

BLUEPRINT FOR EARLY LEARNING: EVIDENCE TO SHAPE BARBERTON'S EARLY LEARNING CAMPUS

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Executive Summary
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PROBLEM

Barberton, Ohio, in Summit County, faces significant early childhood educational challenges. On the Ohio Kindergarten Readiness Assessment (KRA), 23% of incoming kindergartners were “kindergarten ready” in 2023. In 2022, the National Institutes of Health reported that between 68.2-82.9% of 3-5-year-olds were on track in the domains of early learning skills, social-emotional development, self-regulation, and motor development [1]. The gap between Barberton’s readiness rates and national averages signals a pressing need for high-quality early education.

PURPOSE

This report **reviewed existing research on high-quality early learning programs** to guide the development of a birth–5 Early Learning Center (ELC) in Barberton, Ohio. It highlights the **structural and process factors** like classroom design, teacher quality, and family engagement, that drive children’s success. The report had four objectives: (1) Define high-quality early childhood programming and evaluate whether Barberton’s ELC aligns with this definition, (2) Identify program components most predictive of executive functioning and brain development, (3) Explore the economic and community impacts of an ELC, and (4) Assess the short- and long-term academic outcomes of preschool attendance.

DEFINING HIGH-QUALITY

High-quality early learning programs combine strong **structural supports** with positive **day-to-day experiences, or process factors**. Structural supports include small class sizes, low teacher-student ratios, trained and supported teachers, developmentally appropriate classrooms and materials, convenient hours of operation for working families, transportation, and access to health and special services [2,3].

Process factors shape children’s daily experiences. These include warm teacher-child interactions, positive peer interactions, developmentally appropriate instruction, skillful curriculum delivery, and active family involvement [2,3]. Programs that excel in both structural and process quality factors give children the best opportunity to develop academic, social-emotional, and self-regulation skills.

Daily experiences and effective teachers are strong predictors of children’s school readiness.



Strong partnerships with families amplify learning.

Children who enter kindergarten healthy and ready to learn are more likely to meet early academic milestones, which in turn have been associated with a range of better social, economic, and health outcomes across the lifespan [1]

High-quality early learning programs, such as Perry Preschool Project, Head Start, Chicago Child-Parent Centers, Abecedarian, Tulsa, and Boston, **supported short-term gains in literacy, math, and language at kindergarten entry, as well as long-term benefits in high school completion, employment, and overall well-being** [4,5,6,7]. Meta-analyses of Head Start and other large-scale programs show similar patterns [5].

PRIMARY QUALITY FACTORS

- ❖ Highly-trained teachers (Bachelor's with Pre-K specialization for lead teachers and Child Development Associate credential for assistant)
- ❖ Small class sizes
- ❖ Positive teacher-child interactions
- ❖ Evidence-based curriculum
- ❖ High-level curriculum implementation
- ❖ Ongoing coaching or training for teachers

SECONDARY QUALITY FACTORS

Adopting **standards and regulations that allow for the ongoing evaluation of structural factors** provides a systematic way of ensuring alignment with best practices. Family supports such as **health and nutrition services and teacher-parent partnerships amplify positive effects** of early learning programs [4,5,6,7,8]. The Perry Preschool Project included weekly home visits by teachers; Head Start offers parenting classes, helps families connect to services and provides nutritious meals and snacks; and the CPCs require parents to volunteer and attend workshops, and have staffed parent-resource rooms at each location.

In a state-run pre-k evaluation study, researchers concluded that children who had access to state-run, high-quality preschool programs had higher scores in literacy and math in kindergarten compared to children who were not in a state-run, high-quality program. **Using this longitudinal data, the current report empirically tested the effects of participation in a high-quality preschool program voucher system on children's 3rd or 4th grade state standardized tests.** Several state counties were demographically similar to Summit County in average household income and racial makeup.

MAIN FINDINGS

- ❖ **High-quality preschool attendance (State-run pre-k vouchers).** On average, children who attended high-quality preschool through state pre-k vouchers scored better in math on the state standardized test in 3rd or 4th grade but not in ELA, compared to children who did not attend a state-run, high-quality pre-k, controlling for family income level, race/ethnicity, parental education, preschool full- vs. half-day, and county of residence.
- ❖ **School readiness is critical.** Children with higher school readiness assessment scores (colors, numbers, letters, sizes, shapes) performed significantly better in both math and ELA compared to children with lower school readiness scores.
- ❖ **Skill development matters.** Preschool numeracy skills positively predicted 3rd or 4th math and ELA outcomes. Preschool executive functioning positively predicted math and ELA scores.

Strong **instructional quality with intentional family supports** yielded the most durable, long-term positive impacts in major U.S. early learning programs [4,5,6,8]

CONSIDERATIONS

Teacher preparedness and capacity to facilitate positive interactions and classroom climate is key to the success of an ELC. It is essential to consider how teachers will be supported throughout this endeavor.

CITATIONS

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