The Creative Curriculum® Implementation and Ecosystem Engagement (CCIEE) Study Shows Significant Effect on **Retention**

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Independent Randomized Controlled Trial

This brief summarizes findings from *The Creative Curriculum*® Implementation and Ecosystem Engagement (CCIEE) study, a randomized controlled trial independently conducted by the National Institute for Early Education Research (NIEER).[i]

Executive Summary

In a field marked by persistent staffing instability, the CCIEE study found that teachers implementing the *Teaching Strategies*® ecosystem including structured, synchronous and asynchronous, virtual professional learning were 59% more likely to remain in their roles at the end of the 3-year study period. The retention effect was large even for the least experienced teachers.

The study further found that children in treatment classrooms demonstrated significantly more growth than children in control classrooms across all domains of development and learning measured by *GOLD*®, the most widely used observational assessment in early childhood.[ii] These findings suggest that investments in sustained professional learning along with a fully connected system of curriculum and assessment were associated with improvements in both educator continuity and child outcomes.

What is the CCIEE Study?

The CCIEE study used a cluster-randomized design across two New Jersey state-funded preschool districts that included both public and private programs.

Coaches and teachers were randomly assigned to a treatment or control group.

- **Treatment**: Teachers implementing *The Creative Curriculum*® and using the full *Teaching Strategies*® ecosystem including synchronous (live) virtual and asynchronous (on-demand) professional development aligned with the *Teaching Strategies*® ecosystem, plus ongoing coaching supports, and the *GOLD*® assessment system.

- **Control**: The control group had business-as-usual access to *The Creative Curriculum*® and may or may not have had access to or used the digital tools. All the control group users also used *GOLD*® as the assessment tool.[iii]

Teacher retention was tracked across the 3-year study period, and child outcomes were measured via growth (*GOLD*®) and via pre-post external assessments in year 3 (Fall 2023–Spring 2024).

Key Finding: Significant Increase in Retention

The CCIEE study found that teachers in the treatment group were 59% more likely to remain in their roles compared to teachers in the control group, a substantial difference when turnover remains a persistent challenge in the field of early childhood education. Notably, both treatment and control teachers had access to the digital ecosystem, though the control group had various versions of the print curriculum and no consistent implementation expectations; another key difference between the groups was the addition of intentionally aligned, virtually delivered, ongoing, synchronous and asynchronous professional learning and coaching designed to improve curriculum implementation, strengthen effective teaching practices, and increase meaningful engagement with the ecosystem's digital tools. The findings also emerged within a relatively high-quality preschool system, even after adjusting for existing differences between treatment and control classrooms, suggesting that the impact was not simply a function of program weakness or baseline group differences. Taken together, these results indicate that educator stability is supported not by access to curriculum materials and digital tools alone, but by a coherent implementation approach in which professional learning,

coaching, and digital resources operate as an integrated system.

Control n = 45 • Treatment n = 42**

Exp. at Baseline	Group	Total Teachers	Retained	Retention Rate
0-3 years	Control	21	10	48%
	Treatment	12	9	75%
>3–6 years	Control	10	6	60%
	Treatment	11	8	73%
>6–15 years	Control	8	4	50%
	Treatment	6	5	83%
>15–20 years	Control	6	3	50%
	Treatment	13	11	85%

**12 classrooms with teachers who had >20 years of experience at baseline were excluded because some turnover at this experience level reflects retirement rather than attrition. 12 classrooms are excluded for structural reasons unrelated to the intervention (classroom closed, vacant at start of year 1, etc.). 17 classrooms had teachers with missing experience data and could not be assigned to a band.*

Baseline period: Fall 2021 - Retention measured at 3-year follow-up

Teacher Retention by Group & Years of Experience

The retention effect was large even for the least experienced teachers. This indicates that coordinated implementation supports may yield the greatest practical return when focused on early-career educators. Newer teachers face the steepest learning curve: simultaneously learning the curriculum, establishing classroom routines, using assessment tools effectively, and building relationships with children and families. The first few years are, therefore, a particularly fragile period. Programs that provide structured, sustained professional learning and coaching—aligned with curriculum and digital tools—help stabilize that early experience and strengthen the likelihood that new teachers remain in the profession.

Retention Matters for Early Learning Leaders Across All Program Types: Public, Head Start and Private

Public school early learning programs where educator turnover is high experience disruptions in instructional continuity, leading to inconsistencies in teaching approaches. These disruptions can negatively impact early literacy and math outcomes, making it harder for children to build a strong foundation for future learning. Additionally, frequent turnover often results in a greater reliance on less experienced teachers, which may affect student readiness for later grades. Beyond its impact on children and educators, high turnover places a significant administrative burden on school leaders. Continuous recruitment and training efforts divert valuable resources away from program development, ultimately reducing the overall quality of early childhood education.

Head Start programs experience similar hardships when educators leave. The National Head Start Association (NHSA) has been documenting the effects of staff turnover on Head Start programs since 2022.[iv] NHSA reported that elevated turnover leads to higher staff vacancies, resulting in classroom closures and reduced enrollment capacity. For instance, in October 2023, 14% of Head Start classrooms were closed due to staffing shortages, affecting service delivery to children and families. In addition to service delivery, staff turnover also makes it harder for grantees to meet program goals.

For ***private childcare providers***, staff turnover significantly impacts the quality of care they can provide and their operational stability. A large 12-year study conducted by the Frank Porter Graham Child Development Institute found that frequent staff changes can lead to inconsistencies in care routines and educational approaches, diminishing the overall quality of childcare programs (Bryant et al., 2023). More recently, enrollment challenges have increased the interest among private providers seeking material ways to differentiate the quality of their programs. Stable relationships between teachers and families are critical to driving family retention. Stability in staffing is crucial for maintaining structured and effective learning environments, as well as families' confidence in the program.

When teachers leave, programs absorb financial, instructional, and relational costs. Stability allows professional development investments to accumulate and provide returns over time, rather than resetting each time new staff must be onboarded and developed.

The CCIEE study examined whether enhanced professional learning conditions influenced educator continuity—and it found that they did.

Retention as a Pathway to Child Outcomes

The evaluation further found retention also emerged as a key factor behind the improvements in child outcomes in the treatment group as measured with *GOLD*®. While retention alone does not guarantee instructional gains, stable educator-child relationships are foundational to young children's development, particularly in areas that depend on trust, co-regulation, and sustained interaction. The study's analyses suggest that educator stability may function as a critical condition for developmental growth.

Implications for Decision-Makers

These findings suggest several important implications. First, workforce stability should be understood as a core outcome of coherent implementation investments rather than a secondary or incidental benefit. When curriculum, digital tools, professional learning, and coaching are intentionally aligned to strengthen instructional practice and deepen engagement with the *Teaching Strategies*® digital ecosystem, educator retention and child developmental growth improves. Structured, sustained, and relational supports appear more likely to influence stability than access to curriculum materials and digital resources alone, underscoring that impact depends not only on what educators are given, but also on how the full ecosystem is activated and supported over time. Second, investments in educator stability contribute to gains in child outcomes. For public school districts, Head Start programs, and private childcare centers experiencing recruitment and retention pressures, the inclusion of integral professional learning supports may, therefore, function simultaneously as an instructional strategy, as well as a workforce strategy, shaping both teaching quality and educator continuity.

Disclosure

This brief presents selected findings from the published NIEER CCIEE working paper and, while there is a more detailed breakdown of the retention analysis in Table A, it does not introduce new findings.

Study at a Glance

Design – Independent evaluation with an embedded cluster randomized controlled trial (RCT)

Study period - Three full program years, spanning Fall 2021 through Spring 2024

Intervention

- Treatment classrooms: Access to *Teaching Strategies*' digital ecosystem (*Creative Curriculum Cloud*, *GOLD*, *Professional Development Teacher Membership (PDTM)*), current print curriculum kits, additional synchronous professional development opportunities and enhanced coaching
- Control classrooms: Access to *Teaching Strategies*' digital ecosystem without additional synchronous PD/coaching opportunities; some classrooms had older versions of print curriculum.

Context

- NJ state-funded preschool programs with consistent, relatively high levels of structural quality
- Preschool classrooms (ages 3–5 years) in public schools and private provider child care centers
- Diverse population of children and families served by the districts in the study

Sample*

- Treatment/intervention arm
  - 2 districts
  - 14 sites
  - 62 classrooms
  - 240 children
- Control arm
  - 2 districts (same as treatment districts)
  - 12 sites
  - 63 classrooms
  - 237 children
- Child characteristics
  - Age
    - 43% age 3
    - 57% age 4
  - Race/Ethnicity
    - 39% Black
    - 53% Hispanic
    - 8% Asian, white, or other race/ethnicity
  - 43% Multilingual learners (majority bilingual English-Spanish)
  - 6% have an IEP

Measures

- Teacher
  - Retention
  - Well-being/burnout
  - *SmartTeach* platform engagement
  - PD attendance
- Classroom
  - Quality
  - Curriculum fidelity
- Child
  - Social-Emotional
  - Executive Function
  - Creativity
  - Cognitive
  - Language
  - Literacy
  - Mathematics

*Count with follow-up measurements

Endnotes

i Nores, M., E. Harmeyer & W.S. Barnett (2026). *Teaching Strategies' Creative Curriculum Implementation and Ecosystem Engagement Study (CCIEE).* Research Report. New Brunswick, NJ: National Institute for Early Education Research.

ii In addition to externally administered assessments, the study examined child development outcomes using *GOLD*®, an observational assessment system embedded in daily classroom practice and aligned with *The Creative Curriculum*®. *GOLD*® measures children's progress across multiple developmental domains—including social–emotional, language, literacy, mathematics, and cognitive development—based on ongoing teacher observations and documentation. Teacher retention was also associated with improvements in children's executive function and peer play skills as measured by an external assessment.

iii The study used a clustered randomized controlled trial (RCT) design. In practical terms, this means that groups of educators (in this case, coaches and the teachers they supported) were randomly assigned to either receive enhanced professional learning supports (treatment) or continue with existing practices (control). Random assignment helps ensure that differences observed between groups are attributable to the intervention rather than pre-existing differences. Because assignment occurred at the coach level rather than the individual teacher level, the design is referred to as "clustered." This approach reflects how professional development is typically delivered in real-world district settings and strengthens confidence in the credibility of the findings.

iv In a series of reports that started in 2022, NHSA documented the workforce challenges currently facing Head Start and Early Head Start programs, including the impact of low compensation, turnover and staff vacancies, increased child need, and more. The reports may be found on the NHSA website.

Works Cited

Bryant, D., Yazejian, N., Jang, W., Kuhn, L., Hirschestein, M., Soliday Hong, S.L., & Stein, A. (2023). Retention and turnover of teaching staff in a high-quality early childhood network. *Early Childhood Research Quarterly, 65*, 159–169. https://doi.org/10.1016/j.ecresq.2023.06.002

Frank Porter Graham Child Development Institute. (2023, July 27). *Investigating teaching staff turnover in early childhood education.* https://fpg.unc.edu/news/investigating-teaching-staff-turnover-early-childhood-education

Explore More Results

To view more results from *The Creative Curriculum*® Implementation and Ecosystem Engagement (CCIEE) Study visit this link or scan the QR code below.

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