

Connecticut State Department of Education Evidence-Based Practice Guide  
Supporting Local Education Agencies' (LEA) Use of ESSA Title Funds

Early Learning

DRAFT

Under ESSA, there are four tiers, or levels, of evidence. Throughout this guide, the level indicator key is used to identify the evidence level at a quick glance.

Tier	Evidence Level	Evidence Descriptor
1	Strong Evidence	Supported by one or more well-designed and well-implemented <b>randomized control experimental</b> studies.
2	Moderate Evidence	Supported by one or more well-designed and well-implemented <b>quasi-experimental</b> studies.
3	Promising Evidence	Supported by one or more well-designed and well-implemented <b>correlational</b> studies.
4	Demonstrates a Rationale	Practices that have a well-defined <b>logic model</b> or <b>theory of action</b> , are supported by research, and have some effort underway to determine their effectiveness.

Interventions applied under Title I, Section 1003 (School Improvement) are required to have strong, moderate, or promising evidence (Tiers 1-3) to support them. All other programs under Titles I-IV can rely on Tiers 1-4.

Suggested citation: Connecticut State Department of Education. (2018). *CSDE and ESSA Evidence-Based Spending Guide*.



## Instructional Practice

The Connecticut State Department of Education adheres to research that supports the explicit instructional practices of experiential learning and formative assessment that are grounded in neuroscience and incorporate multiple developmental domains and/or content areas.

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Implement developmentally appropriate practices to have a positive influence on children’s cognitive development.</b></p> <p><i>Guidance on effective practice to support children birth to grade 3 in all domains of development including cognitive development (approaches to learning, executive functioning, and logic and reasoning).</i></p>	PreK-3	<p><b>Tier 3, Promising</b></p> <p>Source: <a href="#">The Influence of Developmentally Appropriate Practice on Children’s Cognitive Development: A Qualitative Metasynthesis</a></p>
	PreK-3	<p><b>Tier 3, Promising</b></p> <p>Source: <a href="#">Developmentally Appropriate Practices in Early Childhood by Copple and Bredekamp (2009)</a></p>
<p><b>Practice active play and social mediation by teachers improves student outcomes.</b></p> <p><i>Scaffolding learning to develop cognitive skills including self-regulation, memory as well as academic skills in PreK-grade 2. This can lead to improved performance on measures of vocabulary and reduced behavior problems.</i></p>	PreK-3	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Tools of the Mind, Descriptions and evaluations of the program</a></p>
	PreK-3	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Educational Effectiveness of a Vygotskian Approach to Preschool Education: A randomized trial</a></p>
	PreK-3	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Closing the Achievement Gap through Modification and Neuroendocrine Function: Results From a Cluster Randomized Controlled Trial of an Innovative Approach to the Education of Young Children in Kindergarten</a></p>

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Implement a developmentally appropriate comprehensive preschool curriculum and planning for instruction.</b></p> <p><i>Curriculum planned to focus children’s attention on important concepts, skills, and behaviors. When curriculum is developmentally appropriate, it is challenging, engaging, culturally and linguistically responsive, and it promotes positive outcomes for all children. (Used in conjunction with the CT ELDS: Connecticut Early Learning and Development Standards).</i></p>	<p>PreK-3</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Comparing Child Outcomes: Examining the Impact The Creative Curriculum for Preschool</a></p>
<p><b>Developing executive functioning skills.</b></p> <p><i>A comprehensive executive functioning-based intervention leads to low-income children’s improved executive function skills and math scores. Low-income parents improve executive functioning skills.</i></p>	<p>PreK-3</p> <p>PreK-3</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Civic Science for Public Use: Mind in the Making and Vroom</a></p> <p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Outcome Evaluation of Mind in the Making, Vroom and Circle Time Games</a></p>
<p><b>Assess dimensions of classroom quality linked to student achievement.</b></p> <p><i>Children’s academic and social growth in Pre-K is predicted by the quality of the interactions between students and teachers. Positive emotional climates using diverse, engaging instructional learning formats, and focusing on higher order thinking skills is linked to higher levels of student achievement.</i></p>	<p>PreK-3 4-5 6-8 9-12</p> <p>PreK-3 4-5 6-8 9-12</p> <p>PreK-3 4-5 6-8 9-12</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">The Relations of Observed Pre-K Classroom Quality Profiles to Children’s Achievement and Social Competence</a></p> <p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Classroom Effects on Children’s Achievement Trajectories in Elementary School</a></p> <p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Predicting Adolescent Achievement with the CLASS-S Observation Tool</a></p>

## Professional Learning

The Connecticut State Department of Education supports the following evidence-based models of teacher professional learning in building the competency of adults who support children on a positive trajectory of learning and development.

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Develop professional learning systems including in-class mentoring and instructionally linked feedback.</b></p> <p><i>Creating quality professional learning experiences is fundamental to student learning in ALL grade levels and has unique considerations for young children to include in-class mentoring and instructionally linked feedback. Use the CSDE model considering PreK and K teacher's needs.</i></p>	PreK-3	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Effectiveness of Comprehensive Professional Development for Teachers of At-Risk Preschoolers</a></p>
<p><b>Embed competencies as the core for in-service programs.</b></p> <p><i>When developing outcomes for adult learning, the goal is to increase adult knowledge and competence to improve teaching practice.</i></p>	PreK-3  PreK-3	<p><b>Tier 3, Promising</b></p> <p>Source: <a href="#">Chapter 7 of Transforming the Workforce Birth Through Age 8 Report</a></p> <p><b>Tier 3, Promising</b></p> <p>Source: <a href="#">Connecticut Core Knowledge and Competency Framework for Professionals Working with Young Children and Their Families (CKCs)*</a></p>
<p><b>Provide instructional coaching.</b></p> <p><i>Effective instructional coaching has the structural conditions that support coaching, a guided, content-based focus, and instructional leadership by the coaches.</i></p>	PreK-3 4-5 6-8 9-12	<p><b>Tier 2, Moderate</b></p> <p>Source: <a href="#">Effectiveness of Comprehensive Professional Development for Teachers of At-Risk Preschools. Journal of Educational Psychology, 2009, Vol 101, No 2, 448-465</a></p>

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Evaluate administrator effectiveness.</b></p> <p><i>Addressing the important roles and responsibilities of elementary principals, Early Care and Education directors/managers (from PreK, Head Start, and child care), and other district-level or program-level administrators supports young children’s learning and builds alignment between traditionally disparate systems of birth-to-5 and K-12.</i></p>	<p><b>PreK-3</b></p>	<p><b>Tier 4, Demonstrates a rationale</b></p> <p>Source: <a href="#">Kauerz, K., &amp; Kuhl, K. (2018). Framework in Action: Administrator Effectiveness. Seattle, WA: National P-3 Center, College of Education, University of Washington</a></p>
<p><b>Develop Professional Learning Communities (PLCs).</b></p> <p><i>PLCs affect both teaching practice and student achievement when there is collaboration, focus on student learning, and continuous teacher learning.</i></p>	<p><b>PreK-3</b> <b>4-5</b> <b>6-8</b> <b>9-12</b></p>	<p><b>Tier 2, Moderate</b></p> <p>Source: <a href="#">A review of research on the impact of professional learning communities on teaching practice and student learning</a></p>

## Extended Learning

The Connecticut State Department of Education supports evidenced-based models of extended learning that include two-way relationships and communication with families and the community.

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Engage parents using evidence-based interventions.</b></p> <p><i>Select parenting interventions that are best for families and their children designed to choose interventions most likely to be effective with families of young children.</i></p>	<p>PreK-3 4-5 6-8</p>	<p><b>Tier 2, Moderate</b></p> <p>Source: <a href="#">Compendium of Parenting Interventions</a></p>
<p><b>Provide parents with opportunities to practice effective parenting skills for young children with serious behavior issues.</b></p> <p><i>Skills include child directed play, academic and social and emotional coaching methods; how to establish consistent routines, teaching children to problem solve, providing incentives for positive behavior, and using effective strategies for discouraging unwanted behavior.</i></p>	<p>PreK-3 4-5 6-8</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Incredible Years (IY) Preschool Basic</a></p>
<p><b>Create family-centered, trauma-informed initiative to build nurturing parenting skills.</b></p> <p><i>Maltreatment of children can be treated and prevented through the systematic application of family-based programs to make good choices that promote personal and community health.</i></p>	<p>PreK-3 4-5 6-8 9-12</p> <p>PreK-3 4-5 6-8 9-12</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">RCT: Nurturing Parenting Programs Research &amp; Validation Studies – 2015-1983</a></p> <p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Nurturing Parenting</a></p>

Evidence-based practice and rationale	Grade band	Evidence level and source
<p><b>Develop culturally informed, family-based intervention focused on living in high-risk communities and strengths that families possess.</b></p> <p><i>Delivered in a school setting by teachers and other school staff, draws on diverse family practices, as well as cultural values, beliefs, and norms, to help parents identify goals for themselves and their children.</i></p>	<p>PreK-3 4-5</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Child Trends, Parent Corps Overview</a></p>
<p><b>Provide home visiting.</b></p> <p><i>Supporting and engaging parents and caregivers through comprehensive supports and innovative solutions.</i></p>	<p>PreK-3 4-5</p> <p>PreK-3 4-5</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">The Parents as Teachers Program: its impact on school readiness and later school achievement</a></p> <p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Parents as Teachers: Evidence-based Research</a></p>
<p><b>Encourage improved parenting and family strengthening.</b></p> <p><i>Improving parenting skills, children's social skills, and family life skills for high-risk families.</i></p>	<p>PreK-3 4-5 6-8 9-12</p>	<p><b>Tier 2, Moderate</b></p> <p>Source: <a href="#">SAMSHA Model Programs: Strengthening Families Program</a></p>
<p><b>Create parenting and family support system.</b></p> <p><i>Increasing parents' confidence and competence in raising children to improve the quality of parent-child relationships.</i></p>	<p>PreK-3 4-5 6-8 9-12</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">Triple P: The Evidence</a></p>
<p><b>Enable parent advocacy.</b></p> <p><i>Improve the lifelong health, safety and learning of children and how to become practiced change agents for the next generation.</i></p>	<p>PreK-3 4-5 6-8 9-12</p>	<p><b>Tier 1, Strong</b></p> <p>Source: <a href="#">National Parent Leadership Training: Institute Evaluation, 2012-2013</a></p>