Sustaining Gains

HCRC Fact Brief

What is the fade-out effect?

In many cases, the demonstrated effects of early childhood interventions (ECIs) on child outcomes are greatest early on with effect sizes that appear to decrease gradually over time. This phenomenon has been referred to as the fade-out effect. Even though evidence for long-term effects of ECIs on developmental trajectories is mixed, some studies show that participating in high-quality programs early on can yield significant long-term advantages.^{1,2}

"[The term] fade-out implies that children who received early childhood intervention look the same as children who did not receive the intervention. This is not true."

- Jeanne Brooks-Gunn

The benefits of high-quality ECE for the child often last into kindergarten, and some studies show lasting effects into middle school and high school. The quality of post-intervention schooling can either build upon or counteract these benefits. Studies show that if students enter poorer quality schools after early childhood intervention, fade-out effects can occur. These fade-out effects are more pronounced for black students than white students, as black students are more likely to attend schools of poor quality.³ These findings drive home the need for continuing enrichment programs in early grades, especially in minoritized communities, as a means of retaining initial gains.

Despite possible diminishing effects, early childhood interventions are documented to have higher successes than interventions aimed at any other period in the life course. While we know it's critical to give young children a solid foundation to start school, we can't expect a single year of intervention to secure future outcomes.⁴ Given what we know about human development—that it is a constantly evolving process— a short-term intervention in preschool is more likely to permanently alter school achievement with sustained and aligned support through the elementary years. Preschool through 3rd grade programming is an empirically validated model for maintaining the gains achieved during an early childhood program into the elementary years and beyond.



How do we structure programs for lasting effects? The goal in early childhood interventions is lasting effects. Empirical evidence points to the need for comprehensive interventions that span multiple years and target key transition points as crucial elements of programs addressing children's learning needs. Preschool to 3rd grade (P-3) programs attempt to do just that.

P-3 interventions begin in any of the five years prior to the start of kindergarten and continue to third grade. The involvement of the K-3 system during the preschool years is crucial to promoting a successful transition into school and sustaining the effects of early childhood programs.⁵

K-3 programs that include, "(a) low child-to-staff ratios (under 18 to 2), (b) intensive focus on language and literary within a whole-child, developmental philosophy, (c) comprehensive family services, (d) BA-level teachers and/or compensation competitive with schools, (e) frequent monitoring and feedback, and a (f) supportive organizational context of implementation" have demonstrated increased sustained gains and greater return on investment.⁵



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Why do we target P-3?

If children fall behind in their education, they are unlikely to catch up with their peers without intervention. Research shows that third grade is a critical period for literacy; if children don't reach benchmarks for proficiency in third grade, their further education may be greatly inhibited. While children are learning *how to read* through 3rd grade, once in 3rd grade they are expected to *read to learn*. Similar benchmarks also exist for math and science. Because 90 percent of brain development occurs during the first three years of a child's life, early experiences—good and bad—create the foundation for all future learning. Children who lack a strong foundation may struggle to support the integrated layers of learning.

Early learning relies heavily on the relationship between child and caregiver. Thus, aligning P-3 care requires deeper and comprehensive support from the school and community, providing resources for the caregiver. Examples of partners in this alignment may represent diverse fields such as public health, medical facilities, early childhood-parent education groups, home visiting programs, community activity groups, libraries, and early intervention services.

CPCs as a P-3 intervention

The Child-Parent Center preschool to 3rd grade (CPC P-3) model is the longest established P-3 program in the nation and closely aligns with P-3 principles. The program is built on the theory that school readiness is enhanced by systematic language learning activities and family-support experiences in the form of direct parent involvement in centers. CPCs implement P-3 education within a public school system.

This allows for increased integration of the key principles of continuity, organization, instruction, and family services. With a public-school structure, CPCs have the opportunity for wide-scale implementation without the need to implement a new funding mechanism.⁶ The CPC P-3 program has demonstrated the sustained gain of its participants being more likely to achieve academically and graduate high school.⁷

CPC P-3 Program Features



Programs that create a continuous, aligned, education experience for the youngest children provide a mechanism through which we pro- mote learning and maintain initially high levels of effects from early interventions. Children's development is constantly evolving. Regardless of how high the quality of an intervention is, it must be a continuous system to promote learning and build on prior experiences of the intervention. Structuring programs to support children throughout development will promote continued effects from earlier interventions, prevent dissipating effects, and create a greater return on investment for the programs.⁸

References

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