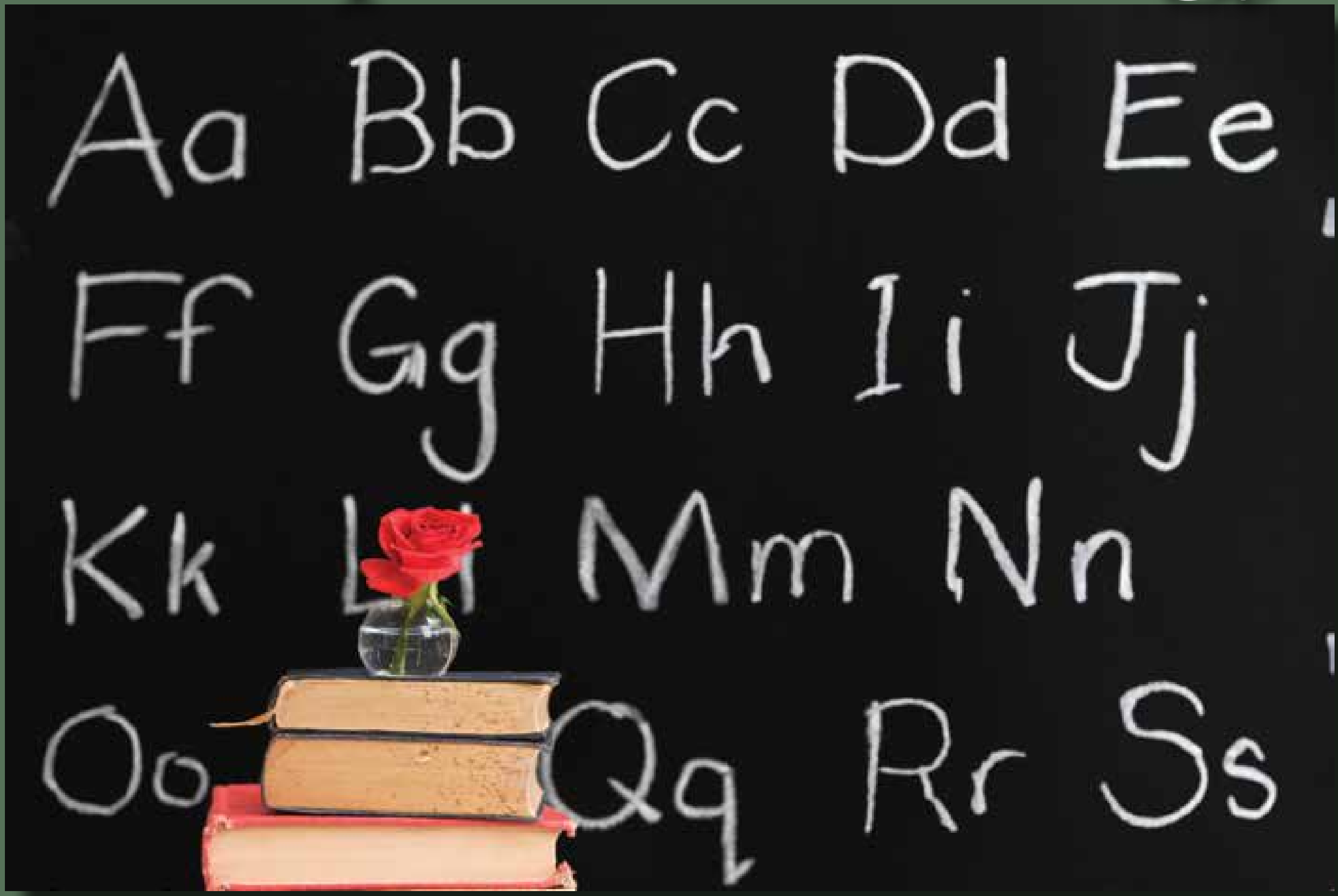
# Early Childhood Care And Education: Should They Be Our No. 1 Economic Development Strategy?



# EARLY CHILDHOOD CARE AND EDUCATION: SHOULD THEY BE OUR NO. 1 ECONOMIC DEVELOPMENT STRATEGY?

*Pay me now or pay me later.*
– The prophetic words from a well-known 1970s television commercial

Somewhat unexpectedly, early childhood care, education and development are becoming hot topics in the economic development arena. **Compared to more conventional approaches to promote economic development that involve tax incentives and attempts to attract businesses, investments in early childhood programs constitute a superior development strategy in terms of societal benefits received per dollar spent. As a consequence, the time has come to consider investments in early childhood programs as a legitimate and viable approach to stimulate economic growth in Hampton Roads.**

In the past decade alone, early childhood development has attracted the attention of numerous high-profile economists, including Nobel laureate and University of Chicago professor, James Heckman; former chair of the Board of Governors of the Federal Reserve System, Ben Bernanke; and president of the Federal Reserve Bank of Richmond, Jeffrey Lacker.[1] The Federal Reserve Bank of Minneapolis considers the topic important enough to devote a "Special Study" section of its website to disseminating early childhood research.[2]

In this chapter, we provide an overview of the issues and evidence concerning early childhood development programs in Hampton Roads. We'll examine the economic "nuts and bolts" of early childhood effectiveness and also survey the child care options that exist in Hampton Roads. We'll close by exploring the challenges ahead and offer a few suggestions to enhance early childhood programs and participation.

[1] Ben Bernanke, "Early Childhood Education." Speech at the Children's Defense Fund National Conference, Cincinnati. July 24, 2012. Jeffrey Lacker, Early Childhood Development and Economic Growth. Governor's Summit on Early Childhood Development, Richmond. July 27, 2007.
[2] www.minneapolisfed.org/publications/special-studies/early-childhood-development.

## The Economics Of Early Childhood Programs

Both formal and informal education and training fall under a single umbrella that economists refer to as "human capital" – all of the talents, abilities, knowledge and drive that people possess. The more human capital an individual, region or state possesses, the better that individual, region or state is likely to be at producing goods and services, generating innovations and producing income. **For most individuals, their human capital usually is one of the strongest predictors of their current *and future* economic productivity, which in turn is one of the strongest predictors of their earnings and overall economic well-being.**

Job training programs and formal schooling are the usual ways utilized to increase the quantity and quality of our human capital. However, so are early childhood education and intervention, which together turn out to be one of the most cost-effective methods for developing human capital and promoting economic development.

A seminal study of the impact of a high-quality early childhood education program was the Abecedarian Project, in which four cohorts of children born between 1972 and 1977 were randomly assigned as infants either to the early education intervention group or a control group. The progress of the children was monitored over time and follow-up studies were conducted at ages 12, 15 and 21. Long-lasting benefits accrued to those children in the early education intervention group. Over the course of their academic careers, the children who attended preschool completed more years of education and were more likely to attend a four-year university than were their peers who did not attend preschool. The group that attended preschool was found to have lower rates of teen pregnancy, violence, crime and overall economic dependence.[3]

**While research has shown that the benefit per dollar invested – the rate of return on investment (ROI) – varies with the specific type of early childhood intervention, there is now widespread agreement that early childhood programs are also an excellent economic investment for the broader community.** Graph 1 shows Heckman's comparative estimates of the ROI on various programs and job training for different age ranges. Note that early childhood programs boast ROIs about three times as large as conventional job training programs.

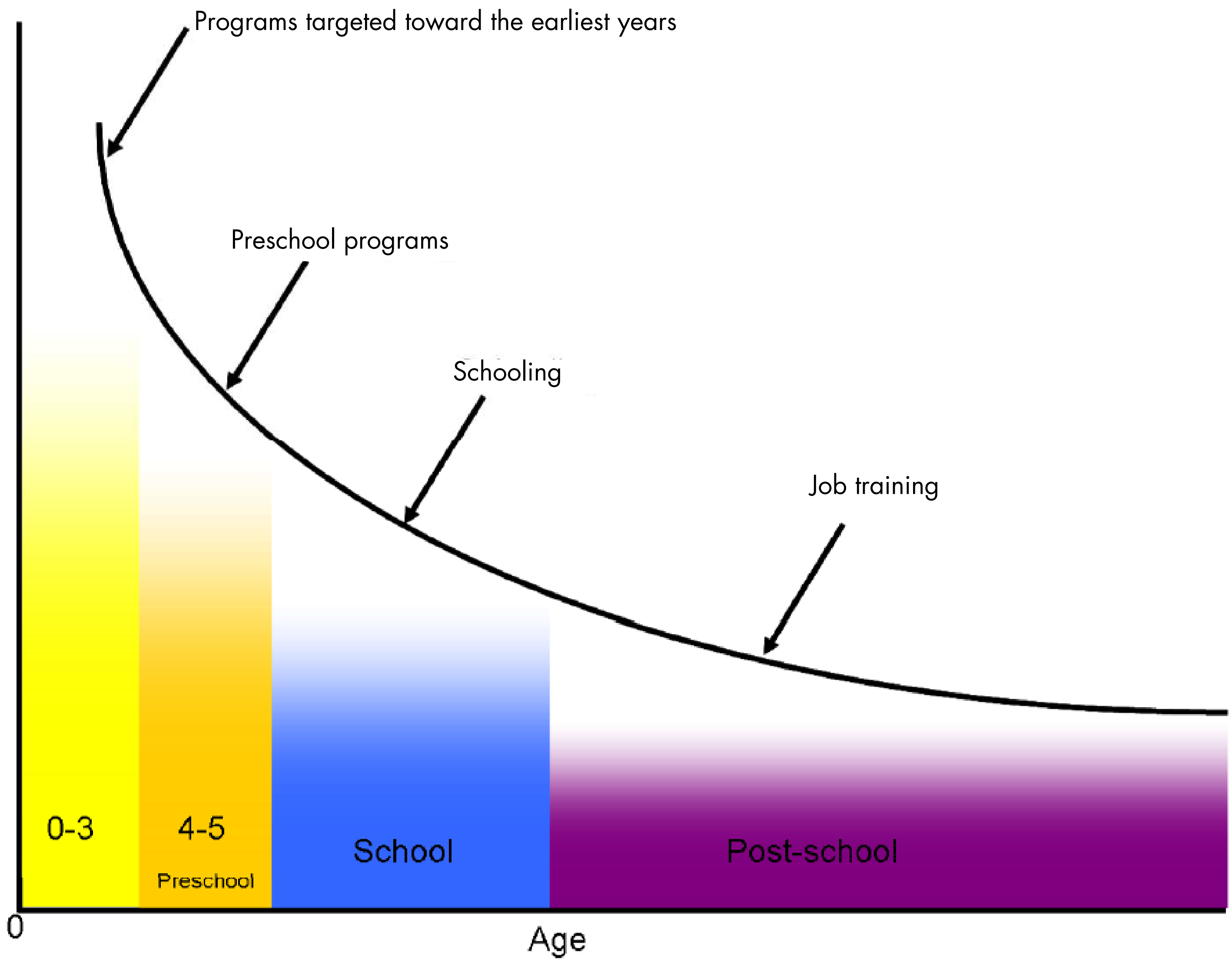
Heckman found that the first five years of a child's life are critical to developing the foundation for the cognitive and character skills one will need to achieve economic success later in life. Since various studies have demonstrated the fact that ROIs on postsecondary education investments have been declining, there is now a strong argument for **shifting resources away from later-in-life job training programs and redirecting them to early childhood programs.**

**A practical political problem, however, is that many of the benefits that flow from preschool programs and interventions often are deferred and do not appear immediately. Elected officials who require visible, immediate feedback and results may be too impatient to wait for these advantages to appear.**

[3] F.A. Campbell, et al. (2002). "Early childhood education: Young adult outcomes from the Abecedarian Project." Applied Developmental Science, 6, 42-57.

**GRAPH 1**

**COMPARATIVE ESTIMATES OF THE RETURN ON INVESTMENT IN HUMAN CAPITAL**




Source: James J. Heckman (2008). "Schools, Skills and Synapses," Economic Inquiry, 46(3), 289-324

# The Perry Preschool Project

We can glean some valuable information on precisely how these early childhood returns materialize by examining data from the well-known Perry Preschool Project. This project began in Ypsilanti, Mich., in the 1960s. It randomly divided 3- and 4-year-old children into two groups: One group was provided free access to part-time preschool and a home visit by each student's teacher every week, while the other control group did not receive the preschool program. The Perry study collected information on all participants annually between the ages of 3 and 11 and again at ages 14, 15, 19, 27 and 40.

One would expect children who received the additional preschooling to receive some benefits while in the program (and they did); however, **the benefits had lasting effects at *every* age point through age 40.** At age 40, for example, the preschool group was less likely to have been arrested, less likely to have experienced teen pregnancies, less likely to have received government assistance, more likely to have graduated high school, more likely to have higher earnings and more likely to have better health. Graph 2 provides a detailed breakdown of the costs and the benefits of the Perry Project (all numbers have been expressed in 2014-equivalent incomes and prices).

**The cost per pupil of the Perry project – in 2014 dollars – was a bit more than $21,000. Through age 40 for each of the participants, preschool program participants were less costly to educate over their lifetimes (a savings of $10,182), less likely to be on public assistance (a savings of $3,859), less likely to commit crimes and be part of the criminal justice system (a savings of $239,079), and they paid more in taxes ($19,628).**

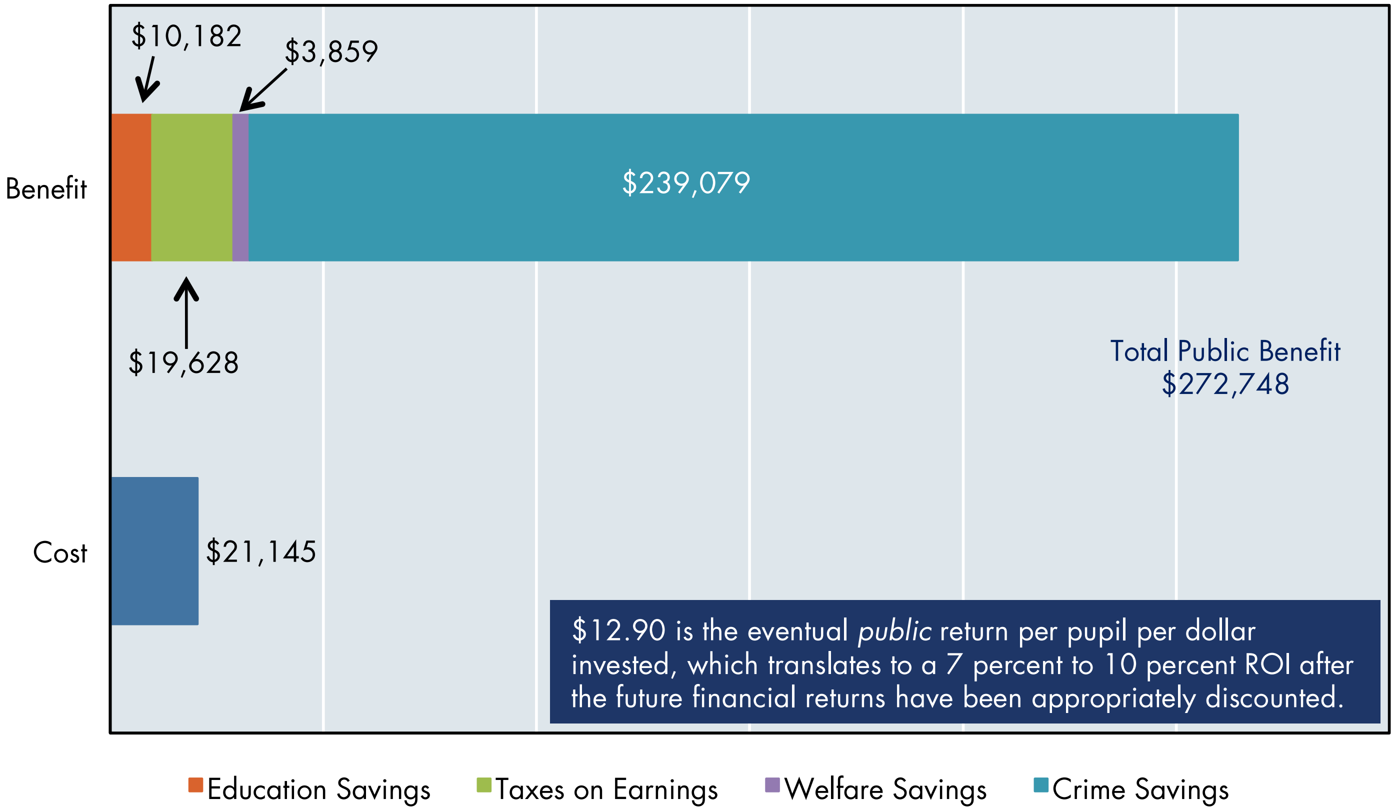
The criminal justice savings ($239,079) associated with preschool programs is almost breathtakingly large. Plainly speaking, it derives primarily from students in preschool programs staying out of jail. It is expensive to lock up individuals.

One must compare these salutary results with the much less impressive outcomes that are generated by conventional business subsidies (usually tax incentives) that governmental units at all levels habitually utilize in hopes of improving their economic situations. In the 2014 State of the Region report, we catalogued these studies in detail and so it will suffice for us to note here that in general, tax incentives yield low returns for cities and counties that rely upon them, and typically yield negative returns for regions and states because of the competitive bidding process that firms use to wring out maximum benefits from their potential hosts. Two studies conducted by JLARC, Virginia's Joint Legislative Audit and Review Committee, concluded that tax incentives had very mixed effectiveness (JLARC, "Review of the Effectiveness of Virginia Tax Preferences," 2012; "Review of State Economic Development Incentive Grants," 2012).

The first study observed that the state's tax preferences were quite expensive: "Tax preferences collectively reduced taxpayers' liability by approximately $12.5 billion in tax year 2008, which represents nearly 90 percent of the amount of State revenue collected from the tax systems reviewed ($14.3 billion)." However, the study concluded the effects were "mixed." The second study concluded that 80 percent of firms that received economic development incentive grants would have chosen the same site they eventually chose even if they had received no grant.

**GRAPH 2**

**PERRY PRESCHOOL PUBLIC COSTS AND BENEFITS (IN 2014 DOLLARS)**




Source: "The High/Scope Perry Pre-school Study Through Age 40: Summary, Conclusions, and Frequently Asked Questions," by Lawrence J. Schweinhart, et al., 2005, www.highscope.org/file/Research/PerryProject/3_specialsummary%20col%2006%2007.pdf

# The Early Childhood Landscape In Virginia And Hampton Roads

Though virtually all children benefit from quality preschool programming, high-risk children from lower socioeconomic statuses benefit the most. This is important to Hampton Roads because we have large numbers of high-risk children living in the region. Table 1 shows the percentage of children under age 6 in each community who were living below the U.S. government-designated poverty level and 200 percent of that poverty level in 2013 (the most recent year that data are available for small geographic areas).

Although one out of every five children under age 6 in Hampton Roads was living below the poverty level in 2013 (more than 26,000 children total), the percentages vary considerably from community to community. The Peninsula communities of Poquoson, York County, Williamsburg and Gloucester County have the lowest percentage of at-risk children.

By way of contrast, communities such as Hampton, Newport News, Norfolk, Portsmouth and Mathews County have much higher percentages at risk. **In fact, if we extend the threshold to 200 percent of the poverty level, then more than one-half of all children under age 6 are at high risk in Newport News, Norfolk, Portsmouth and Mathews County.** According to a 2014 report by the Weldon Cooper Center, more than 60 percent of Virginia's children living in single-parent families and 50 percent of children in cohabiting-parent families live in or near poverty. Contrast these numbers to the 20 percent of children living at or near poverty levels in married-parent families.[4] This is one of the reasons why society has strong reasons for encouraging married, two-parent families.

[4] www.coopercenter.org/demographics/childhood-poverty-in-Virginia.

| TABLE 1<br><br>AT-RISK CHILDREN IN HAMPTON ROADS COMMUNITIES, 2013 | | |
|---|---|---|
| | **Percentage of Children Under Age 6 at or Below Poverty Line<br><br>($23,550 or less for a family of four)** | **Percentage of Children Under Age 6 at or Below 200 Percent of Poverty Line<br><br>($47,100 or less for a family of four)** |
| Chesapeake | 12.9% | 34.6% |
| Hampton | 25.2% | 49.3% |
| Newport News | 26.9% | 52.7% |
| Norfolk | 30.2% | 57.1% |
| Poquoson | 1.4% | 24.6% |
| Portsmouth | 32.2% | 53.5% |
| Suffolk | 20.7% | 42.9% |
| Virginia Beach | 14.7% | 37.2% |
| Williamsburg | 7.6% | 40.0% |
| Gloucester County | 9.2% | 40.1% |
| Isle of Wight County | 26.8% | 43.3% |
| James City County | 18.1% | 31.1% |
| Mathews County | 48.6% | 77.2% |
| York County | 5.8% | 25.5% |
| **Hampton Roads Total** | **20.6%** | **43.8%** |
| Source: Calculations made from the 2013 American Community Survey 5-Year Estimates, Table B17024 | | |

**As a consequence, many Hampton Roads children begin their formal education at a distinct disadvantage that often turns out to be long lasting. Children who begin kindergarten behind their peers rarely close the gap.** Rather, the gap widens throughout their education, placing them at risk for undesirable outcomes, including not being promoted, dropping out of school, not attending college, and being unemployed. These negative outcomes on the individual level become even more troubling when one considers the cumulative costs that these results impose on the broader community.

Child care is one way to diminish the differences that otherwise might exist between and among preschool children. In Virginia, from a regulatory standpoint, there are three child care options: (1) licensed; (2) regulated/unlicensed; and (3) unregulated/unlicensed. Table 2 presents the number and types of facilities in each community in Hampton Roads.

Licensed child care facilities must meet the standards set forth by the State Board of Social Services. These facilities differ from others in terms of how they operate. There are three major varieties of licensed child care facilities. A *child care center* is a regularly operating service arrangement for children where, during the absence of a parent or guardian, that center has agreed to assume responsibility for the supervision, protection and well-being of a child under the age of 13 for less than a 24-hour period. *Short-term centers* operate during only part of the year, while *family day homes* may provide care for six to 12 children (exclusive of the provider's own children and any children who reside in the home). The care may be offered in the home of the provider or in the home of any of the children in care.

**However, as Table 2 reveals, the largest single category of child care facilities in Hampton Roads consists of facilities that are unlicensed by the Commonwealth.** These facilities, numbering almost 600, may be unlicensed because they have opted for a religious exemption, or they may be operating in an otherwise accredited private school (called a certified Pre-K facility), or they may be providing care in a private home with fewer than six children.

There is no single source of reliable data that informs us how many children are cared for in unregulated/unlicensed child care environments, such as extended family or family friend care. A recent Washington Post report noted that nine children died in unregulated day care homes in Virginia in 2014, making it the deadliest year for child care environments in the past decade.[5] In addition to potential safety concerns, the quality of the educational curriculum, teacher-child interactions and teacher qualifications can be a matter of concern in such instances.

[5] www.washingtonpost.com/investigations/nine-va-children-died-in-unregulated-day-care-in-2014-the-deadliest-year-in-a-decade/2014/12/30/bf302040-8161-11e4-81fd-8c4814dfa9d7_story.html.

**TABLE 2**

**CHILD CARE FACILITY OPTIONS IN HAMPTON ROADS, 2014**

| | State-Licensed Child Care | | | Regulated/Unlicensed Child Care |
|---|---|---|---|---|
| | **Child Day Center** | **Family Day Home** | **Short-Term Child Day Center** | **Religious Exempt, Certified Pre-K and Voluntary Registered Day Homes** |
| Chesapeake | 62 | 27 | 4 | 100 |
| Hampton | 28 | 12 | 2 | 55 |
| Newport News | 67 | 2 | 1 | 50 |
| Norfolk | 79 | 17 | 5 | 131 |
| Poquoson | 3 | 0 | 0 | 2 |
| Portsmouth | 27 | 15 | 0 | 54 |
| Suffolk | 27 | 5 | 1 | 33 |
| Virginia Beach | 102 | 28 | 2 | 105 |
| Williamsburg | 3 | 0 | 0 | 5 |
| Gloucester County | 7 | 1 | 0 | 7 |
| Isle of Wight County | 12 | 3 | 0 | 5 |
| James City County | 25 | 2 | 0 | 10 |
| Mathews County | 3 | 0 | 0 | 3 |
| York County | 23 | 4 | 0 | 11 |
| **Hampton Roads** | **468** | **116** | **15** | **571** |

Source: Virginia Department of Social Services website, www.dss.virginia.gov (accessed March 23, 2015)

# Accreditation

In an effort to demonstrate quality beyond basic health and safety regulations, the National Association for the Education of Young Children (NAEYC) has developed child care accreditation standards and Virginia's Star Quality Initiative represents a voluntary system of center rating that has higher standards and expectations than state licensing regulations. The theory is that quality in early childhood settings makes a difference in outcomes. This is a reasonable supposition, but there is comparatively little evidence available on this issue other than the "child care versus no child care" dichotomy. Quality is not easy to measure.

This has led to attempts to measure quality according to specific standards. In Virginia, a QRIS (Quality Rating and Improvement System) exists that operates on a voluntary basis. Each participating preschool, child care program or family child care home is assigned a star rating that ranges from 1 (lowest) to 5 (highest). The star rating system examines four standard areas: 1) education, qualifications and training; 2) interactions; 3) structure; and 4) instruction. Currently, there are 89 star-rated child care centers and 29 star-rated family child care homes in operation within Hampton Roads. The communities in which these facilities operate are shown in Table 3.

On a national scale, the largest professional organization of early childhood educators is the National Association for the Education of Young Children. NAEYC accreditation of programs for young children represents the benchmark of quality in early childhood education. Accreditation began in 1985 with the goal of providing an accrediting system that would raise the level of early childhood programs. Today, more than 6,500 programs are NAEYC-accredited. NAEYC-accredited programs in Virginia include private child care, Head Start and military-affiliated child care programs. Virginia has a total of 134 NAEYC-accredited programs, 29 of which are located in Hampton Roads.

The relatively small number of quality-rated or nationally accredited child care options in Hampton Roads may be a cause for concern for families wanting to place their children in environments that have been evaluated for program quality using robust measures. Mandatory participation would supply decision makers, especially parents, with valuable information. However, as just noted, the link between apparent measures of quality and outcomes has not been firmly established.

**TABLE 3**

**VIRGINIA STAR QUALITY INITIATIVE CHILD CARE FACILITIES IN HAMPTON ROADS**

| | **Star-Rated Child Care Center** | **Star-Rated Family Child Care Home** |
|---|---|---|
| Chesapeake | 4 | 8 |
| Hampton | 14 | 1 |
| Newport News | 21 | 2 |
| Norfolk | 14 | 5 |
| Poquoson | 0 | 0 |
| Portsmouth | 4 | 7 |
| Suffolk | 5 | 2 |
| Virginia Beach | 16 | 3 |
| Williamsburg | 9 | 0 |
| Gloucester County | 0 | 0 |
| Isle of Wight County | 0 | 0 |
| James City County | 0 | 0 |
| Mathews County | 1 | 0 |
| York County | 1 | 1 |

Source: QRIS website, http://qrisnetwork.org

# Early Childhood And Preschool Teachers

By Virginia statute, being a "program leader" is the minimum standard to be considered a child care teacher. Program leaders are individuals who are designated to be responsible for the direct supervision of children and for implementation of the activities and services for a group of children. Program leaders may also be referred to as child care supervisors, or as teachers, must be at least 18 years of age, have completed a high school program or the equivalent, and have six months of supervised programmatic experience. Classroom aides must be at least 16 years of age.[6]

It may be confusing to the uninitiated, but the minimal qualifications just cited are not the same as those for teachers working in classrooms receiving Virginia Preschool Initiative (Commonwealth) funding. At present, Virginia's VPI guidelines do not specify education and licensure requirements, though school division administrators may strive to hire teachers with Virginia state Pre-K-3 or Pre-K-6 teaching licenses to lead classrooms.

# Participation And Challenges

Anyone who has ever relied on either formal or informal child care services knows how expensive these services can be. According to a 2014 report from Child Care Aware, the average annual cost of caring for an infant in a Virginia child care center was $10,028, which was just 3 percent less than the average annual cost of tuition and fees at a public college in the Commonwealth.[7] For many families in Hampton Roads, private, center-based infant care is not an affordable option. The children most at risk in our region (those living at or below the poverty level) more than likely must rely on publicly funded preschool programs, such as the VPI and Head Start, for their programming.[8]

Virginia's VPI programs began in 1996 and are designed to serve at-risk 4-year-old children. Primary funding responsibility for the program is shared by the Commonwealth and local school district and assumes a per-pupil cost of $6,000. **School districts, if they choose to participate, are allocated "slots" based on factors such as the number of 4-year-olds in their community, the number of students eligible for free lunch and the district's Head Start enrollment.**

Beginning in 2016, children in Hampton Roads will be eligible for the VPI if their family income is less than 200 percent of the poverty line (or 350 percent for children with special needs or disabilities), they are homeless, or their parents or guardians dropped out of school. In 2014-15, the VPI program served more than 18,000 children statewide and the Commonwealth's share of funding exceeded $68 million.

Table 4 reports the apparent number of eligible students, the number of VPI slots allocated by the Commonwealth and the number and percentage of unused VPI slots.

Unlike the attendance figures, the use of VPI slots in Hampton Roads varies widely from school district to school district. Although our region's average usage of allocated slots (88.2 percent) far exceeds the statewide average of 69.4 percent, local figures vary from a low of 0 percent in Mathews County to a high of 100 percent in Hampton, Newport News, Norfolk, Portsmouth, Suffolk and Williamsburg-James City County. To date, Mathews County has chosen not to participate in the VPI, even though it has been allocated six slots.

[6] http://nrckids.org/default/assets/File/StateRegs/VA/StandardsforLicensedChildDayCenters.pdf.

[7] Child Care Aware of America (2014). Parents and the High Cost of Child Care: 2014 Report. www.arizonachildcare.org/pdf/2014-child-care-cost-report.pdf. See Appendix VI.

[8] T. Halle, et al. (2011). "Setting the context for a discussion of quality measures: The demographic landscape of early care and education," pp. 3-10 in I. Martinez-Beck et al., Quality Measurement in Early Childhood Settings. Paul H. Brookes Publishing Company.

*Head Start* is probably the most well-known early childhood initiative because it has existed since 1965. Its principal function is to provide comprehensive early childhood services to (primarily) low-income children up to age 5. Nationally, and within Hampton Roads, Head Start centers are heavily dependent on federal funding to operate. During the 2013-14 year, the federal government provided more than 99 percent of the more than $7 million in Head Start funding received in Hampton Roads. In terms of services, seven Head Start facilities on the Peninsula reported serving 447 children, while the 15 Southside facilities reported assisting 875 children (for a total of 1,322).

**TABLE 4**

**PRESCHOOL ENROLLMENT AND VIRGINIA PRESCHOOL INITIATIVE (VPI) SLOTS AND USAGE, 2012-2013**

| | Percentage of Children Age 5 and Under in Any Preschool | Number of VPI Slots Allocated | Percentage of VPI Slots Used | Number of Unused Slots |
|---|---|---|---|---|
| Chesapeake | 24.3% | 537 | 56.6% | 233 |
| Hampton | 24.7% | 617 | 100.0% | 0 |
| Newport News | 22.4% | 1,157 | 100.0% | 0 |
| Norfolk | 22.5% | 1,827 | 100.0% | 0 |
| Poquoson | 34.0% | 10 | 20.0% | 8 |
| Portsmouth | 30.9% | 619 | 100.0% | 0 |
| Suffolk | 26.2% | 402 | 100.0% | 0 |
| Virginia Beach | 23.4% | 1,078 | 65.3% | 374 |
| Gloucester County | 29.4% | 38 | 47.4% | 20 |
| Isle of Wight County | 26.2% | 189 | 47.6% | 99 |
| Williamsburg - James City County | 22.5% | 85 | 100.0% | 0 |
| Mathews County | 24.5% | 6 | 0.0% | 6 |
| York County | 20.5% | 55 | 29.1% | 39 |
| **Hampton Roads Total** | **24.3%** | **6,620** | **88.2%** | **779** |
| **Virginia Total** | **25.1%** | **24,483** | **69.4%** | **7,498** |

Sources: 2013 American Community Survey 5-Year Estimates Tables B14001, S0101, and Virginia's Biennial School Readiness Report Card: 2013

# Final Thoughts

Unfortunately, where economic development strategies are concerned, we live in a "what have you done for me lately" world. The lure of new arenas, hotels and performance venues tends to trump investments in preschool programs and interventions, even though the available empirical evidence shows that preschool investments generate higher rates of return (ROI) on scarce investment dollars.

There are three reasons for this. **First, the time horizon attached to preschool investments apparently is too long for elected officials. Preschool investments simply don't pay off quickly enough to satisfy many, perhaps most, elected officials.**

**Second, preschool investment advocates don't have the political clout of those interested in large bricks-and-mortar developments, and they seldom make the critical political contributions that lubricate American democracy.**

**Third, by and large, elected officials believe they are making the right decision when they invest in arenas, hotels and performance venues. Regrettably, this is because they are substantially uninformed, even ignorant, of the evidence on early childhood education and what the ROIs are for each of the alternative investment choices in front of them.** Getting their attention in order to have an opportunity to inform them is a major challenge because, almost daily, they interact with innumerable groups of constituents pushing one agenda or another. Some of these groups are well placed and well funded.

**The stakes, however, are huge. If we wish to jolt Hampton Roads upward from its current low economic growth pattern, then we must do things differently. A very important place to start – perhaps the most important place to start – is increasing our regional investment in preschool programs and interventions.**


SCHOOL BUS
EMERGENCY DOOR
STOP