

Full Day Kindergarten in Avon Grove School District

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What is FDK?

Avon Grove School District (AGSD) has approved full-day kindergarten (FDK) for the 2017-2018 school year. This move is in accordance with the district's strategic plan and current educational standards. In fact, about 75% of all kindergarten students in the United States are already enrolled in full-day programs (Children's Defense Fund, 2014). In Pennsylvania, 462 out of 501 school districts provided full-day kindergarten in 2015 (Parkland School District: Pennsylvania, 2015). An extended day gives students a chance to develop increased emotional, social and cognitive skills. Furthermore, it enables teachers to identify students in need of interventions earlier to reduce later grade retention and dropouts.

What does the research say about FDK?

- FDK programs lead to advances in reading and math for everyone, but particularly for minority students (Gibbs, 2014).
 - *Advances in math and reading especially among minority students are particularly important for closing the achievement gap, or the difference in academic performance between advantaged and at-risk students (Gibbs, 2014). AGSD has a 19.5% Hispanic population (Avon Grove School District, 2016), meaning that the school district stands to gain much from a reduced achievement gap, which may manifest itself in terms of reduced grade retention and increased graduation in later years. Since it has been shown that the achievement gap only widens with time, reducing it early on has important benefits (see benefits sections below).*

- Research suggests that the benefits of FDK programs **ARE** long-term. The benefits are particularly evident in adulthood with regards to health status and earning potential.
 - *A few long-term benefits of FDK that have been studied include a decreased risk of incarceration, decreased grade retention (repeating a grade), increased graduation rates, increased health and increased earning potential in adulthood(Reynolds, 2011). Additional studies have found that the cognitive abilities students acquire in kindergarten persist for at least 10 years into the future (Hahn, 2014).Some studies and working papers suggest that the benefits of FDK suffer from “fade out” by third grade, meaning that there are no longer any measurable differences in test scores between HDK and FDK students (Cannon, Jackowitz, & Painter, 2005). However, many more studies suggest the opposite is actually true, particularly if researchers follow the students into adulthood.The longitudinal studies making claims that “fade out” occurs are problematic in terms of their research methodology. Namely, previous studies have not taken into account the fact that there is a selection bias in the FDK group under study, meaning that the FDK group isn’t a random sample of the population. The test group is more likely to include high-risk students – those who are at risk of academic difficulties (factors include low income, ethnicity, maternal educational level and parental involvement) - at higher proportions than is representative of the general population (Hahn, 2014). This is because in districts where FDK and HDK students coexist, at-risk students are more likely to be enrolled in FDK as an early intervention program. Therefore, as the children age, they face obstacles to success at a higher proportion in relation to the HDK control group, which is likely to contain more advantaged students. This may contribute to difficulties maintaining their FDK gains and thereby skew the results of the studies. In other words, there are a number of variables related to academic success for students over time including income, maternal educational attainment, parental involvement in school and ethnicity. All of these variables must be controlled for in order to draw robust conclusions about the effects of FDK specifically. A random sample study, such as the one carried out by Chloe Gibbs, leads to much more robust conclusions because it better controls for variables outside of the reach of FDK.Additionally, surveys indicate that teachers spend more time with students who are struggling (Libassi, Education Policy Is Health Policy: Full-Day Kindergarten Edition, 20014; Hahn, 2014). Since studies overwhelmingly suggest that FDK students are further ahead in reading and math than their peers, it would follow that teachers spend more time catching up the HDK students to their FDK peers who may appear to be struggling less (Hahn, 2014). Therefore, studies should consider that this may be factoring into a lack of differences between HDK and FDK students who share the same third grade classes instead of assuming that the students have forgotten all they had learned.*

- FDK is worth the investment. Studies suggest that for high quality educational programs in the first 4-6 years of schooling, including kindergarten, the societal benefit for every dollar spent is \$8.24 by the time the students reach age 26(Reynolds, 2011).
 - *Additional research has found that FDK programs are more efficient (better return for every dollar spent) than other early childhood interventions such as*

Head Start programs (Libassi, Best Research yet on the Effects of Full-Day Kindergarten, 2014; Gibbs, 2014). (see community benefits section for more on economic benefits)

- FDK provides consistency for kids' schedules.
 - *Having an all-day program reduces the stress on children who transition between school, daycare and home (Vecchiotti, 2001; Walston & Jerry, 2004). Students in a full-day program can remain in a high quality educational setting rather than having to move to a daycare. While some daycares may be staffed with trained individuals and have the resources to provide continued educational experience for students, many do not. Students can, without a midday interruption, continue to work with highly trained teachers on emerging learning skills – a benefit that may not be available or accessible to all students equally without FDK.[/showhide]*

What are the educational benefits of FDK?

- FDK has been shown to improve literacy rates.
 - *Students in FDK outperform their HDK peers in reading and math scores. While this is true across the board, the greatest benefits were seen for minority students(Gibbs, 2014). Avon Grove School District's demographic statistics indicate that 19.5% of the student population is Hispanic (Avon Grove School District, 2016), meaning that while all students will benefit, one fifth of our community stands to gain significantly. These gains could mean a smaller achievement gap in our schools, which would translate to higher graduation rates and decreased grade retention. Furthermore, literacy skills have become more and more important as demands for them in the workplace have increased due to advances in technology (Griffin, 1998, p. 1). Therefore, while FDK may not have been the standard 20 years ago, it's becoming increasingly important and necessary today for its role in literacy development.*
- FDK students are more likely to have instruction time in science and social studies.
 - *Surveys indicated that while both HDK and FDK programs focused on reading and language arts, the FDK students were much more likely to study math, science, and social studies every day(What does the research say about all day kindergarten programs?, 1999). Penn London Elementary School's HDK program splits the day between math, language arts and a rotating special class. Therefore, the teachers must work science and social studies into the language arts block due to time constraints. With more time in class, students would be able to more fully explore a number of different subjects on a more regular basis. In fact, AGSD has announced that it will introduce a block dedicated to science and social studies in a full-day program, while also extending reading and math time so students can go more in-depth in all subject areas (Avon Grove School District, 2016).*

- Pennsylvania requires that all kindergarten programs have a full-day curriculum regardless of the length of day. Therefore, half-day kindergarteners need to cover the same information as full-day kindergarteners (Pennsylvania Department of Education, 2009). Having a whole day enables students to spend more time mastering and applying each of the key pieces of the curriculum.
 - *Avon Grove's curriculum meets Pennsylvania standards for a full-day program, but is compacted to fit into a half-day schedule. This results in subjects that may only be briefly covered, such as science, which impacts their readiness for first grade (Avon Grove School District, February 18, 2016).*
- Students have a smoother transition to 1st grade.
 - *Because teachers are more highly educated than many of staff members at daycares, FDK students receive higher quality instruction throughout the day that is consistent and predictable (Vecchiotti, 2001), making a transition into first grade easier for the child. With FDK, all students are, therefore, taught equally and enter first grade with the same educational backgrounds regardless of their ability to access accredited daycares.*
- Students who have attended FDK are less likely to be held back a grade and less likely to drop out of school before graduation.
 - *Studies show that the achievement gap, which is the difference in test scores between at-risk students and their more advantaged peers, decreases with FDK (Gibbs, 2014). Having a smaller achievement gap between individuals reduces the amount of time teachers must spend with struggling students. Achievement gaps have been shown to start as early as infancy and to widen over time (Halle, et al., 2009). Therefore, it is crucial to address these inequities as early as possible in order to reduce grade retention and dropout rates later.*
- Students would have time for purposeful play.
 - *While many opponents may undervalue play time at school, purposeful play is extremely important for students to develop emotionally and socially (Parkland School District: Pennsylvania, 2015; Ginsburg, 2007). Purposeful play also gives students time to process and apply concepts learned in the classroom.*

What are the community benefits of FDK? [back to top](#)

- There are economic benefits to investing in FDK for the community as a whole. Several studies have found that FDK programs are often more economically efficient than their HDK counterparts (see also budgetary considerations section)
 - *The community stands to benefit from increased future tax revenue from those students in literacy intensive programs as studies have shown that reading proficiency by the third grade is linked to increases in future earning potential (Fiester, 2013). Kindergarten builds the basis for reading for students so that they can become proficient readers by third grade. Sources indicate that 68% of FDK classes spend at least one hour of class time reading; whereas, only 37%*

of HDK classes spend at least one hour reading (Laurent, 2012). Having more time to read in the classroom with the help of highly trained teachers is known to be important for a child's initial introduction to reading (Griffin, 1998, p. 3), which often happens in kindergarten. Furthermore, studies suggest that students who do not read proficiently by third grade are four times more likely to drop out of high school and more likely to be incarcerated (Parkland School District: Pennsylvania, 2015). These cost our community money in terms of law enforcement, incarceration, reduced property values and lost tax revenue. Additionally, studies show that students who attend high quality early childhood education programs including FDK are more likely to be in good health as well as have higher paying jobs as adults. This translated to a benefit of approximately \$8.24 for every dollar spent in one study (Reynolds, 2011) (see What does the Research say about FDK for more information). Gibbs' study also finds that FDK offers economic efficiency, stating that the strides made in learning during FDK programs are greater than those in other early intervention programs such as Head Start (Libassi, Best Research yet on the Effects of Full-Day Kindergarten, 2014; Gibbs, 2014)

- More desirable school districts attract increased housing sale prices. Therefore, offering FDK, which has been shown to increase graduation rates (see educational benefits section), would help maintain the district's reputation for high quality education. Because surrounding districts offer FDK programs already, the expectation of parents is that a high quality education program includes FDK.
 - *A cursory look of real estate prices suggested that, on average, people paid \$50 per square foot more for a house located in an area with a highly rated school district (Harney, 2013). These price differentials were maintained for houses near each other, but serving different school districts. More rigorous academic studies have also shown a positive relationship between housing prices and high quality primary education in which the price gaps are quite large (Chiodo, Hernández-Murillo, & Owyang, 2010, p. 201). Finally, with 75% of American kindergarteners attending full-day programs and with 462 of 501 Pennsylvania districts offering full-day (Parkland School District: Pennsylvania, 2015), the expectation of home buyers is that a quality primary school offers FDK.*

What are the budgetary considerations for FDK and what are the risks?

- Avon Grove School District estimated the initial cost for FDK to be approximately \$2.2 million, which will be funded, in part by the General Fund.
 - *To fund the initial year, the district proposes that \$1,337,875 be taken out of the general fund balance, which would leave \$19,942,121 in the fund (Avon Grove School District, 2015). It should also be noted that these numbers do not factor in savings in tuition fees that are currently being sent to Avon Grove Charter for students opting out of Penn London Elementary in search of a FDK program. The numbers also do not reflect any potential savings on midday*

transportation.[/showhide]

- The school district expects FDK to be cost neutral within the second year of its implementation. (Alexander, 2016) This estimate is based on an expected enrollment of 274 students in the first year.
- Cost of FDK does increase when compared to HDK, although the benefits to society show that FDK is a worthwhile investment and may actually be a more efficient use of money than HDK.
 - *While the initial costs may seem high, studies have attempted to carry out long-term cost-benefit analyses on the investment with interesting results. A study coming from Manheim county, PA found that FDK, while more expensive, was actually more cost efficient three years after initial set up and led to much higher numbers of students passing the reading proficiency test by the end – 92% of FDK students passed and 80% of HDK students passed(Hahn, 2014). After three years the cost per student for FDK dropped from about \$4700 to \$4200; whereas, the cost of HDK actually rose from approximately \$2700 to almost \$3400 (Hahn, 2014). The Avon Grove school district can expect the cost of switching to FDK to be offset, to some extent, by a reduction in midday transportation costs, a decrease in grade retention rates and a decrease in tuition paid to the Avon Grove Charter School.*
- FDK is a relatively low-risk program to implement.
 - *While risks may be hard to gauge, they are relatively low given that FDK has been successfully implemented nationwide and in neighboring districts. There are many models to use as examples.*

How does this align with the AGSD strategic plan?

- The strategic plan for years 2015-2018 utilized input from multiple stakeholders including parents, teachers, students and community members. The guiding mission statement for the strategic plan is that students should be “exceptionally well-prepared to succeed and lead full and meaningful lives”(Avon Grove School District, 2015). Full-Day Kindergarten and the high school bell schedule were listed as the first major initiatives to be considered by the board as part of this strategic plan (Avon Grove School Board Holds First Committee of the Whole Meeting, 2015). Fulfilling FDK is, therefore, not only in line with one of the major goals as defined by the district and the school board, but it is also in line with the guiding mission statement. As arguments outlined in the “What does the research say?” and the “community benefits” sections indicate, FDK is important for students’ success later in life in terms of literacy, emotional and social well-being, health and earning potential. Consequently, FDK may indeed prepare AGSD students to “lead full and meaningful lives”.

How does the district plan to measure the success of FDK?

- The Avon Grove School District has indicated that the following characteristics would be assessed in order to determine successful implementation of FDK(Avon Grove School District, 2015).
 - *Increased Kindergarten enrollment rates. Has the school become more attractive to parents because of FDK? Have parents opted to send their students to Penn London Elementary School instead of to Charter or a private school?*
 - *Increased number of students who meet or exceed grade expectations.*
 - *Decreased number of special education referrals.*
 - *Increased number of students exiting English as a Second Language (ESL) classes at Penn London Elementary.*
 - *Increased parent satisfaction as measured by surveys.*

What do teachers say about FDK?

- While some parents and community members may worry about a full-day program being too intensive for a five or six year old, the reality is that many kids are coming into kindergarten from all-day daycare programs. For those students, FDK may be important for maintaining educational gains obtained in preschool(Children's Defense Fund, 2014).
- Teachers have more time to allow students to explore and apply the information taught throughout the day. They also have more time for subjects like science (Laurent, 2012; What does the research say about all day kindergarten programs?, 1999).
- Teachers have more time to observe students and to catch and address learning difficulties early on before students fall behind (Laurent, 2012; What does the research say about all day kindergarten programs?, 1999). Similarly, students who enter kindergarten without the basic necessary skills will have more time to catch up to their peers(Parkland School District: Pennsylvania, 2015).
- Teachers also reported that having a full-day meant that they felt less rushed and could take advantage of “teachable moments” (What does the research say about all day kindergarten programs?, 1999).

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