



Pre-K Benefits: The Facts on Fade-out

As policymakers adopt policies for pre-K programs, they want to know that the programs are effective. Do the gains last? Here's what we know.

Pre-K yields short-term academic gains.

After one year, children who participated in pre-K showed substantial gains compared with children who did not.

Pre-K participants gained about **one-third of a year of additional learning** over their peers who did not attend. This gain is equivalent to one-third of the achievement gap between children from low-income families and their peers. These findings are based on 100+ studies over several decades.

The benefit of preschool at school entry is equal to moving a child **from significantly below par to average** — from the 30th to the 50th percentile on achievement tests — based on studies over the last 25 years.

Pre-K programs designed on current research about child development and program quality yield even greater initial results — in some cases doubling the academic benefits.

Pre-K yields long-term academic gains, too.

While the results of studies show that academic benefits may diminish somewhat over time — few studies show they fade away completely.

On average, the gap in results between pre-K participants and nonparticipants diminished by half from kindergarten to the later early grades. Still, pre-K participants performed better than their peers in later grades in nearly all studies.

K-3 academic programs are often poorly aligned with pre-K. The repeat of pre-K curriculum content in kindergarten does not encourage each child to move ahead when ready.

Many early grades **teachers spend less time** with children who attended pre-K, studies show, as they catch up other students. Researchers also cite a *spillover effect* as former pre-K children help catch up their peers who didn't attend pre-K.

Benefits of pre-K can be sustained long term if children move from high quality pre-K to well-aligned kindergarten and early-grades programs, as recent research recommends.

Pre-K also yields substantial nonacademic benefits.

Pre-K provides positive social, emotional, physical and behavioral benefits on a child's long-term success in school and life, especially for children from low-income families.

Pre-K improves the **level of education completed, graduation rates and earnings; it reduces the incidence of crime and teen pregnancy.** Studies also document long-term health benefits.

Research shows pre-K children are less likely to need **special education** and be **retained** (fail a grade) in school. The savings from these benefits, some believe, are sufficient to fund a sizable portion of the cost of the program.

These gains have been documented in model programs dating back decades, and they have also been shown in current state-funded pre-K programs and Head Start.

New Pre-K Research is Clear: Quality Matters

- *Recent research on brain development has transformed what practitioners believe is necessary in pre-K classrooms, especially for children from low-income families. Experts believe 2010 was the year this research took hold in program design. Policymakers need to focus on recent research about newly designed programs.*
- *Current research shows that close interactions between teachers and children are key to long-term gains. Teachers need training for these interactions to be most effective. Key elements in developing this relationship include observation, measurement, feedback, coaching and ongoing professional development. More structural aspects of quality, such as small class-size, are important but not sufficient for gains.*
- *The benefits of pre-K programs are most substantial and lasting for children living in poverty, and they are significant for children from low-income families.*
- *Curriculum alignment through the early grades is critically important for children who completed pre-K. Studies show that if these children are not presented with new, more advanced material throughout the early grades, their learning will stall.*
- *The 2010 Head Start Impact Study of a 2002 cohort of Head Start children is widely quoted by pre-K critics. Yet, it is flawed in ways that invalidate its conclusions. It reports that initial gains made by Head Start participants disappear by first grade. Many children, however, assigned to its control group as nonparticipants attended Head Start at an alternate site. And many children assigned to the Head Start group did not complete the year. Furthermore, Head Start was created in 1965 as part of the “War on Poverty,” with a focus on child care — not education. The policy push for high-quality education within Head Start started in 2007. Using the 2002 Head Start program as a proxy for pre-K programs, which emphasize school readiness, is inappropriate.*

Definitions

Three terms describe a perceived phenomenon – the reduction in the gap in results between children who attended pre-K programs and those who did not, over time.

- **Fade-out:** implies that pre-K participation provides few or no lasting benefits – and by 3rd grade most academic benefits are gone or greatly reduced. Critics tend to rely on a few studies rather than the entire research field.
- **Convergence:** implies that the achievement results of pre-K and non-pre-K children grow together over time. Some would argue they become indistinguishable as children enter poorly aligned or low-quality early grades programs that do not sustain the gains made in pre-K. In fact, the academic results may grow toward each other, but they rarely completely converge.
- **Catch-up:** implies that early grades gains made by nonparticipants are sufficient to bring them to the same results as pre-K attendees. Some argue that effective early grades programs are actually “catching up” non-participants through special interventions since teachers do not have to focus as much attention on the children who did attend pre-K programs.

References

www.sreb.org/earlylearning for annotated bibliographies and additional references

High Quality on New Measures Yields Lasting Benefits

The following state-funded pre-K programs have implemented the evidence-based elements of quality identified in recent research; they have all shown sustained academic growth in students each time the programs were studied.

Program	Long-Term Academic Outcomes	Measurable Gains Through...	Larger Gains for Children in Poverty?
New Jersey (Abbott Preschool)	Equals a 10 percentile boost on state test	Grade 5	Yes
Boston Pre-K	43% of participants, compared with 34% of nonparticipants, scored proficient or above on state third-grade language arts test	Grade 3	Yes
Maryland (Extended Elementary Edu. Program and Judy Centers)	Under study; Statewide kindergarten readiness is up 33 percentage points from 2002 to 2013	Grade 4	Yes
North Carolina (More at Four)	Significant academic gains for participants on third- grade end-of-grade assessments	Grade 3	Yes

Source: *Early Learning: The New Fact Base and Cost Sustainability, Minervino and Pianta, 3-4, 2013*