: the program's website (http://www.teachingstrategies.com/page/CCPS_Overview.cfm, downloaded July 2009). The WWC requests developers to review the program description sections for accuracy from their perspective. Further verification of the accuracy of the descriptive information for this program is beyond the scope of this review.
2. The studies in this report were reviewed using WWC Evidence Standards, Version 1.0 (see the WWC Standards).
3. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
4. These numbers show the average and range of student-level improvement indices for all findings across the studies.

Absence of conflict of interest

The PCER Consortium (2008) study summarized in this intervention report had numerous contributors, including staff of Mathematica Policy Research, Inc. (MPR). Because the principal investigator for the WWC Early Childhood Education review is

Additional program information

Developer and contact

Developed by Diane Trister Dodge, Laura Colker, and Cate Heroman, *The Creative Curriculum*® is distributed by Teaching Strategies, Inc. Address: 7101 Wisconsin Ave., Suite 700, Bethesda, MD 20814. Email: CustomerRelations@TeachingStrategies.com. Web: <http://www.teachingstrategies.com/>. Telephone: (800) 637-3652.

Scope of use

No information on the scope of use or the demographic characteristics of program users is available.

Teaching

The Creative Curriculum® is an early childhood curriculum designed to foster children's social/emotional, physical, cognitive, and language development and to enhance learning in literacy, math, science, social studies, the arts, and technology. The curriculum includes information on children's development and learning, classroom organization and structure, teaching strategies, instructional goals and objectives, and guidance on how to engage families in their children's learning. Intentional, teacher-guided learning experiences are provided in large and small group settings. Children are offered learning opportunities in the following interest areas: blocks, dramatic play, toys and games, art, library, discovery, sand and water, music and movement, cooking, computers, and outdoors. The curriculum describes the learning that occurs through play in each area, the corresponding stages of play, and teacher interactions to promote and scaffold children's learning. The curriculum incorporates the use of "studies," which are project-based investigations focused on meaningful science and social studies topics that provide children with an opportunity to apply skills in literacy, math, the arts, and technology. *The Creative Curriculum*® also emphasizes

also an MPR staff member, the study was rated by Chesapeake Research Associates, who also prepared the intervention report. The report was then reviewed by the principal investigator, a WWC Quality Assurance reviewer, and an external peer reviewer.

the use of ongoing, observation-based child assessments to help guide instruction. CreativeCurriculum.net is a web-based application that enables teachers to link curriculum and assessment and streamline the assessment process. Adaptations in all resources are suggested for children with disabilities and dual language learners. In addition to the general curriculum guide, separate literacy, mathematics, and science and social studies guides can be purchased, and implementation and evaluation guidance and professional development services are available.

Cost

The curriculum materials can be purchased separately depending on program needs with prices ranging from \$12.95 for an individual *Study Starter* to \$49.95 for *The Creative Curriculum*® for *Preschool*, 4th edition. Preschool assessment materials cost \$114.95 for 25 children. *The Creative Curriculum*® does not require any special materials or manipulatives other than those that may be found in most well-equipped preschool classrooms; however, a series of literacy and mathematics kits containing materials that align with curriculum activities are available for \$499.95 each.

Teaching Strategies also offers *The Creative Curriculum*® *Classroom Resource Kit*, which provides all the resources necessary to implement the program in a classroom. The kit contains the following materials: *The Creative Curriculum*® for *Preschool* (2 copies), *The Creative Curriculum*® for *Preschool in Action* DVD (1 copy), *The Creative Curriculum*® for *Preschool Implementation Checklist* (1 copy), *Setting Up a Classroom for 20 Preschool Children*® (1 copy), *The Creative Curriculum* for *Preschool Developmental Continuum Assessment Toolkit for Ages 3–5*® (1 toolkit), 20 subscriptions to CreativeCurriculum.net, *The Power of Observation*, 2nd edition (1 copy), *Literacy: The Creative Curriculum*® *Approach* (1 copy), *Mathematics:*

Additional program information *(continued)*

The Creative Curriculum Approach® (1 copy), *The Creative Curriculum*® *Study Starters: A Step-by-Step Guide to Project-Based Investigations in Science and Social Studies* (complete set of 12 topics and the *Teacher's Guide*), *Using The Creative Curriculum*® *LearningGames With Families: A Teacher's Guide* (1 copy), A

Parent's Guide to Preschool (2 sets with 10 copies in each set), *Reading Right from the Start* (2 sets with 10 copies in each set), *The Creative Curriculum*® *LearningGames*® 48–60 months (1 set containing 20 copies). The kit costs \$1,595. Professional development costs vary depending on the type of service provided.

Research

Eight studies reviewed by the WWC investigated the effects of *The Creative Curriculum*®. One study (Chapter 3 in PCER Consortium, 2008) was a randomized controlled trial that meets WWC evidence standards. One study (Chapter 2 in PCER Consortium, 2008) used a randomized controlled trial design that had nonrandom allocations after random assignment, but the analytic groups were shown to be equivalent, so the study meets WWC evidence standards with reservations. One study (Henry et al., 2004) is a quasi-experimental design in which the analytic groups were shown to be equivalent, so the study meets WWC evidence standards with reservations. The remaining five studies do not meet WWC evidence standards.

Meets evidence standards

PCER Consortium [Chapter 3] (2008) conducted a randomized controlled trial of teachers and children in five Head Start centers in North Carolina and Georgia.⁵ Randomization of teachers was conducted in the pilot year. Twenty teachers were blocked on education and teacher certification status and then randomly assigned equally to treatment or control. Eighteen of the classrooms were maintained during the evaluation year. Then, children within a center were sorted into blocks based on gender, disability status, and ethnicity and randomly assigned to treatment or control classrooms. Each of the five participating Head Start centers included both treatment and control classrooms. Data were collected for 171 children (90 *Creative Curriculum*® and 81 control). The study investigated effects on oral language, print knowledge, phonological processing, and math. The control

condition consisted of teacher-developed, nonspecific curricula with a focus on basic school readiness. The study reported children's outcomes in the spring of the preschool year and again at the end of kindergarten.

Meets evidence standards with reservations

PCER Consortium [Chapter 2] (2008) assessed the effectiveness of *The Creative Curriculum*® as part of the PCER effort. This study of 28 preschools in Tennessee was a randomized controlled trial with severe attrition. In the pilot year, 36 full-day preschool classrooms were sorted into blocks based on demographic and achievement characteristics and then randomly assigned to *The Creative Curriculum*®, to Bright Beginnings, or to the control group. Also in the pilot year, 21 of the 36 classrooms (7 from each group) were randomly selected to become part of the PCER study in the following year. After the pilot year, 8 classrooms from the PCER study dropped out. Eight classrooms were randomly selected from the local study classrooms to replace those that had dropped out, bringing the total to 7 classrooms per group again for the PCER evaluation (7 *Creative Curriculum*® and 7 control). The study investigated effects on oral language, print knowledge, phonological processing, and math. The WWC based its effectiveness ratings on findings from comparisons of 93 students who received *The Creative Curriculum*® and 100 control group students who received teacher-developed, nonspecific curricula with a focus on basic school readiness. The study demonstrated the baseline equivalence of the outcome measures for the analytic sample of intervention and

5. The study was part of the Preschool Curriculum Evaluation Research Consortium (2008) that evaluated a total of 14 preschool curricula, including *The Creative Curriculum*®, in comparison to the respective control conditions.

Research *(continued)*

control group children. The study reported students' outcomes in the spring of the preschool year and again at the end of kindergarten.

Henry et al. (2004) conducted a quasi-experimental design study that compared 482 children in 69 state prekindergarten, Head Start, and private preschool program classrooms in Georgia that were using *The Creative Curriculum*® or another curriculum (High/Scope, High Reach, or a different curriculum).⁶ The study investigated effects on oral language, print knowledge, and math. The baseline intervention and comparison groups were equivalent on the achievement measures in the fall. The study reported students' outcomes in the spring of the preschool year.

Effectiveness Findings

The WWC review of interventions for Early Childhood Education addresses child outcomes in six domains: oral language, print knowledge, phonological processing, early reading and writing, cognition, and math. The studies included in this report cover four domains: oral language, print knowledge, phonological processing, and math. The findings below present the authors' estimates and WWC-calculated estimates of the size and the statistical significance of the effects of *The Creative Curriculum*® on children.⁸

Oral language. Three studies presented findings in the oral language domain. PCER Consortium [Chapter 3] (2008) analyzed the effectiveness of *The Creative Curriculum*® on oral language using

Extent of evidence

The WWC categorizes the extent of evidence in each domain as small or medium to large (see the WWC Procedures and Standards Handbook, Appendix G). The extent of evidence takes into account the number of studies and the total sample size across the studies that meet WWC evidence standards with or without reservations.⁷

The WWC considers the extent of evidence for *The Creative Curriculum*® to be medium to large for oral language, print knowledge, phonological processing, and math. No studies that meet WWC evidence standards with or without reservations examined the effectiveness of *The Creative Curriculum*® in the early reading and writing or the cognition domains.

the Peabody Picture Vocabulary Test–III (PPVT-III) and the Test of Language Development–Primary: III (TOLD-P:3). The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® group and the control group are not statistically significant or substantively important (that is, an effect size of at least 0.25) on either of these measures. According to WWC criteria, the study shows indeterminate effects on oral language.

PCER Consortium [Chapter 2] (2008) examined the effectiveness of *The Creative Curriculum*® on oral language using the PPVT-III and the TOLD-P:3. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® group and the control group are not statistically significant or substantively important (that is, an effect size of at least 0.25)

6. To calculate effects of *The Creative Curriculum*®, the WWC aggregated means and standard deviations across three comparison curricula: High/Scope, High Reach, and other.
7. The extent of evidence categorization was developed to tell readers how much evidence was used to determine the intervention rating, focusing on the number and size of studies. Additional factors associated with a related concept—external validity, such as the students' demographics and the types of settings in which studies took place—are not taken into account for the categorization. Information about how the extent of evidence rating was determined for *The Creative Curriculum*® is in Appendix A6.
8. The level of statistical significance was reported by the study authors or, when necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation, see the WWC Tutorial on Mismatch. For the formulas the WWC used to calculate the statistical significance, see WWC Procedures and Standards Handbook, Appendix C for clustering and WWC Procedures and Standards Handbook, Appendix D for multiple comparisons. No correction for clustering was needed for the studies by the PCER Consortium (PCER Consortium [Chapters 2 and 3], 2008) because its analysis corrected for clustering by using HLM. A correction for clustering was needed for the Henry et al. (2004) study, so the significance levels in this report may differ from those reported in the original study. No corrections for multiple comparisons were needed in any of the studies because the findings were not statistically significant.

on either of these measures. According to WWC criteria, this study shows indeterminate effects on oral language.

Henry et al. (2004) compared children in preschool classes using *The Creative Curriculum*® to children in preschool classes using High/Scope, High Reach, and several other curricula. They report that at the end of preschool, no differences on standardized measures in the oral language domain emerged between children who were in preschool classrooms using *The Creative Curriculum*® and children who were in preschool classrooms using either the High Reach or the High/Scope curriculum. Using data on PPVT-III and Oral and Written Language Scale (OWLS) Oral Expression subtest scores at the end of the preschool year supplied by the authors, the WWC calculates that the differences between children in preschool classes using *The Creative Curriculum*® and those in preschool classes using other curricula are not statistically significant or substantively important (that is, an effect size of at least 0.25). According to WWC criteria, the study shows indeterminate effects on oral language.

Print knowledge. Three studies presented findings in the print knowledge domain. PCER Consortium [Chapter 3] (2008) analyzed the effectiveness of *The Creative Curriculum*® on the Test of Early Reading Ability (TERA-3), the Woodcock-Johnson-III (WJ-III) Letter-Word Identification subtest, and the WJ-III Spelling subtest. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® and control groups are not statistically significant or large enough to be substantively important on any of these measures. According to WWC criteria, this study shows indeterminate effects on print knowledge.

PCER Consortium [Chapter 2] (2008) examined the effectiveness of *The Creative Curriculum*® on the TERA-3, the WJ-III Letter-Word Identification subtest, and the WJ-III Spelling subtest. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® and control groups are not statistically significant or large enough to be substantively important on any of these measures. According to WWC criteria, the study shows indeterminate effects on print knowledge.

Henry et al. (2004) compared children in preschool classes using *The Creative Curriculum*® to children in preschool classes using High/Scope, High Reach, and several other curricula. They report that at the end of preschool, no differences in the print knowledge domain emerged between children who were in preschool classrooms using *The Creative Curriculum*® and children who were in preschool classrooms using either the High Reach or the High/Scope curriculum. Using data on WJ-III Letter-Word Identification subtest scores at the end of the preschool year supplied by the authors, the WWC calculates that the difference between children in preschool classes using *The Creative Curriculum*® and those in preschool classes using other curricula is not statistically significant or substantively important (that is, an effect size of at least 0.25). According to WWC criteria, the study shows indeterminate effects on print knowledge.

Phonological processing. Two studies presented findings in the phonological processing domain. PCER Consortium [Chapter 3] (2008) analyzed the effectiveness of *The Creative Curriculum*® on phonological processing using the Preschool Comprehensive Test of Phonological and Print Processing (Pre-CTOPPP) Elision subtest. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® and control groups are not statistically significant or substantively important on this measure. According to WWC criteria, this study shows indeterminate effects on phonological processing.

PCER Consortium [Chapter 2] (2008) also analyzed the effectiveness of *The Creative Curriculum*® on phonological processing using the Pre-CTOPPP Elision subtest. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*® and control groups are not statistically significant or substantively important on this measure. According to WWC criteria, this study shows indeterminate effects on phonological processing.

Math. Three studies presented findings in the math domain. PCER Consortium [Chapter 3] (2008) analyzed the effectiveness of *The Creative Curriculum*® on math using the WJ-III Applied Problems subtest, the Child Math Assessment–Abbreviated, and

Effectiveness *(continued)*

the Shape Composition task. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*[®] and control groups are not statistically significant or large enough to be substantively important on any of these measures. According to WWC criteria, this study shows indeterminate effects on math.

PCER Consortium [Chapter 2] (2008) also examined the effectiveness of *The Creative Curriculum*[®] on math using the WJ-III Applied Problems subtest, the Child Math Assessment–Abbreviated, and Shape Composition task. The authors report, and the WWC confirms, that differences between *The Creative Curriculum*[®] and control groups are not statistically significant or large enough to be substantively important on any of these measures. According to WWC criteria, this study shows indeterminate effects on math.

Henry et al. (2004) compared children in preschool classes using *The Creative Curriculum*[®] to children in preschool classes using High/Scope, High Reach, and several other curricula. They report that at the end of preschool, no differences in the math domain emerged between children who were in preschool classrooms using *The Creative Curriculum*[®] and children who

were in preschool classrooms using either the High Reach or the High/Scope curriculum. Using data on the WJ-III Applied Problems subtest scores at the end of the preschool year supplied by the authors, the WWC calculates that the difference between children in preschool classes using *The Creative Curriculum*[®] and those in preschool classes using other curricula is not statistically significant or substantively important (that is, an effect size of at least 0.25). According to WWC criteria, the study shows indeterminate effects on math.

Rating of effectiveness

The WWC rates the effects of an intervention in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings (as calculated by the WWC), the size of the difference between participants in the intervention and the comparison conditions, and the consistency in findings across studies (see the WWC Procedures and Standards Handbook, Appendix E).

The WWC found *The Creative Curriculum*[®] to have no discernible effects on oral language, print knowledge, phonological processing, and math

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study and an average improvement index across studies (see WWC Procedures and Standards Handbook, Appendix F). The improvement index represents the difference between the percentile rank of the average student in the intervention condition and the percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results for the intervention group.

Based on three studies, the average improvement index for *The Creative Curriculum*[®] for three measures of oral language across three studies is +3 percentile points with a range of –6 to +9 percentile points across findings. The average improvement index for three measures of print knowledge is +3 percentile points across three studies, with a range of –7 to +8 percentile points across findings. Based on two studies, the average improvement index for *The Creative Curriculum*[®] on one measure of phonological processing is –2 percentile points, with a range of –4 to +1 percentile points across findings. The average improvement index across three studies for three measures of math is +4 percentile points, with a range of –5 to +8 percentile points across findings.

The WWC found *The Creative Curriculum*® to have no discernible effects on oral language, print knowledge, phonological processing, and math *(continued)*

Summary

The WWC reviewed eight studies of *The Creative Curriculum*®. One of these studies meets WWC evidence standards, and two of these studies meet WWC evidence standards with reservations. Five studies do not meet either WWC evidence standards

or eligibility screens. Based on the three studies, the WWC found no discernible effects of *The Creative Curriculum*® on oral language, print knowledge, phonological processing, and math. The conclusions presented in this report may change as new research emerges.

References

Meets WWC evidence standards

Preschool Curriculum Evaluation Research (PCER) Consortium. (2008). *Creative Curriculum*: University of North Carolina at Charlotte. In *Effects of preschool curriculum programs on school readiness* (pp. 55–64). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education.

Meets WWC evidence standards with reservations

Henry, G. T., Ponder, B. D., Rickman, D. K., Mashburn, A. J., Henderson, L. W., & Gordon, C. S. (2004, December). *An evaluation of the implementation of Georgia's pre-K program: Report of the findings from the Georgia early childhood study (2002–03)*. Atlanta, GA: Georgia State University, Andrew Young School of Policy Studies.

Additional source:

Henry, G. T., Henderson, L. W., Ponder, B. D., Gordon, C. S., Mashburn, A. J., & Rickman, D. K. (2003, August). *Report of the findings from the early childhood study: 2001–02*. Atlanta, GA: Georgia State University, Andrew Young School of Policy Studies.

Preschool Curriculum Evaluation Research (PCER) Consortium. (2008). *Bright Beginnings and Creative Curriculum*: Vanderbilt University. In *Effects of preschool curriculum programs on school readiness* (pp. 41–54). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education.

Studies that fall outside the Early Childhood Education review protocol or do not meet WWC evidence standards

Abbott-Shim, M. (2000, October). *Sure Start effectiveness study: Final report*. Atlanta, GA: Report for the U.S. Department of Defense Education Activity by Quality Assist, Inc. The study is ineligible for review because it does not use a comparison group.

Additional source:

Zigler, E. F., & Bishop-Josef, S. J. (2006). The cognitive child versus the whole child: Lessons from 40 years of Head Start. In D. G. Singer, R. M. Golinkoff, & K. Hirsh-Pasek (Eds.), *Play = learning: How play motivates and enhances children's cognitive and social-emotional growth* (pp. 15–35). New York: Oxford University Press.

Gomby, D., Spiker, D., Golan, S., Zercher, C., Daniels, M., & Quirk, K. (2005). Los Angeles County Vaughn Next Century Learning Center. Supporting literacy: Curriculum, technology, parents, and experts. In *Case studies of the First 5 School Readiness Initiative. Promising programs and practices: A focus on early literacy* (pp. 2-73–2-87). Santa Monica, CA: SRI International. Retrieved from <http://policyweb.sri.com/cehs/publications/f5cslit.pdf>. The study is ineligible for review because it does not use a comparison group.

Hartford Foundation for Public Giving. (2004). *Hartford children are learning by leaps and bounds: Achievements of children involved in Brighter Futures child care enhancement project*. Hartford, CT: Author. The study does not meet WWC evidence standards because the measures of effect cannot be attributed solely to the intervention—the intervention was combined with another intervention.

References *(continued)*

Lambert, R. G., Abbott-Shim, M., & Kusherman, J. *The effect of Creative Curriculum training and technical assistance on Head Start classroom quality*. Paper presented at the annual meetings of the North Carolina Association for Research in Education, March 30, 2006, Hickory, North Carolina, and the American Educational Research Association, April 8, 2006, San Francisco, California. The study is ineligible for review because it does not include a student outcome.

Preschool Curriculum Evaluation Research (PCER) Consortium. (2008). *Creative Curriculum with Ladders to Literacy*: University of New Hampshire. In *Effects of preschool curriculum programs on school readiness* (pp. 65–73). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. The study does not meet WWC evidence standards because the measures of effectiveness cannot be attributed solely to the intervention—the intervention was combined with another intervention.
