

2-2010

Head Start: It Works for Indiana Children and Families!

Jennifer Dobbs-Oates

Purdue University - Main Campus, jendo@purdue.edu

James Elicker

Purdue University - Main Campus, elickerj@purdue.edu

Volker Thomas

Purdue University - Main Campus, thomasv@purdue.edu

Follow this and additional works at: <http://docs.lib.purdue.edu/cffpub>



Part of the [Child Psychology Commons](#), [Educational Assessment, Evaluation, and Research Commons](#), [Education Policy Commons](#), [Health Policy Commons](#), [Other Education Commons](#), [Other Educational Administration and Supervision Commons](#), and the [Social Policy Commons](#)

Dobbs-Oates, Jennifer; Elicker, James; and Thomas, Volker, "Head Start: It Works for Indiana Children and Families!" (2010). *Center for Families Publications*. Paper 21.

<http://docs.lib.purdue.edu/cffpub/21>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

Head Start: It Works for Indiana Children and Families!

Jennifer Dobbs-Oates

James Elicker

Volker Thomas

Department of Child Development & Family Studies

Purdue University

February, 2010

Acknowledgements

The authors wish to acknowledge the participation of Indiana Head Start directors, staff, and families in the development of this report. Their daily hard work and caring contributions to the early education and care of Indiana's neediest children will result in a brighter, more hopeful, and more productive future for many Indiana citizens.

This research was supported by a contract to James Elicker, Jennifer Dobbs-Oates, and Volker Thomas of the Department of Child Development and Family Studies at Purdue University from the Indiana Head Start State Collaboration Office, Division of Family Resources, of the Indiana Family and Social Services Administration. The contents of the report are solely the responsibility of the authors and do not represent the official views of the funding agency or the state of Indiana, nor does publication in any way constitute an endorsement by the funding agency. The Purdue Center for Families contributed significant support to this project, in the form of writing, editing, and design of the summary report booklet.

Table of Contents

A.	Head Start in Indiana—Introduction.....	5
B.	Who Does Head Start Serve? Indiana Children and Families At Risk.....	6
C.	Head Start: Supporting Children’s Development and School Readiness.....	7
	1. Indiana Children Grow and Learn in Head Start: Reports from Local Programs.....	8
	a. Assessment of children’s outcomes	
	b. Benefits to children	
	c. Children’s success stories	
	d. Child outcomes reported by Indiana Head Start programs	
	2. Children in Early Head Start and Head Start: National Studies.....	11
	a. Early Head Start (prenatal to 3 years).....	11
	1. General outcomes for children	
	2. Outcomes for special populations	
	b. Head Start (3 to 5 years).....	13
	1. General outcomes for children	
	2. Outcomes for non-native English speakers	
	c. Conclusions: National Research- Children’s Development in Head Start ..	14
	3. New Purdue Research: Findings from the ECLS-B Study	15
	a. Key findings from the Purdue Head Start Study	
	4. Indiana Voices: Head Start Children	16
D.	Supporting Parents and Families At-Risk	17
	1. Indiana Programs Assist Families.....	19
	a. Assessment of family outcomes	
	b. Benefits to families	
	c. Families’ success stories	
	2. Family Outcomes in Early Head Start and Head Start: National Studies	22
	a. Early Head Start (prenatal to 3 years).....	22
	1. Parenting behavior	
	2. Parents’ well-being	
	b. Head Start (3 to 5 years).....	23
	1. Parenting behavior	
	2. Parents’ well-being	
	c. Conclusions: National Research- Family Outcomes in Head Start	23
	3. Indiana Voices: Head Start Families.....	23
E.	Head Start: Making Connections with Communities.....	24
	1. Indiana Head Start Programs Work with Community Partners	25
	a. Benefits to communities	
	b. Community success stories	
	2. Indiana Voices: Head Start and Communities	27
F.	Conclusions: Is Indiana Head Start Effective?.....	28
	1. Benefits for Children- Reported by Indiana Programs.....	28
	2. Benefits for Children- National Research	29
	3. Benefits for Families- Reported by Indiana Programs	30
	4. Benefits for Families- National Research	30
	5. Benefits for Communities	31

6. Implications and Recommendations	31
G. Endnotes.....	33
H. Appendices	
1. Appendix A: Indiana Map and Head Start Program List	
2. Appendix B: New Purdue Study Using Data from the Early Childhood Longitudinal Study- Birth Cohort (ECLS-B)—Detailed report	
3. Appendix C: Quotes from Indiana Programs (compilation of all quotes received)	

Head Start: It Works for Indiana Children and Families!

Jennifer Dobbs-Oates, James Elicker, Volker Thomas

A. Head Start in Indiana—Introduction

Head Start is a comprehensive child development program funded nationwide with federal tax dollars. The purpose of Head Start is to “promote the school readiness of low-income children by enhancing their cognitive, social, and emotional development.”¹ According to its enabling legislation, Head Start works toward this general goal

(1) in a learning environment that supports children’s growth in language, literacy, mathematics, science, social and emotional functioning, creative arts, physical skills, and approaches to learning; and

(2) through the provision to low-income children and their families of health, educational, nutritional, social, and other services that are determined, based on family needs assessments, to be necessary.

Head Start is the nation’s early childhood development program for young children at risk. Head Start programs are run by local community grantees, funded directly by the federal government, on the basis of competitive grant proposals. Local programs are funded and evaluated regularly by the federal Department of Health and Human Services, Administration for Children and Families (ACF). Indiana currently has 40 community organizations funded by ACF to provide Head Start to low-income young children and families, serving all 92 counties. (See Appendix A for a map and list of Indiana programs.)

Head Start is one of the few remaining programs from the nation’s “War on Poverty,” crafted during the administration of Lyndon Johnson in 1964. Head Start began nationwide, including Indiana, in 1965 as a summer program for children from poor families prior to entering their first year of public school. The program later was expanded to include preschool classes throughout the school year for children 3 to 5 years, and eventually many programs offered services full day and year-round. In 1995, Early Head Start was created to extend Head Start services to children birth to 3 years and pregnant women. In fiscal year 2007, ACF funded Head Start programs for 14,213 children in Indiana, for a total of \$ 96,596,956.²

This report was written by three child development scholars at Purdue University-- Jennifer Dobbs-Oates, James Elicker, and Volker Thomas, all professors in the Department of Child Development and Family Studies. The purpose of the report is to review available research and program information to address the question, “Does Head Start work for Indiana children and families?”

B. Who Does Head Start Serve? Indiana Children and Families At-Risk

Head Start was designed for America's poorest children, because they have the highest unrealized potential, and because they are at highest risk for school failure and other costly or debilitating life outcomes. A substantial number of Indiana's young children are growing up in poverty today, and the number is increasing.³ In 2007 (even before the current economic recession) more than 269,000 (17%) Indiana children under 18 yrs. lived below the poverty level-- a 21% increase in the proportion of children in poverty since 2000. Indiana ranked 25th in the nation in child poverty. During the same time period, the proportion of children living with a single parent increased from 14% to 17%.⁴ Growing up poor and being raised by a single parent often go hand-in-hand. Very young Hoosiers-- those under kindergarten age-- are those most likely to be living in poverty. In 2007, the poverty rate for Indiana children ages birth to 4 years was 21%, (an estimated 91,311 young children) compared with a 12% poverty rate for the general population.⁵ As we learn more about the importance of early learning and brain development, these early years seem even more precious.⁶ How much human potential is lost because Indiana's poor young children do not have sufficient opportunities to be healthy and to learn?

The circumstances of poverty present established risks to young children's healthy development and learning. Research on poverty in early childhood has found that young children from low income families enter formal schooling with fewer skills, perform less well in the first years of school than their peers, and eventually are more likely to drop out before high school graduation.⁷ They are more likely to have psychological or behavioral problems as they mature, including disobedience, impulsiveness, and not getting along with peers. Children in poverty are more likely to be born and die prematurely, to be underweight or overweight, and to suffer chronic diseases, like asthma and anemia. They are more likely to suffer untreated health problems and more likely to be neglected or abused.

The risks of growing up in poverty are many. They stem from the low level of resources poor families have available, including the high unemployment and lower education levels typical of parents who live in poverty. Families in poverty daily experience stressors of various kinds, which render them less able to provide environments that nurture children's optimal health and development. The neighborhoods of children in poverty often present dangers, or produce social isolation. None of these conditions of poverty are conducive to optimal learning and development.

High quality early care and education has proven to be an important buffer for the stresses associated with early childhood poverty. Research nationwide has shown that high quality early education and child care is especially beneficial for young children who come from low income families.⁸ Yet low income families in Indiana often struggle to find and afford high quality early education and child care.

A 2005 study by Elicker and colleagues at Purdue University found that low income working families in the four largest Indiana cities were most typically using various types of child care that were rated "below good, and just above minimal" in quality.⁹ However, Head Start programs and licensed child care centers were found to have the highest levels of quality among the forms of child care used by these families. The average Head Start classroom was rated above "good" on this quality scale. Children

enrolled in Head Start or Early Head Start programs had teachers with the highest education levels, with more specialized training in early development, and teachers that were observed to be more sensitive and responsive, when compared with teachers or caregivers in other types of child care settings. But only 9% of the low income families in this Purdue study were enrolled in Head Start.

Statewide, in 2008, only 17,518 (19%) of Indiana's estimated 91,311 poor young children were enrolled in Head Start. There is simply not enough funded capacity to provide Head Start for all eligible low income Indiana children. Among the 19% who were served by Head Start, how did the children, families, and communities benefit? That is the subject of this report.

C. Head Start: Supporting Children's Development and School Readiness

Head Start is a comprehensive child development and family support program. Children in Indiana Head Start programs receive a wide range of services designed to support their health, development, learning, and readiness for school. According to the Office of Head Start,

Head Start's commitment to wellness embraces a comprehensive vision of health for children, families, and staff. The objective of ***Child Health and Development Services*** is to ensure that, through collaboration among families, staff, and health professionals, all child health and developmental concerns are identified, and children and families are linked to an ongoing source of continuous, accessible care to meet their basic health needs.

The objective of ***Education and Early Childhood Development*** is to provide all children with a safe, nurturing, engaging, enjoyable, and secure learning environment, in order to help them gain the awareness, skills, and confidence necessary to succeed in their present environment, and to deal with later responsibilities in school and in life. Each child is treated as an individual in an inclusive community that values, respects, and responds to diversity. The varied experiences provided by the program support the continuum of children's growth and development, which includes the physical, social, emotional, and cognitive development of each child.¹⁰

Here is a summary of services provided to Indiana Head Start children during the 2007-2008 school year¹¹:

- Head Start was funded to provide services to 14,210 children during this program year.
- 17,518 children were enrolled for at least part of the year
- Children were served by 53 Head Start programs in 257 centers, or in home-based services.

In addition to providing a program of early education for these children, Head Start ensured that--

- 16,732 children had health insurance.
- 17,026 children had a "medical home" (continuous accessible source of medical care.)
- 15,807 children had a "dental home."
- 16,100 children received up-to-date immunizations

- 15,644 children received age-appropriate preventive health care.
- 14,311 children had a dental exam.
- 1,939 children received timely medical treatment for diagnosed medical conditions.
- 15,237 children received a developmental screening.
- 1,902 children were determined by screening to need a follow-up evaluation.
- 2,623 children with disabilities were determined eligible to receive special education services.
- 2,784 children received consultation by a mental health professional.
- 623 children were referred for mental health services in the community.

Indiana Children Grow and Learn in Head Start: Reports from Local Programs

Each Head Start and Early Head Start director in the state of Indiana was invited to complete an online survey as part of this study. The survey asked directors to describe their approach to measuring outcomes for children participating in their programs. Additionally, directors were asked to identify the three primary benefits that Head Start (or Early Head Start) provides to the children enrolled in their programs. Finally, directors were asked to report notable success stories or other information they wished to share. Seventeen Head Start or Early Head Start directors responded to the survey and provided information about their programs. Nine respondents directed regular Head Start programs, two directed Early Head Start programs, and six directed both Head Start and Early Head Start programs. The survey also asked for information about families and communities. These responses are reported in later sections of this report.

Assessment of children's outcomes. All survey respondents who directed a regular Head Start program reported having a formal system for assessing and tracking children's development. Fifty three percent (53%) of the respondents reported using a single assessment tool, while 47% of the respondents reported using more than one tool for assessing children's outcomes. The Creative Curriculum Developmental Continuum was by far the most popular, with eight programs reporting the use of that particular instrument. Three programs each reported using Brigance or Galileo assessment tools. Two programs reported using various versions of the DIAL (Developmental Indicators for the Assessment of Learning). Measurement tools mentioned once included the DECA (Devereux Early Childhood Assessment), PreK Success, Waterford Assessment of Core Skills, Kaufman Brief Intelligence Test, and the ISTAR-KR (the kindergarten readiness tool developed by the Indiana Department of Education). Additionally, four programs indicated that at least some of their assessments are derived from self-developed assessment tools. Although this question was not specifically asked, most of the respondents indicated that their programs use computerized data tracking systems. Overall, Head Start programs that took part in the survey appeared to be using extensive, developmentally-appropriate assessment techniques. There is an emphasis placed on both the quantity and the quality of the information.

Importantly, many programs emphasized an observational approach to child assessment, which is recommended for children this age.

Each Early Head Start director who responded also reported using one or more tools on a regular basis to screen, assess, and track children's development in their programs. Similar to the Head Start programs, the Creative Curriculum Developmental Continuum was the most commonly used assessment tool in Early Head Start programs. Three programs reported using that tool. All other measurement tools were reported by a single program only. Measurements used in both Early Head Start and Head Start settings included the Brigance, Galileo, DECA (Infant-Toddler version), and ISTAR-KR. Measurement tools reported only by Early Head Start programs included the Denver II, Ages and Stages Questionnaire (Social-Emotional version), HELP (Hawaii Early Learning Profile), and the Ounce Scale. One program also reported referring to child health records and creating their own mid-year and end-of-year reports of achievement of individual objectives. As in Head Start programs, the use of computerized data tracking systems appeared to be common.

Benefits to children. Survey respondents were asked to name the **three most important benefits** children receive from participation in **Head Start** programs. **By far, the three most common benefits mentioned were socialization, school readiness skills, and access to health services.** Respondents believed that Head Start provided an important benefit by exposing children to peers and adults on a regular basis. Through this ongoing interaction with both adults and children, children build social skills. These social skills, such as taking turns, sharing, making friends, and resolving conflicts, will benefit children both in school and home settings, and throughout their lives. In the area of school readiness skills, respondents emphasized literacy, mathematics, and science as being areas in which children develop skills and knowledge that will make success in school more likely. Several respondents mentioned that a major benefit of Head Start is exposure to letters, numbers, colors, and other basic skills in developmentally appropriate ways. Third, health-related benefits were often mentioned. Children in Head Start receive access to a variety of health-related screening and follow-up services, including physical, mental, and dental services. Many respondents named these services, and associated health improvements, as important benefits of Head Start.

Several directors mentioned that another benefit of Head Start was its provision of a safe and high-quality environment for children to spend time during their early years. Safe, educational, and responsive child care is a precious resource, and one that can be difficult for low-income families to access. Head Start makes that available for many needy children. Other benefits mentioned by multiple survey respondents were general developmental gains made by children during their time in Head Start and the early detection of, and subsequent early intervention for, learning problems. Finally, some Head Start benefits were mentioned just once. These included physical education gains, such as body awareness, movement, and nutrition; exposure to daily routines; and enrichment through exposure to arts, culture, etc. Finally, one respondent pointed out that children benefit from the gains their families make during the program, such as improved parental education and self-sufficiency. These gains that are directly related to parents and families are described in more detail in a later section.

Early Head Start directors were also asked to name the **three most important benefits** children receive from participation in Early Head Start programs. Many of the benefits listed were similar to those noted for regular Head Start programs. The most common response was **access to health services**. Children in Early Head Start receive screening and referral to appropriate services in areas such as physical, mental, and dental health, as well as nutrition. A related benefit also mentioned repeatedly is that **children's difficulties and delays can be identified, and intervention begun, at an early age**. Respondents also repeatedly mentioned the provision of a safe and high-quality child care environment as an important benefit of early Head Start. Also commonly mentioned were the **benefits of socialization and the development of age-appropriate social skills**. Early Head Start benefits mentioned just once included general enrichment of developmental skills, services for pregnant women, and increased parenting skills and knowledge.

Children's success stories. Head Start and Early Head Start directors who responded to the survey shared some success stories. These stories highlight the multiple risks that many Head Start children experience, and the complicated needs of the children and their families. One such story involves a child who was badly burned in a house fire in his native country prior to being adopted by a U.S. family. This child had extensive injuries, including the loss of his fingers, and was going through a series of surgical procedures. When he enrolled in Head Start at age three, he was described as withdrawn and non-verbal. By the end of his time with Head Start, as the director said, "his sadness became happiness." He was social, verbal, and truly a part of the community. He gained confidence, and his classmates learned about acceptance.

Another success story concerned a homeless, diabetic child. Participation in Head Start helped his family acquire a permanent home and Medicaid benefits which provided an insulin pump for the child. He went on to participate in gifted programming in elementary school. Another case involved a child who had experienced abuse, neglect, witnessing his parent being shot, and moving from foster home to foster home. Upon enrollment in Head Start, he had many challenging behaviors. A few months later, he identified Head Start as the place where he felt most safe. Other directors described the success of Head Start graduates who went on to be honor students in college, law students, teachers, and armed service members.

Child outcomes reported by Indiana Head Start programs. We reviewed 8 annual reports provided by Head Start and Early Head Start programs from different regions of the state of Indiana, including the northern area around Hammond, IN, central Indiana (i.e., Marion County), the Terre Haute area, and the Lafayette-Kokomo area.

Most of these programs reported child and family and outcomes using the assessment system from the *Creative Curriculum for Preschool* (2002). The following findings are based on the school year 2008-2009. Although programs summarized their data using various matrices, which makes them difficult to compare, some noteworthy trends emerged. The *Creative Curriculum* differentiates the developmental curriculum for children ages 3 to 5 years into four levels. Most programs measured the children's progress from the beginning to the end of the school year via repeated teacher observations.

Child Outcomes:

- Literacy: In most programs about 60-65% of the children progressed at least 1 level, while 20-30% progressed 2 or more levels during the most recent school year, from spring to fall.
- Mathematics: Programs reported similar numbers, in that 50-60% of all children progressed at least 1 level, while 20-25% progressed 2 or more levels.
- Social/Emotional: In this developmental domain, 70-74% children across reporting programs progressed at least 1 level, while 10-15% progressed 2 or more levels.
- Physical Health: All programs reported that 90-100% of enrolled children completed the required physical exams and 90-95% completed the required dental exams during the school year.
- Immunization: Close to 100% of all children in the reporting programs completed the required immunizations.

Family Outcomes:

Most programs listed the activities in which families engaged, with few specific measures. Below is a summary of available data:

- About 2/3 of all families in the reporting programs participated in family goal-setting activities or family partner agreements.
- More than 40% (more than 70% in some programs) received family services such as crisis intervention, housing assistance, job training, parental education, and behavioral health services.

In summary, child and family outcome data that are consistent across Indiana local Head Start programs are sparse, because programs do not use standardized measures and report results in various ways in their annual reports. However, the available data suggest that Indiana children make significant progress on several educational and development domains from fall to spring while participating in Head Start and their families do participate in the family support programs that Head Start and Early Head agencies offer.

Children in Early Head Start and Head Start: Results from National Studies

What is the most trustworthy scientific evidence that Head Start supports children's development and learning? Do children from high-risk environments do better when they participate in Head Start? In the following sections we review ***existing national research*** on Head Start children.

Early Head Start (prenatal to 3 years). Early Head Start was created in 1995 to serve children from birth to 3 years and mothers during pregnancy. The best available data on Early Head Start come from the **Early Head Start Research and Evaluation Study (EHSRE)**, a large-scale, random-assignment evaluation of Early Head Start. Congress mandated this study in the 1994 legislation that created Early Head Start. The EHSRE was carried out by the Administration for Children and Families (ACF) and was extended to include a prekindergarten follow-up phase and an elementary school follow-up phase (currently ongoing). As part of this research, applicants to the participating Early Head Start programs were

randomly assigned to receive Early Head Start services or to be in the control group. Control group families were free to enroll in other programs available in the community. Thus, these findings represent an experimental evaluation of the effects of Early Head Start as it was implemented when it was first created. The key findings of the EHSRE study are summarized below.

General Outcomes for Children. Children who attended Early Head Start from birth to age 3 had better social-emotional development, more positive approaches to learning, more supportive home environments, and mothers with better mental health, compared with the children in the control group. Children who attended Early Head Start from birth to three, followed by formal preschool programs from age three to five, experienced all the above benefits, plus improved early reading skills. They also did not experience the increase in aggressive behavior that is often associated with preschool or child care center attendance.¹² These benefits were apparent when considering the complete study sample. Subgroup findings indicated that Early Head Start was particularly effective in providing benefits to certain groups of children and families. Overall, strongest impacts were found for families who enrolled while the mother was pregnant, families with moderately-high risk (three of five risks assessed), and African American families.¹³ Notably, African American children continued to demonstrate the greatest benefits of Early Head Start, even when followed into the prekindergarten years, after Early Head Start enrollment was concluded.¹⁴

Cognitive and Language Skills. Overall, Early Head Start children performed better than control children on cognitive and language outcomes, but still scored below national norms, on average.¹⁵ This finding suggests that Early Head Start narrows, but does not completely eliminate, the gap between socioeconomically at-risk children and their more advantaged peers. At the conclusion of Early Head Start services, the Early Head Start children had larger vocabularies and higher cognitive scores than control children. Additionally, they were less likely to score in the “at risk” range on measures of cognitive development, relative to the children in the control group.¹⁶

Social-Emotional Development and Behavior. The benefits of Early Head Start to social-emotional development are more apparent at age three than age two.¹⁷ This may be a developmental effect, in which social-emotional outcomes are more salient in older children, or a dosage effect, in which social-emotional benefits of Early Head Start take more time to accrue, compared with outcomes in other domains.

Children who had received Early Head Start services had lower levels of aggression than control children. They also demonstrated higher levels of sustained attention, greater engagement with their parents, and less negativity toward their parents in a play interaction, compared with control children.¹⁸ Children who received Early Head Start services from birth to age three maintained favorable outcomes on these behavioral indicators in the prekindergarten years.¹⁹

Health. Compared to children in the control group, children enrolled in Early Head Start were more likely to receive all recommended immunizations and were less likely to be hospitalized due to injury.²⁰ Early Head Start mothers were more likely to breastfeed than were mothers in the control group.²¹

Outcomes for Special Populations. For children with disabilities, receiving Early Head Start services was associated with benefits in cognitive, language, and social development, compared to control children with disabilities.²² These children were also more likely to receive Part C special education services than control children with disabilities. Spanish-speaking children who received Early Head Start services from

birth to age three had more positive vocabulary outcomes in the prekindergarten years, compared to Spanish-speaking control children.²³

Head Start (3 to 5 years). Head Start serves children 3 years old to the legal age of public school entry, usually 5 years. Two large national studies conducted by the Administration for Children and Families (ACF) provide extensive information about the outcomes of Head Start enrollment for children and families.

The **Head Start Family and Child Experiences Survey (FACES)** is a multi-wave longitudinal study of the characteristics, experiences, and outcomes of Head Start children and families. Each wave of the study included a nationally representative sample of Head Start children and families. This study was not experimental, as there was no comparison group and families made their own decisions to enroll in Head Start. Therefore, no causal conclusions can be drawn from the FACES results. Rather, the data are descriptive, revealing experiences and outcomes that are associated with Head Start enrollment and completion.

The **National Head Start Impact Study** is a Congressionally-mandated, experimental study of how Head Start affects children's outcomes. Head Start-eligible families were randomly assigned to the treatment group (which had access to Head Start services) or the comparison group (which could receive any community resources other than Head Start). Like FACES, this study is nationally representative, but unlike FACES, the Head Start Impact Study is experimental. As a result, these data can be used to draw conclusions regarding the effect of Head Start on children and families. The following information summarizes results from the FACES and Head Start Impact studies.

General Outcomes for Children. In general, the FACES study suggests that Head Start seems to be most effective for the children who are most at-risk. The children who entered with the lowest levels of cognitive and pre-academic skills showed the most improvement during Head Start enrollment. A similar pattern was found for social-emotional outcomes, such that children who started Head Start with the highest levels of problem behavior or the lowest levels of cooperative behavior showed the greatest improvements in these areas.²⁴

Pre-Academic Skills. The FACES study provides a lot of information about how children's pre-academic skills progress over the course of Head Start participation and beyond. For most pre-academic outcomes, Head Start participation narrows but does not close the gap in performance between Head Start children and their more advantaged peers.²⁵ For example, Head Start children's skills in the areas of vocabulary, early writing, and early math grow significantly over the course of Head Start participation, but remain below national norms, on average.²⁶ At the end of Head Start, the top 25% of Head Start children are scoring at or above national norms on early language and number skills. The bottom 25% of Head Start children are scoring in the bottom 2% of all U.S. preschoolers on early language and number skills.²⁷ Although most Head Start children are not doing as well as the national average, they compare well in relation to their fellow at-risk preschoolers. For example, Head Start children performed above the levels of other low-income children on a measure of vocabulary.²⁸ There have been significant improvements in alphabet knowledge over the years such that Head Start students in 2004 could identify more letters than Head Start students in 1998 could.²⁹

Head Start programs can vary in quality. At the end of the Head Start year, children in the best programs are at national norms for early literacy and math skills, but children in many programs are not. Quality indicators associated with children's early learning include: the quality of teacher-child interactions, the

learning resources present in the classroom, and the frequency and caliber of language learning opportunities.³⁰ Children's school readiness is also enhanced when programs work with families as well as children.³¹

Head Start graduates continue to make gains relative to national norms during kindergarten, and the size of their gains during Head Start predicts their achievement at the end of kindergarten.³² By the end of kindergarten, the average Head Start graduate had writing skills near the national norm, but they were still behind national averages on vocabulary and math skills.³³

The National Head Start Impact Study provides experimental evidence that Head Start participation boosts some of children's pre-academic skills. Head Start participation increased children's pre-reading, pre-writing, and vocabulary outcomes, compared to the children in the control group. This was true regardless of whether the children enrolled in Head Start as a three-year-old or a four-year-old. Additionally, parents rated the Head Start children as having better early literacy skills than the children in the control group. There were no significant differences between the two groups for oral comprehension, phonological awareness, or early math skills.³⁴

Social-Emotional Development and Behavior. The following is a summary of results of the FACES study with respect to children's social-emotional development and behavior. Children showed a reduction in hyperactive, aggressive, and withdrawn behaviors over the course of Head Start enrollment; whereas, their cooperative behavior increased.³⁵ After attending Head Start, children had more positive attitudes toward learning.³⁶ Children who were particularly shy at the beginning of Head Start demonstrated a reduction in shyness over the course of the program.³⁷ Children who spent two years in Head Start completed their Head Start enrollment with higher levels of cooperative behavior and social skills and lower levels of hyperactive behavior, compared to children who spent only one year in Head Start.³⁸

The Head Start Impact study produced the following results: For children who entered the program as three-year-olds, there was a significant impact of Head Start resulting in a reduction of problem behavior. There was no measurable impact of Head Start in the social-emotional domain for children who enrolled as four-year-olds.³⁹

Health. FACES results indicate that children's physical health improved over the course of Head Start participation.⁴⁰ According to the Head Start Impact study, Head Start had a positive impact on children's access to health care. For children enrolling as three-year-olds only, Head Start also had a positive impact on parent-reported child health.⁴¹

Outcomes for Non-Native English Speakers. The FACES study has reported results specific to children whose native language is Spanish. Spanish-speaking children made significant gains in their English vocabulary during Head Start enrollment, while maintaining their Spanish vocabulary; however, they did not show improvement in letter recognition skills.⁴²

Conclusions from National Research: Children's Development in Head Start. National studies commissioned by the Administration for Children and Families have addressed outcomes associated with both Head Start and its newer sister program, Early Head Start. Some studies are experimental (EHSRE, Head Start Impact), while others are descriptive (FACES). Each of these studies collected data related to a wide range of outcomes. Early Head Start research concludes that enrollment in Early Head Start results in a variety of benefits to children, including better social-emotional development and more positive approaches to learning. Positive outcomes tend to be maximized by enrollment in the entire

period of Early Head Start services – from pregnancy through age three. Outcomes were also best for moderately high-risk families and for African American families. Head Start research concludes that enrollment in Head Start is associated with some improved pre-academic and social-emotional skills and increased access to child health care.

Although the general picture of results is positive, it is also complex. Not all measured outcomes were affected by Early Head Start or Head Start enrollment, and there are different patterns of outcomes for different subgroups of participants, for different program models and quality levels, and over different periods of time. These studies are still collecting data and releasing results. There is still much to learn and report about the effectiveness of Early Head Start and Head Start programming, and about the potential for continued improvements in the programs.

New Purdue Head Start Research: Findings from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B)

As a part of the Purdue University study that produced this report, Dr. Jennifer Dobbs-Oates conducted new analyses using data from the **Early Childhood Longitudinal Study – Birth Cohort (ECLS-B)** to investigate the relationship between Head Start participation and a variety of child and family outcomes. The ECLS-B is a nationally representative longitudinal study of child development conducted by the National Center for Education Statistics at the U.S. Department of Education. The complete ECLS-B dataset includes information on approximately 10,700 children, their families, and their child care experiences collected at three time points. This sample includes children from Indiana. The present analyses use data collected in the “preschool” wave of data collection. This information was collected when the children were in their pre-kindergarten year and approximately 4.5 years of age. (For a detailed report of the Dobbs-Oates study, see Appendix B.)

These analyses compare two groups of children selected from the complete dataset – children who were currently enrolled in Head Start, and a comparison group. The Head Start group consists of 1,350 children who, at the time of the data collection, had been attending Head Start for at least one full month. A matched comparison group of 1,850 children was selected with similar socio-economic status and rates of disability. The comparison group children, while identical in these characteristics to the Head Start group, had never been enrolled in Head Start. All of the comparisons statistically controlled for the child’s age and minority status, mother’s age, single-parent status, and household income. Both participation or no participation in Head Start were considered, as well as the number of months each Head Start child had been in the program.

Key Findings from the Purdue Head Start Study

Preacademic Development. The length of Head Start enrollment was uniquely positively related to children’s receptive vocabulary, literacy, and math skills. These skills were more advanced the longer the children were in the Head Start program. There was no significant result for expressive vocabulary.

Access to Health Services. Children enrolled in Head Start are 3.7 times more likely to receive dental care than children in the comparison group. Similarly, children enrolled in Head Start are 2.6 times more likely than children in the comparison group to be covered by health insurance.

Home Literacy Environment. Children who were enrolled in Head Start were 1.3 times more likely than children in the comparison group to have visited the library in the past month and 1.4 times more likely to have borrowed books from the library in the past month. There was no significant result for the likelihood of attending a library story hour.

Parent Involvement and Communication. Head Start parents participated in significantly more school activities than parents from the comparison group. Additionally, the parent-rated quality of the communication from Head Start was significantly above the quality of the communication received from other preschools. Head Start performance standards require Head Start programs to make a variety of efforts to promote parent involvement and to communicate successfully with the families of enrolled students. These analyses suggest that Head Start programs successfully promote more parental involvement and communicate more successfully with parents than do other programs serving similar children.

Parent Beliefs Regarding Children's Education. Parents of comparison group children were 1.7 times more likely than the parents of Head Start children to indicate concern that their child would not be ready for kindergarten. It may be that Head Start parents' observations of their children suggest to them that their children are academically, behaviorally, or otherwise well-prepared for kindergarten. Or, Head Start parents may receive better communication from their child's school about their child's progress, typical child development, what to expect in kindergarten, and so forth. If so, this communication may lead to more confidence in their child's preparedness.

Indiana Voices: Head Start and Children

The local and national data summarized above concludes that Head Start and Early Head Start provide important benefits for the children enrolled in those programs. Another way to consider the type and extent of benefits received is to listen to the voices of those directly involved. The following quotations from Head Start directors and parents offer individual, personal testimonials to the effect of Head Start and Early Head Start on the children served.

Head Start directors and parents describe the benefits of Head Start for children:

- “Socialization -- children have the chance to participate with a peer group to learn sharing, conversation, group dynamics and a multitude of other social skills.” –HS Director, Fort Wayne
- “[An] environment where each child can be safe, healthy, engaged, supported, and challenged.” –HS Director, Kokomo
- “Exposure to the possibilities in life. Head Start provides children with experiences in the community that deal with the arts, culture, science, positive community role models, etc.” –HS Director, Indianapolis
- “Children experience success, gain self-esteem, and leave with a love for school.” –HS Director, Lafayette
- “Children go into kindergarten more prepared than children who go to a regular day care or stay at home.” –HS parent, Lafayette
- “I think the menus are great. Head Start is doing great to make sure that all the children eat healthy.” –HS parent, Terre Haute
- “The children have a lot of fun while learning and growing. It really helps them develop and get ready for school for years to come.” –HS parent, Terre Haute

Head Start directors and parents tell of children's success:

- “We had eight children from our program test into the gifted and talented classes this year in kindergarten within our school corporation. They are excelling in education by having Head Start equip them and give them a strong start.” –HS Director, Kokomo
- “Head Start has benefitted my son so much – from motor skills to speech to learning how to get along with others. Everything he has learned over the years from Head Start he still applies in his everyday living. I believe that without this program, a lot of children would not have the skills they would need once they enter kindergarten. This program is overall the best that I have ever encountered.” –Former HS parent, Lafayette
- “I went to Head Start as a kid. As a Head Start kid, I was the first in my family to graduate from high school. Now I am the first in my family to attend college. No one else in my family went to Head Start. That's proof that Head Start is doing something!” –HS parent, Lafayette
- “[Head Start] is a wonderful opportunity. When my child first started he was shy and hardly spoke. He has come such a long way in his development thanks to the help and support here.” – HS parent, Terre Haute

Head Start parents give their opinion of Head Start:

- “I am so glad that Indiana has...programs for our children [to] help them succeed down the road. We all feel very grateful and relieved to know that there is help and not just a place to send children for the day.” –HS parent, Lafayette
- “Head Start is a wonderful program. The faculty and staff are all professionals, concerned with the children's well-being and educational development. They are more than teachers, they are life nurturers.” –HS parent, Terre Haute
- “Head Start is an excellent program. My son has learned so much and I love all the teachers and helpers. This is a wonderful school.” –HS parent, Terre Haute
- “Head Start is the best beginning of school that you could enroll your child into. These children have grown so much in just one year of school. I thought my son was smart before head start, but after one year I realize that he is so much smarter. I could have never imagined that he would do this well after just one year.” –HS parent, Terre Haute

(More quotations can be found in Appendix C, a compilation of parent and director comments about Head Start and Early Head Start in Indiana.)

D. Supporting Parents and Families At-Risk

Families with young children living in poverty face many risks to healthy development.⁴³ Risk factors established by research include: parent mental health problems, including depression and anxiety; conflicted marital relations; more chaotic home environments; and fewer cognitively-stimulating activities in the home. Parents living in poverty tend to be harsher and more authoritarian in their discipline, and spend less time reading or talking with their children, and less time taking them to libraries, museums, or other educational places. The long term effects of living in poverty (and exposure to these family-related risk factors) on cognitive development and school achievement are strongest in

the preschool period. Therefore, Head Start addresses family-based risk factors, in addition to supporting children's learning in preschool.

According to the enabling legislation, "Head Start offers parents opportunities and support for growth, so that they can identify their own strengths, needs and interests, and find their own solutions. The objective of Head Start **Family Partnerships** is to support parents as they identify and meet their own goals, nurture the development of their children in the context of their family and culture, and advocate for communities that are supportive of children and families of all cultures. The building of trusting, collaborative relationships between parents and staff allows them to share with and to learn from one another."⁴⁴ Family support and parent education services provided by Indiana Head Start programs include assessing family needs, family goal setting, opportunities for parent involvement and education, and assisting with access to community services.⁴⁵

Head Start in Indiana serves diverse families, including 41% racial minorities and 14% Hispanic or Latino families. Twelve percent (12%) of Indiana Head Start children speak a home language other than English.⁴⁶ Of the 15,887 families served, 39% were two-parent families, and 61% were single-parent families. The majority of families, 63%, had at least one parent who was employed. Twenty eight percent (28%) of Indiana Head Start families had parents with less than a high school education, while 44% had a parent who had completed high school, but no education beyond. In today's world, education beyond high school has become almost essential for adults to avoid living in poverty during their lifetimes.

Here is a summary of services provided to parents and families in Indiana in 2007-2008:⁴⁷

- More than 184 pregnant women received prenatal care, mental health interventions, prenatal education, or breastfeeding information through Early Head Start.
- 1,815 families (11%) had at least one parent in job training or school.
- 13,267 (84%) of participating families completed a family goal setting process and made a family partnership agreement with the program.
- Head Start families received a wide variety of social, health, and education services, based on their needs and interests:
 - Parenting education (50%)
 - Health education (38%)
 - Emergency/crisis intervention (20%)
 - Housing assistance (18%)
 - Mental health services (13%)
 - Adult education (GED; college selection, etc.; 13%)
 - Transportation assistance (10%)

- Other services: English as a Second Language, job training, substance abuse training/treatment, child abuse/neglect services, domestic violence services, child support assistance, assistance to families of incarcerated parent, marriage education.
 - 11,992 (75%) received at least one of the services above.
- 42 programs had regular activities to involve fathers/father figures in the program, including the fathers of 3,185 children.
 - Programs served 671 homeless families, including 982 children, and 312 of those families acquired housing during this year.

Indiana Head Start Programs Assist Families

As described above, each Head Start and Early Head Start director in the state of Indiana was invited to complete an online survey as part of this research effort. Directors were asked to describe their approach to measuring outcomes for families participating in their programs. They were also asked to identify the three primary benefits provided to families and to report notable success stories or other information they wished to share.

Assessment of Family Outcomes. All of the responding directors of regular Head Start programs reported having a formal system for assessing and tracking family outcomes. The majority of directors (80%) specifically mentioned family partnership agreements as a tool they use to monitor accomplishments of Head Start families. In a family partnership agreement, a parent or family works together with their assigned family advocate to set one or more goals. These goals can fall into a number of categories, including parenting skills, adult education, housing, employment, and so on. If the goal is complex, it may be divided into sub-steps. The family advocate supports the family in their work toward their goals and monitors progress in achieving the goals. Head Start directors mentioned using a number of different tracking systems to monitor family outcomes, many of which were especially designed by the agency, and some of which were selected to mirror the tracking system for children's outcomes. Other tools mentioned by respondents included tracking referrals made linking families to needed services, conducting formal needs assessments for families, and using home-school connection projects to promote family involvement in their children's care and education.

For Early Head Start families, the same kinds of approaches were reported. Family partnerships were again the most common tool for setting and monitoring family goals. Data tracking systems were similar to the ones reported above. One response unique to Early Head Start was the use of the HOME (Home Observation for Measurement of the Environment) scale, which uses observations of the home and an interview with the parent to measure the quality of the home environment for Early Head Start children.

Benefits to Families. The directors were asked to name the **three most important benefits** families receive from participation in **Head Start** programs. By far the most common responses were **access to**

social services, parenting development, involvement in their children's education, and empowerment/leadership skills. Access to social services includes referrals to, and help accessing, a variety of needed child, parent, and family services. Families with children enrolled in Head Start often experience multiple pressing needs apart from the issue of early childhood care and education. Head Start helps parents to locate and access services that contribute to the family's stability and quality of life. Parenting development is another key benefit to Head Start families. Head Start programs offer many opportunities for parents to learn about parenting and child development, both in group and one-on-one settings. Thus, a major contribution of Head Start in Indiana is building better parents. Another benefit provided by Head Start is giving parents the opportunity and encouragement to be actively involved in their child's education, and perhaps even in the wider community. Head Start not only encourages parental involvement but also teaches parents about its importance. Parents get an introduction to the culture of school while their child is in Head Start, which may make it easier for them to be more involved parents as their children transition to elementary school and beyond. Finally, a frequently mentioned benefit of Head Start is that it builds empowerment and leadership skills in parents. Parents can be active in a number of roles – parent groups, policy councils, even agency boards. These leadership roles teach parents how to work with others and advocate effectively for their children and their families.

Benefits mentioned by multiple respondents also included working with the family advocate, having access to affordable, high-quality preschool, and increased self-esteem. Through interactions with the family advocate, parents set goals for themselves and have a source of support and accountability as they strive to achieve those goals. Like the referrals mentioned above, this can promote important improvements in the family's quality of life. Head Start provides parents with access to a high-quality child care environment that they likely would be otherwise unable to afford. This means that parents have the opportunity to attend school or work while their children receive high-quality care and education. Finally, Head Start directors noted that Head Start parents often gain an improved sense of self-esteem, as they increasingly see evidence of their children's strengths – and their own. Finally, additional family benefits mentioned in the survey responses included job opportunities through Head Start, increased independence, and stronger support systems, often developed through relationships with other Head Start parents.

Early Head Start directors were also asked to name the **three most important benefits** families receive from participation in Early Head Start programs. Many of the benefits listed were similar to those noted for regular Head Start programs. **The most common benefits listed were parenting development, access to high-quality child care, and social services.** Like Head Start parents, Early Head Start parents are provided many opportunities to learn about parenting and child development. For Early Head Start, a particular emphasis is placed on the zero to three age range as a crucial learning and developmental period. Parents learn about ways to interact with their children that will promote their health and learning. The availability of high-quality, affordable child care was also listed as a primary benefit of Early Head Start. This care allows parents to attend jobs or further their schooling. In particular, it was noted that many young parents have the opportunity to finish high school or college because of Early

Head Start services. Referral to social services was also mentioned as an important benefit of Early Head Start. Directors noted that these services help improve families' self-sufficiency.

Benefits also mentioned by multiple respondents included working with the family advocate and improving access to child health services. As they do in Head Start, family advocates help Early Head Start families to set goals for themselves and to work toward accomplishing those goals. Early Head Start also helps parents access needed health services for their children. At this young age, immunizations and well-child check-ups were noted as being of particular value. Finally, family benefits mentioned once in the survey responses included increased parent empowerment and the improved health of pregnant women (leading to healthier newborns).

Families' Success Stories. Head Start and Early Head Start directors who responded to the survey shared their most memorable success stories regarding the families of Head Start and Early Head Start children. The most common theme in these stories was of parents finding employment opportunities through Head Start, often leading to furthering their education and climbing the job ranks. One such story tells of a mother of two Head Start children. Twenty years ago, when her children were in Head Start, she began to volunteer with the program. She then became an assistant teacher and bus driver, then a lead teacher, then a program site manager. She completed a college degree during that time and now has the title of Head Start Site Manager for three sites in her Head Start system. Her director describes her leadership as instrumental in key agency efforts such as accreditation and moving sites closer to the children they serve. Another family success story describes a Head Start father who was quiet, reserved, and unemployed when his child came to Head Start. With Head Start's help, he found work with a company that provided transportation for Head Start. He advanced to a supervisory position, and even advocated for his company to provide in-kind assistance to Head Start. Employment within Head Start was often mentioned in these success stories. Some of the jobs held by current or former Head Start parents included bus monitors, bus drivers, cooks, clerks, assistant teachers, lead teachers, and supervisory positions.

Other success stories mentioned parents who grow into Head Start community advocates. One director related the tale of a mother of four who had many difficulties (poverty, history of abuse, anger) when she first came to Head Start. She was mentored by a Head Start staff member and eventually became an employee of the program while furthering her education. This mother gives Head Start credit for her success and her children's success. She is now an advocate for the program, and, in the words of her local Head Start director, "makes it her mission to help the children and families we serve." Another example mentioned a Head Start parent who was a volunteer and a policy council member and now is a member of the local public school board. The common theme in these stories is that Head Start has helped many parents to further their education and employment, and, as a result, they become active and generous members of the community.

Family Outcomes in Early Head Start and Head Start: Results from National Studies

What is the evidence that Head Start supports parents and families? Do parents benefit by participating in Head Start? In the following sections, we review existing national research on Head Start parents and families.

Early Head Start

Outcomes for Parents and Families. Early Head Start can be delivered via several different program models, and the type of program model is important when it comes to parent and family outcomes. In the **Early Head Start Research and Evaluation Study (EHSRE)**, home-based programs tended to have impacts on parent outcomes, center-based programs tended to have impacts on child outcomes, and mixed-approach programs tended to have impacts on both.⁴⁸ However, program model also differed by subgroup. African American and Latino families had better outcomes in center-based and home-based programs, rather than mixed-approach programs, whereas children whose parents had less than a high school education received the most cognitive benefit from the mixed-approach programs.⁴⁹

Parenting Behavior. Parents of children who had attended Early Head Start provided more support of their child's language development and learning, compared to parents of control group children.⁵⁰ Furthermore, Early Head Start parents were more likely to read to children daily and at bedtime.⁵¹ Parents of children in the Early Head Start group provided more emotional support to their children, compared to parents of control group children. They were also less likely to use insensitive and hostile parenting behavior or punitive discipline strategies.⁵² Early Head Start parents, compared to control parents, showed greater warmth and supportiveness and less detachment toward their children. They also spent more time in play with their child, were less likely to spank their child, and had a greater repertoire of discipline strategies.⁵³

Parents' well-being. The provision of Early Head Start services is also expected to impact parents' well-being. The EHSRE study considered parents' mental health and participation in education and employment settings.

Mental health. Early Head Start parents reported lower levels of family conflict and parenting stress compared to control parents.⁵⁴ There was no effect on parental depression or family use of mental health services when children were completing Early Head Start at age three.⁵⁵ Two years later, however, prior to children's enrollment in kindergarten, a follow-up study detected reductions in maternal depression for the Early Head Start group.⁵⁶ These maternal mental health benefits were mediated by Early Head Start parents' reduced parenting distress and reduced use of spanking during Early Head Start enrollment, and by children's reduced aggression and improved cognitive development during Early Head Start enrollment. So apparently, the Early Head Start programs were effective in teaching positive parenting methods, reducing children's problem behavior, and increasing learning, which was associated with reduction in mothers' symptoms of depression.

Education and employment. Parents of children in the Early Head Start group were more likely than control parents to participate in an education or job training program. They were also more likely to have been employed during the evaluation period.⁵⁷

Head Start

Outcomes for Parents and Families. Head Start performance standards require that Head Start programs intervene with families as well as children. Some of the primary family-related goals include educating parents on child development and effective parenting, promoting parents' involvement in their child's schooling, and connecting families with community resources.

Parenting Behavior. Results of the FACES study indicate that during the period of Head Start enrollment, parents increased the variety of educational and recreational activities that they do with their children.⁵⁸ The impact study echoed that, finding that Head Start had a positive impact on parents' use of educational activities with their children.⁵⁹ The FACES study detected a small but significant decline in parents' use of spanking over the course of receiving Head Start services.⁶⁰ Similarly, the impact study found that, for children who enrolled at age three, Head Start was associated with a reduction in parents' use of physical discipline.⁶¹

Parents' Well-being. Only the FACES study has released results related to parents' well-being at this time. Head Start parents in the FACES study demonstrated higher levels of mental well-being over the course of receiving Head Start services. They also rated Head Start highly as a source of social support. Nine percent of primary caregivers in the FACES study obtained a license, certificate, or degree over the program year. Head Start enrollment was associated with an increase in the number of parents with full-time jobs and decrease in the number of parents on welfare.⁶² Furthermore, average family income increased during Head Start enrollment.⁶³

Conclusions from National Research: Family Outcomes in Head Start

As discussed above in the child outcomes section, these national studies provide both experimental (EHSRE, Head Start Impact) and descriptive (FACES) evidence regarding outcomes associated with Early Head Start and Head Start participation. Early Head Start research concludes that enrollment in Early Head Start results in a variety of benefits to families, more supportive home environments and better maternal mental health. Head Start research concludes that enrollment in Head Start is associated with more effective parenting behavior and improvement in parents' educational and employment status.

Indiana Voices: Head Start Families

The local and national data summarized above concludes that Head Start and Early Head Start provide important benefits for the families of children enrolled in those programs. Another way to consider the type and extent of benefits received is to listen to the voices of those directly involved. The following quotations from Head Start directors and parents offer individual, personal testimonials to the effect of Head Start and Early Head Start on the families of children served.

Head Start directors and parents describe the benefits of Head Start for families:

- “Families gain skills and a sense of having some control by setting goals and working to achieve them. They are hopeful.” –HS Director, Lafayette

- “[Parents become]...empowered in their active roles in the program, whether as a classroom volunteer or as an officer or member of their parent group or Policy Council.” –HS Director, Covington
- “To be able to get great care for my children for a price I can afford, as a student, is amazing. You can’t get that anywhere else.” –HS parent, Lafayette
- “The program has benefited my family so much. We love the family activities that they have. I also love the fact that most of the teachers would go out of their way to help you and your children.” –Former HS parent, Lafayette

Head Start directors and parents tell of families’ successes:

- “One of our Head Start parents volunteered in the classrooms, served on policy council, and now sits on the school board. She also will be serving as a friend to Head Start at the state level this coming year.” –HS Director, Kokomo
- “A parent, who started out in the Pregnant Women's Program, graduated from high school this past May, received a Disney Scholarship to an 8 week culinary school, and was hired by the Polynesian Hotel. Her little girl receives child care through her new employer.” –HS Director, Lafayette
- “In the last couple of years, we have seen some of our fathers become very involved in parent meetings, policy council, the dads’ group, and even going to Head Start conferences. They become strong advocates for their children. Our current policy council chair is a Head Start father who also leads the dads’ group. He recently led a community-based activity for families all by himself, with no need for staff support.” – HS Director, Garrett
- “[Head Start] has helped us because [before Head Start] I did not know how to get my child help and to see what problems he has and to catch them very quickly.” –HS parent, Lafayette

(More quotations can be found in Appendix C, a compilation of parent and director comments about Head Start and Early Head Start in Indiana.)

E. Head Start: Making Connections with Communities

According to the enabling legislation, “Head Start serves families within the context of the community, and recognizes that many other agencies and groups work with the same families. The objective of Community Partnerships is to ensure that grantee and delegate agencies collaborate with partners in their communities, in order to provide the highest level of services to children and families, to foster the development of a continuum of family centered services, and to advocate for a community that shares responsibility for the healthy development of children and families of all cultures.”⁶⁴

According to the Head Start Performance Standards, which specify what local programs must accomplish:

“Grantee and delegate agencies must take affirmative steps to establish ongoing collaborative relationships with community organizations to promote the access of children and families to community services that are responsive to their needs, and to ensure that Early Head Start and Head Start programs respond to community needs, including:

- (i) Health care providers, such as clinics, physicians, dentists, and other health professionals;

- (ii) Mental health providers;
- (iii) Nutritional service providers;
- (iv) Individuals and agencies that provide services to children with disabilities and their families (see 45 CFR 1308.4 for specific service requirements);
- (v) Family preservation and support services;
- (vi) Child protective services and any other agency to which child abuse must be reported under State or Tribal law;
- (vii) Local elementary schools and other educational and cultural institutions, such as libraries and museums, for both children and families;
- (viii) Providers of child care services; and
- (ix) Any other organizations or businesses that may provide support and resources to families.”⁶⁵

Indiana Head Start Programs Work with Community Partners

As described above, each Head Start and Early Head Start director in the state of Indiana was invited to complete an online survey as part of this research effort. The survey asked directors to identify the three primary benefits Head Start provided to communities. Directors were also asked to report notable success stories or other information they wished to share.

Benefits to Communities. Survey respondents were asked to name the **three most important benefits communities receive from their local Head Start programs**. The most common response provided was that **children are better prepared for kindergarten**. By helping the neediest children in the community become ready for school, Head Start reduces the need for remediation services in the public schools, which are expensive. When a school enrolls “ready and eager learners,” as one Head Start director described her program’s graduates, the entire community benefits.

Other commonly mentioned community benefits were more productive community members, job opportunities, the increased coordination of social services, and the provision of high quality child care. Many Head Start directors mentioned that Head Start results in more productive adults in the community. Parents become better educated, receive help in addressing many of their immediate needs, and become more engaged as parents and community members. As a result, the community benefits from a better educated workforce and the alleviation of many of the challenges of poverty. Over the long term, Head Start children become more likely to grow into productive, educated, employed citizens as well. Head Start also contributes to the employment base of the community directly by hiring community members. The existence of a local Head Start program means dozens of job opportunities, across a wide range of educational requirements, from GED to master’s degree. Head Start also contributes to the local community by coordinating social services for a needy population – low-income families with young children. This reduces the burden on all community social services and public programs. Additionally, the community benefits from Head Start’s provision of high-quality, affordable early childhood services for the neediest children in the community. These children receive

care in a safe, enriching environment that might exceed anything they could experience in the home or in other low-priced community child care settings. As a result, children's well-being is enhanced, and the future of the community is protected.

Additional community benefits mentioned by directors were the infusion of federal dollars into the community and increased community awareness of important issues. Head Start programs bring substantial funds into communities, where they are used to hire citizens, to contract with local companies, and to buy the supplies needed to operate a high-quality program. These monies provide an economic benefit to the community. The presence of a local Head Start may increase a community's awareness of poverty and of the importance of early intervention for young children. This increased awareness may influence community members to volunteer or take other actions to better their community. Finally, a number of community benefits were mentioned by individual directors. These included the early identification of children's needs, the provision of volunteer opportunities, and the increased understanding parents gain of their role in the community and in the schools. Furthermore, Head Start programs collaborate with and support local schools and also serve as training sites for local institutions of higher education.

Early Head Start directors were asked to name the **three most important benefits communities receive from participation in Early Head Start programs**. Many of the benefits listed were similar to those noted for regular Head Start programs. The **most common benefits listed were support for young, low-income families and quality early childhood services**. The support and services that Early Head Start parents receive – in some cases even before the birth of the baby – provide benefits to the community as they result in healthier, happier, more stable families, and adults who are more able to be productive members of the community. Additionally, the provision of high-quality child care services for the youngest and neediest children in the community provides an additional benefit, particularly given the lack of quality infant/toddler child care in many communities.

Other commonly mentioned community benefits were the jobs and federal dollars brought to the community by Early Head Start, the improved education and parenting skills of Early Head Start parents, and the coordination of social services for a high-need population. Finally, community benefits mentioned once in the survey included being able to reach families very early with prevention/intervention services, giving children group experiences prior to entering preschool, and providing Early Head Start staff to serve on other community committees.

Community Success Stories. Head Start and Early Head Start directors who responded to the survey shared their most memorable success stories regarding collaborations with other organizations in the community. Many programs involved working with other local educational organizations. In Fort Wayne, the Head Start program collaborated with the city, the local schools, and the United Way to develop a series of workshops for parents whose children will soon be enrolling in kindergarten. A "Passport to Kindergarten" was also created. This is a communication tool that goes from Head Start to the kindergarten teacher to give the teacher important information about the new student. The Head Start program headquartered in Monrovia is moving Head Start classrooms into a local vocational and alternative high school. The high school students enrolled in child development courses will be able to

get field experience in the Head Start classrooms. In Kokomo, a local university holds early childhood education classes on site at Head Start, creating a mutually beneficial relationship that leads to practicum and student teaching experiences for the college students and many volunteers for the Head Start program. Other programs reported collaborating with public libraries and special services units of the public schools.

Another key area of collaboration is health. The Head Start program in Merrillville reported a collaboration with the Valparaiso University School of Nursing. Graduate-level RNs visit the Head Start sites and provide lead and hemoglobin testing, as well as general physical examinations, for the children. Other programs reported collaboration with the local health department and local dental care providers. There is no shortage of community success stories, as Head Start and Early Head Start programs demonstrate their skill in collaborating with other community organizations to meet the needs of young children and their families.

Indiana Voices: Head Start and Communities

The local information summarized above concludes that Head Start and Early Head Start are successfully collaborating with community agencies and providing benefits for communities that go beyond the children and families directly served by the programs. Another way to consider the type and extent of benefits received is to listen to the voices of those directly involved. The following quotations from Head Start directors offer vivid examples of the way each Head Start program impacts its local community.

Head Start directors describe the benefits of Head Start for communities:

- “We employ over 90 staff so we are supporting the workforce.” –HS Director, Monrovia
- “Any gain made by the families will serve as a gain for the whole community. This can be in terms of increased adult education, job training, budgeting [skills], or various other factors that influence the 'living state' of our families.” –HS Director, Covington
- “Head Start brings federal dollars into our community, not only providing services, but providing jobs and funds to purchase what is needed to run a successful program.” –HS Director, Lafayette
- “Schools receive ready and eager learners. Many Head Start students become fluent in the language most often used by teachers in school systems.” –HS Director, Lafayette

Head Start directors tell of successful collaborations with other community organizations:

- “Our program has collaborated with the city of Fort Wayne, Fort Wayne Community Schools, and United Way to bring training opportunities for parents whose children are headed to kindergarten. A series of workshops entitled "Off to a Good Start" have been presented for the past three years. A "Passport to Kindergarten" was developed that follows the child to kindergarten and shares information with the kindergarten teacher.” –HS Director, Fort Wayne
- “Our newest collaboration is moving our Head Start classrooms into the building with the AREA 30 Career Center in Greencastle, which is the vocational and alternative school for the area. We will have 1/2 day and full day Head Start classes there. The Child Development high school students will be able to get their field experience in our Head Start rooms while we gain those ever valuable ‘extra set of hands.’” —HS Director, Monrovia

- “We teamed with a local university and they have early childhood education classes on site in our facility. Then their practicum and student teachers work in our Head Start classrooms. All parties benefit and the children and families benefit most of all. We plan special events together, receive in-kind, and prepare future educators.” –HS Director, Kokomo
- “We collaborate with the IUK Center for Early Childhood Education to provide totes with activities in them for families to use with their children at home. This provides our families with programming if they have to wait for Head Start services to begin.” –EHS Director, Kokomo
- “We collaborate with Young Audience. We bring the arts to our children's classrooms and our children bring joy to many of the retired artists that work with them. Our program was highlighted for this partnership by region V as innovative.” –HS Director, Indianapolis
- “We [partner] with the School of Nursing at Valparaiso University.Graduate level Registered Nurses (RN)...visit each of our sites and provide lead and hemoglobin testing and physical examinations while accruing practicum experience. Not only does this provide a needed service for our children, it assists us in meeting one of our many Head Start Standards and provides an in-kind resource to support our required federal dollar match.” –HS Director, Merrillville

More quotations can be found in Appendix C, a compilation of parent and director comments about Head Start and Early Head Start in Indiana.

F. Conclusions: Is Indiana Head Start Effective?

The purpose of this study was to examine both available and new evidence that can address the question, “Does Head Start work for Indiana children, families, and communities?” Based on careful study of evidence from the state Head Start Program Information Report, from local Indiana Head Start and Early Head Start programs, and from national studies of Head Start and Early Head Start, the answer is a resounding, “Yes! Indiana children, families, and communities are benefitting from Head Start!” Here is a synopsis of our findings, including implications for future Head Start programming and needed research in Indiana:

Benefits for Children: Reported by Indiana programs

1. Fifty three (53) local Indiana Head Start and Early Head Start programs serve more than 17,000 Indiana preschool children (prenatal to age 5) and their families each year. These are primarily children living below the poverty line who would not otherwise have access to quality early education, health services, and support services for their families. However, funding limitations mean only 1 out of every 5 eligible Indiana children are able to participate in Head Start.
2. Head Start programs assess children’s development and school readiness at least twice each year. Indiana Head Start programs report substantial gains, from the beginning of the school year to the end, in early literacy, mathematics, social/emotional development, and physical health.

3. Indiana program directors surveyed reported the 3 most important benefits children gain from Head Start are:
 - a. Building early social skills;
 - b. Gaining basic early academic skills, better preparing children for kindergarten;
 - c. Getting access to critical health and disability screenings, so that problems can be treated early and more effectively.
4. Directors we surveyed reported the 3 most important benefits for children of Early Head Start are:
 - a. Access to health services;
 - b. Early identification and intervention for delays and disabilities;
 - c. Socialization, enabling infants and toddlers to develop age-appropriate social skills

Benefits for Children: National Research

5. Rigorous national research studies, some including Indiana Head Start children, show that Head Start and Early Head Start are effective in improving outcomes for children from low income families.
 - a. Early Head Start improves cognitive, language, social, and health outcomes for infants and toddlers, when compared with other programs available in communities for low income families.
 - b. Head Start children gain significantly higher pre-academic skills than their non-Head Start peers, and they continue to make gains after Head Start, in the kindergarten year. While Head Start does not entirely eliminate the well-known and persistent “achievement gap” between poor children and more advantaged children, it does give disadvantaged children a better chance at success in school and in life.
 - c. A new Purdue University study of national data completed for this report shows that children in Head Start have measureable advantages over a comparable sample of low income preschoolers who did not have Head Start:
 - i. Have significantly higher receptive vocabulary, literacy, and math skills;
 - ii. Are 3.7 more likely to receive dental care, and 2.6 times more likely to have health insurance;
 - iii. Have parents who are more actively involved in their education and who expect them to do well in school.

Benefits for Families: Reported by Indiana Programs

6. Families living in poverty experience multiple stressors and instability that adversely affects both parents and their young children. Indiana Head Start programs support families at risk by assessing families' needs, developing family partnership agreements with parents, providing access to prenatal care and other health services, and helping families access the community services they need.
7. Most programs assess family needs and help families develop plans for positive change.
 - a. About 2/3 of all families in the reporting programs participated in family goal-setting activities or family partner agreements.
 - b. More than 40% (more than 70% in some programs) received family services such as crisis intervention, housing assistance, job training, parental education, and behavioral health services.
8. The 3 most important benefits of Head Start to families reported by the Indiana directors we surveyed were:
 - a. Access to social services families need;
 - b. Support and education that helps parents better support their children's development and learning;
 - c. Empowerment and leadership skills that help parents be more successful in life.
9. Directors we surveyed reported Early Head Start provided similar benefits to families, and in addition the programs provided access to high quality child care for infants and toddlers, which is in extremely short supply in most communities.

Benefits for Families: National Research

10. Our review of rigorous national studies of the impact of Early Head Start and Head Start on families revealed the program improves family outcomes, just as it improves children's outcomes:
 - a. Early Head Start parents report lower levels of stress and family conflict than comparable low income parents. Early Head Start mothers report lower levels of depression two years after their children were in the program. Their parenting is more likely to be responsive and supportive of their children, rather than harsh and punitive.
 - b. Head Start parents engage in more educational activities with their children and spank their children less. They report that Head Start provides them with social support, well-being, and helps them get more education, jobs, and reduces their dependence on welfare.

Benefits for Communities

11. Head Start and Early Head Start programs are required to collaborate with other community agencies to more effectively provide the highest level of services to children and families.

Indiana Head Start directors reported many community benefits and creative and effective collaborations:

- a. Children are better prepared for kindergarten, “ready and eager to learn.” When children succeed in school, the community benefits long term by having a more productive and involved citizenry.
- b. Head Start parents become better educated and more involved in the community.
- c. Head Start provides employment opportunities and job training for low income citizens.
- d. Head Start returns federal tax dollars directly to people and businesses, stimulating the local economy.
- e. Indiana Head Start directors reported effective community collaborations, including:
 - i. Linkages between Head Start and the public schools to ensure children receive needed services and are more successful;
 - ii. Partnerships with local high schools and colleges to provide services to students;
 - iii. Collaborative arrangements with health care providers, to provide affordable examinations and treatment for children, and sometimes training opportunities for health care professionals.

Implications & Recommendations

All evidence reviewed for this report points to the conclusion that “Head Start works for Indiana children and families.” Head Start and Early Head Start are comprehensive child development and family support programs. The positive effects of Head Start for low income families and children are many: improved health, greater well-being, improved educational attainment for parents, better preparation for school for young children, better health outcomes, more effective community support efforts on behalf of families, and many more. The hard research data and the voices of parents and community members both reinforce the significant contributions of these programs to Indiana children and families. The challenge for Indiana is to find a way to provide Head Start or similar comprehensive early childhood programs for all needy citizens. Currently only about 20% of Head Start eligible children are able to participate. Clearly, we need to do better at providing education, health care, and family support to Indiana’s children during their impressionable and vulnerable first five years.

Indiana Head Start programs devote considerable effort to measuring child and family outcomes. However, currently each Head Start program selects its own measures to show child and family growth while in the program. First, we recommend the programs consider in the future selecting a universal

well-validated normed measure for child development outcomes and a similar valid, normed measure for family outcomes. While local decision making about measures is valuable in some ways, we believe the benefits of being able to aggregate statewide child- and family-outcome data would outweigh the advantage of being able to select measures locally. Statewide data using valid and normed measures would enable Indiana Head Start programs to show in a much more powerful way the benefits both children and families gain from participation. Second, Indiana Head Start programs should explore ways of tracking Head Start children's progress and achievement when they enter kindergarten. Uniform statewide data describing the early school success of Head Start children has the potential to add considerable evidence to Head Start's success and program improvement in the future.

Endnotes

-
- ¹ Improving Head Start for School Readiness Act of 2007 (<http://eclkc.ohs.acf.hhs.gov/hslc>)
- ² Head Start Program Fact Sheet, February, 2008 (www.acf.hhs.gov/programs/ohs/about/fy2008.html, Sept. 20, 2009)
- ³ The federal poverty level is based on family size and composition and is updated every year to account for inflation. In calendar year 2007, a family of two adults and two children fell in the “poverty” category if their annual income was below \$21,027.
- ⁴ Anney E. Casey Foundation, Kids Count Data Center (<http://datacenter.kidscount.org/>)
- ⁵ U.S. Census Bureau, *2005-2007 American Community Survey 3-Year Estimates*.
- ⁶ Hawley, T. (2000). *Starting Smart: How Early Experiences Affect Brain Development*. Zero to Three, Washington, DC.
- ⁷ Moore, K.A. et al. (2009). Children in poverty: Trends, consequences, and policy options. Washington DC: Child Trends Research Brief.
- ⁸ NICHD Early Child Care Research Network. (2002). The interaction of child care and family risk in relation to child development at 24 and 36 months. *Applied Developmental Science*, 6, 144-156.
- ⁹ Elicker, J., Clawson, C., Hong, S., Kim, T., Evangelou, D. & Kontos, S.J. (2005). *Child care for working poor families: Child development and parent employment outcomes*. Technical report, Center for Families, Purdue University, West Lafayette, IN.
- ¹⁰ Office of Head Start (www.acf.hhs.gov/opa/fact_sheets/headstart_printable.html, Sept. 20, 2009)
- ¹¹ Includes both Head Start and Early Head Start. Head Start Program Information Report for the 2007-2008 Program Year, State Level Summary Report
- ¹² Administration for Children and Families (2006d). *Research to Practice: Preliminary Findings from the Early Head Start Prekindergarten Follow up*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ¹³ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation “Short” Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ¹⁴ Administration for Children and Families (2006d). *Research to Practice: Preliminary Findings from the Early Head Start Prekindergarten Follow up*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ¹⁵ Administration for Children and Families (2006f). *Supporting Language and Cognitive Development in Early Head Start*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/lang_literacy/lang_literacy.pdf
- ¹⁶ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation “Short” Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ¹⁷ Administration for Children and Families (2002a). *Making a Difference in the Lives of Infants and Toddlers and*

-
- Their Families: The Impacts of Early Head Start Executive Summary*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html
- ¹⁸ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation "Short" Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ¹⁹ Administration for Children and Families (2006d). *Research to Practice: Preliminary Findings from the Early Head Start Prekindergarten Follow up*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ²⁰ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation "Short" Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ²¹ Administration for Children and Families (2006e). *Services and Outcomes for Early Head Start Families Enrolled During Pregnancy: Is There a Magic Window?* Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ²² Administration for Children and Families (2006a). *Children with Disabilities in Early Head Start*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ²³ Administration for Children and Families (2006d). *Research to Practice: Preliminary Findings from the Early Head Start Prekindergarten Follow up*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ²⁴ Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elio, M. A. (2003). *Head Start FACES 2000: a Whole-Child Perspective on Program Performance*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces00_4thprogress/faces00_4thprogress.pdf
- ²⁵ Ibid.
- ²⁶ Administration for Children and Families (2006b). *"Friendly FACES" – FACES Findings: New Research on Head Start Outcomes and Program Quality*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces_findings_06/faces_findings.pdf
- ²⁷ Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elio, M. A. (2003). *Head Start FACES 2000: a Whole-Child Perspective on Program Performance*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces00_4thprogress/faces00_4thprogress.pdf
- ²⁸ Administration for Children and Families (2000). *FACES Findings: New Research on Head Start Program Quality and Outcomes*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces_findings/facesfindings.pdf
- ²⁹ Administration for Children and Families (2006b). *"Friendly FACES" – FACES Findings: New Research on Head Start Outcomes and Program Quality*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces_findings_06/faces_findings.pdf
- ³⁰ Administration for Children and Families (1998). *Head Start Program Performance Measures Second Progress Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/perform_2nd_rpt/meas_98.pdf
- ³¹ D'Elio, M. A., O'Brien, R. W., & Vaden-Kiernan, M. (2003). *Relationship of Family and Parental Characteristics to Children's Cognitive and Social Development in Head Start*. Washington, DC: U.S. Department of Health and

Humans Services. Retrieved from

http://www.acf.hhs.gov/programs/opre/hs/faces/pres_papers/relation_family/relation_family.pdf

- ³² Administration for Children and Families (2006b). *“Friendly FACES” – FACES Findings: New Research on Head Start Outcomes and Program Quality*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces_findings_06/faces_findings.pdf
- ³³ Zill, N., Resnick, G., Kim, K., O’Donnell, K., Sorongon, A., Ziv, Y., Alva, S., McKey, R. H., Pai-Samant, S., Clark, C., O’Brien, R., & D’Elio, M. A. (2006). *Head Start Performance Measures Center Family and Child Experiences Survey (FACES 2000) Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/technical_2000_rpt/tech2k_final2.pdf
- ³⁴ Puma, M., Bell, S., Cook, R., Heid, C., & Lopez, M. (2005). *Head Start Impact Study: First Year Findings*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/reports/first_yr_finds/first_yr_finds.pdf
- ³⁵ Administration for Children and Families (2006b). *“Friendly FACES” – FACES Findings: New Research on Head Start Outcomes and Program Quality*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces_findings_06/faces_findings.pdf; Zill, N., Resnick, G., Kim, K., O’Donnell, K., Sorongon, A., Ziv, Y., Alva, S., McKey, R. H., Pai-Samant, S., Clark, C., O’Brien, R., & D’Elio, M. A. (2006). *Head Start Performance Measures Center Family and Child Experiences Survey (FACES 2000) Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/technical_2000_rpt/tech2k_final2.pdf
- ³⁶ Tarullo, L. B., Zill, N., Resnick, G., Hubbell-McKey, R., & Pai-Samant, S. (2002). *Improving the Performance of the Head Start Program: Findings from FACES 2000*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/pres_papers/improve_perf/improve_performance2002.pdf
- ³⁷ Zill, N., Resnick, G., Kim, K., O’Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O’Brien, R., & D’Elio, M. A. (2003). *Head Start FACES 2000: a Whole-Child Perspective on Program Performance*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces00_4thprogress/faces00_4thprogress.pdf
- ³⁸ Zill, N., Resnick, G., Kim, K., O’Donnell, K., Sorongon, A., Ziv, Y., Alva, S., McKey, R. H., Pai-Samant, S., Clark, C., O’Brien, R., & D’Elio, M. A. (2006). *Head Start Performance Measures Center Family and Child Experiences Survey (FACES 2000) Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/technical_2000_rpt/tech2k_final2.pdf
- ³⁹ Puma, M., Bell, S., Cook, R., Heid, C., & Lopez, M. (2005). *Head Start Impact Study: First Year Findings*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/reports/first_yr_finds/first_yr_finds.pdf
- ⁴⁰ Tarullo, L. B., Zill, N., Resnick, G., Hubbell-McKey, R., & Pai-Samant, S. (2002). *Improving the Performance of the Head Start Program: Findings from FACES 2000*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from

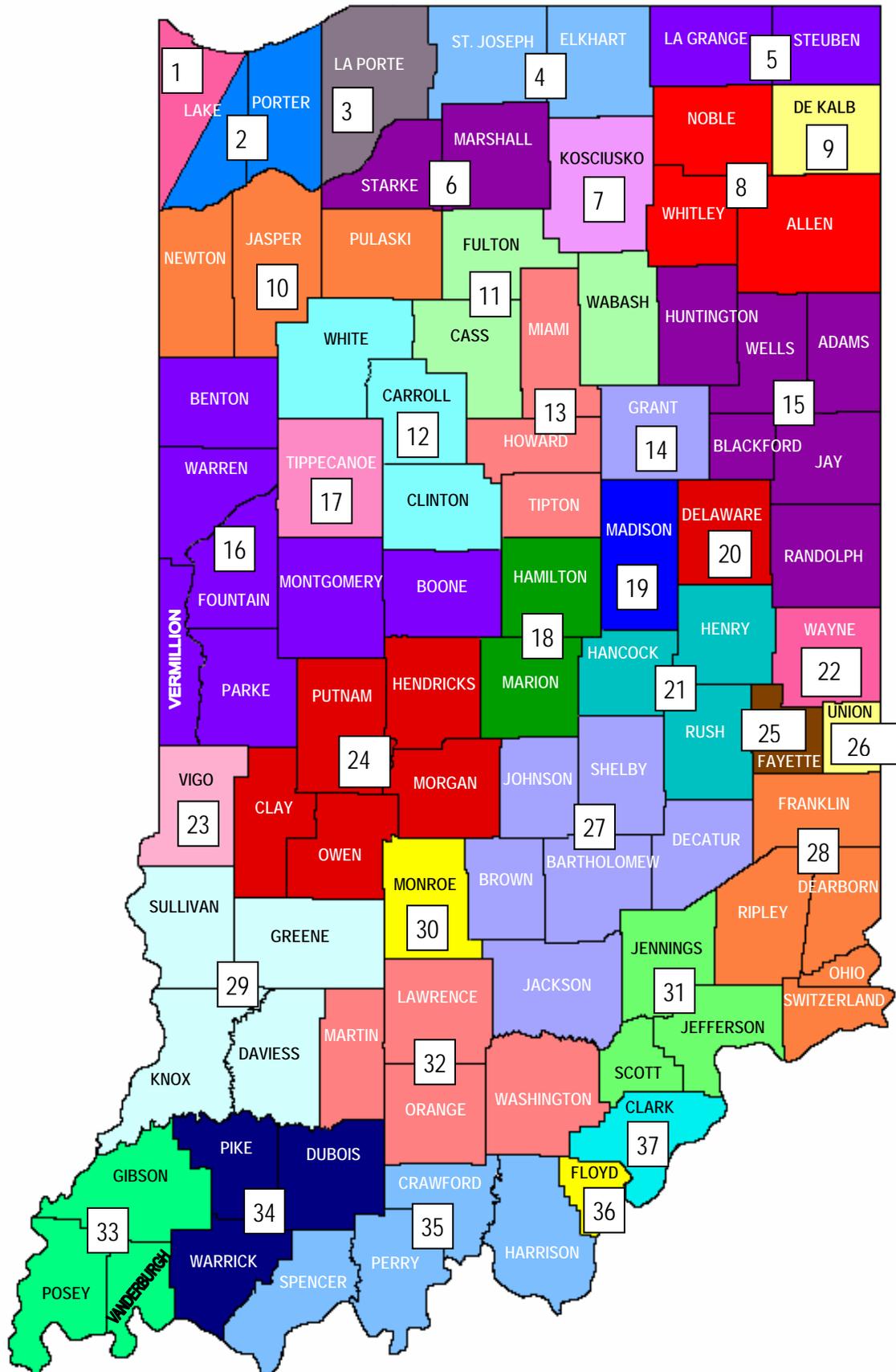
- http://www.acf.hhs.gov/programs/opre/hs/faces/pres_papers/improve_perf/improve_performance2002.pdf
- ⁴¹ Puma, M., Bell, S., Cook, R., Heid, C., & Lopez, M. (2005). *Head Start Impact Study: First Year Findings*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/reports/first_yr_finds/first_yr_finds.pdf
- ⁴² Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elia, M. A. (2003). *Head Start FACES 2000: a Whole-Child Perspective on Program Performance*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/faces00_4thprogress/faces00_4thprogress.pdf
- ⁴³ McCartney, K. et al. (2007). Quality child care supports the achievement of low-income children: Direct and indirect pathways through caregiving and the home environment. *Journal of Applied Developmental Psychology* 28(5/6), 411-426.
- ⁴⁴ Improving Head Start for School Readiness Act of 2007 (<http://eclkc.ohs.acf.hhs.gov/hslc>)
- ⁴⁵ Family Partnerships, Early Learning & Knowledge Center web site, <http://eclkc.ohs.acf.hhs.gov/hslc/Family%20and%20Community%20Partnerships/>
- ⁴⁶ Head Start Program Information Report for the 2007-2008 Program Year, State Level Summary Report
- ⁴⁷ Head Start Program Information Report for the 2007-2008 Program Year, State Level Summary Report
- ⁴⁸ Administration for Children and Families (2006c). *Program Models in Early Head Start*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ⁴⁹ Jung, S., & Stone, S. (2008). Sociodemographic and programmatic moderators of Early Head Start: Evidence from the National Early Head Start Research and Evaluation Project. *Children & Schools*, 30(3), 149-157.
- ⁵⁰ Administration for Children and Families (2002b). *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start. Volume I: Final Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html
- ⁵¹ Administration for Children and Families (2001). *Building their futures: How early head start programs are enhancing the lives of infants and toddlers in low-income families summary report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/building_summary/building_exesum.pdf
- ⁵² Administration for Children and Families (2002b). *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start. Volume I: Final Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.dhhs.gov/programs/core/ongoing_research/ehs/ehs_intro.html
- ⁵³ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation "Short" Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ⁵⁴ Administration for Children and Families (2001). *Building their futures: How early head start programs are enhancing the lives of infants and toddlers in low-income families summary report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/building_summary/building_exesum.pdf
- ⁵⁵ Administration for Children and Families. (2003a). *Depression in the Lives of Early Head Start Families: PowerPoint Presentation*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/reports/dissemination/depression/depression_talking_pts.pdf

-
- ⁵⁶ Chazan-Cohen, R., Ayoub, C., Pan, B. A., Roggman, L., Raikes, H., McKelvey, L., Whiteside-Mansell, L., & Hart, A. (2007). It takes time: Impacts of Early Head Start that lead to reductions in maternal depression two years later. *Infant Mental Health Journal*, 28(2), 151-170.
- ⁵⁷ Administration for Children and Families. (2003b). *Early Head Start Research and Evaluation Project: Overall Findings Presentation "Short" Version*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html
- ⁵⁸ Zill, N., Resnick, G., Kim, K., McKey, R. H., Clark, C., Pai-Samant, S., Connell, D., Vaden-Kiernan, M., O'Brien, R., & D'Elio, M. A. (2001). *Head Start FACES: Longitudinal Findings on Program Performance, Third Progress Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/perform_3rd_rpt/perform_3rd_rpt.pdf
- ⁵⁹ Puma, M., Bell, S., Cook, R., Heid, C., & Lopez, M. (2005). *Head Start Impact Study: First Year Findings*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/reports/first_yr_finds/first_yr_finds.pdf
- ⁶⁰ Zill, N., Resnick, G., Kim, K., McKey, R. H., Clark, C., Pai-Samant, S., Connell, D., Vaden-Kiernan, M., O'Brien, R., & D'Elio, M. A. (2001). *Head Start FACES: Longitudinal Findings on Program Performance, Third Progress Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/perform_3rd_rpt/perform_3rd_rpt.pdf
- ⁶¹ Puma, M., Bell, S., Cook, R., Heid, C., & Lopez, M. (2005). *Head Start Impact Study: First Year Findings*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/impact_study/reports/first_yr_finds/first_yr_finds.pdf
- ⁶² Zill, N., Resnick, G., Kim, K., McKey, R. H., Clark, C., Pai-Samant, S., Connell, D., Vaden-Kiernan, M., O'Brien, R., & D'Elio, M. A. (2001). *Head Start FACES: Longitudinal Findings on Program Performance, Third Progress Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/perform_3rd_rpt/perform_3rd_rpt.pdf
- ⁶³ Zill, N., Resnick, G., Kim, K., O'Donnell, K., Sorongon, A., Ziv, Y., Alva, S., McKey, R. H., Pai-Samant, S., Clark, C., O'Brien, R., & D'Elio, M. A. (2006). *Head Start Performance Measures Center Family and Child Experiences Survey (FACES 2000) Technical Report*. Washington, DC: U.S. Department of Health and Humans Services. Retrieved from http://www.acf.hhs.gov/programs/opre/hs/faces/reports/technical_2000_rpt/tech2k_final2.pdf
- ⁶⁴ Improving Head Start for School Readiness Act of 2007 (<http://eclkc.ohs.acf.hhs.gov/hslc>)
- ⁶⁵ Head Start Early Childhood Knowledge and Learning Center- Community Partnerships. retrieved from <http://eclkc.ohs.acf.hhs.gov/hslc/Family%20and%20Community%20Partnerships/Community%20Partnership>

Appendix A

Map and Head Start Program List

Indiana Head Start / Early Head Start Program Location Map



Indiana Head Start & Early Head Start Program Location Map Key

1	Hammond Head Start	Lake						
1	Lake Ridge Schools Head Start	Lake						
2	Geminus XX1 Head Start	Lake	Porter					
3	Community Organization of Social Concern Head Start	LaPorte						
4	Elkhart & St. Joseph Counties Head Start Consortium	Elkhart	St. Joseph					
5	Vistula Head Start	LaGrange	Steuben					
6	Marshall-Starke Development Center Head Start & Early Head Start	Marshall	Starke					
6 a	Texas Migrant Council Head Start	Marshall						
7	Kosciusko County Head Start & Early Head Start	Kosciusko						
7	Texas Migrant Council Head Start	Kosciusko						
8	CANI Head Start	Allen	Noble	Whitley				
8 a	East Wayne Head Start	Allen						
9	Garrett-Keyser-Butler Head Start	DeKalb						
10	K-IRPC Head Start	Jasper	Newton	Pulaski				
11	Area Five Head Start	Cass	Fulton	Wabash				
12	Area IV Head Start	Carroll	Clinton	White				
13	Kokomo Center Schools Head Start	Howard	Miami	Tipton				
13 a	Bona Vista Programs Early Head Start	Howard	Miami					
13 b	Texas Migrant Council Head Start	Howard						
14	Marion Community Schools Head Start	Grant						
14 a	Carey Services, Inc. Early Head Start	Grant	Blackford					
15	Community & Family Services Head Start	Adams	Blackford	Huntington	Jay	Randolph	Wells	
15 a	Texas Migrant Council Head Start	Adams						
15 b	Carey Services, Inc. Early Head Start	Blackford	Grant					
16	CAP of Western Indiana Head Start	Benton	Boone	Fountain	Montgomery	Parke	Vermillion	Warren
17	Community & Family Resource Center Head Start & Early Head Start	Tippecanoe						
17	Texas Migrant Council Head Start	Tippecanoe						
18	Family Development Services Head Start & Early Head Start	Hamilton	Marion					
18 a	Texas Migrant Council Head Start	Marion						
19	Hopewell Center, Inc. Early Head Start	Madison						
19	Texas Migrant Council Head Start	Madison						
19	Urban League of Madison County Head Start	Madison						
20	Action, Inc. Head Start	Delaware						
21	ICAP Head Start	Hancock	Henry	Rush				
22	CAECI Head Start	Wayne						
23	Hamilton Center Early Head Start	Vigo						
23	Western Indiana Community Action Agency	Vigo						
24	Cars Head Start & Early Head Start	Clay	Hendricks	Morgan	Owen	Putnam		
25	Fayette County Head Start	Fayette						
26	Community Care in Union County Head Start	Union						
27	Human Services, Inc. Head Start	Bartholomew	Brown	Decatur	Jackson	Johnson	Shelby	
28	Southeastern Indiana EOC Head Start	Dearborn	Franklin	Ohio	Ripley	Switzerland		
29	PACE Community Action Agency Head Start & Early Head Start	Daviess	Greene	Knox	Sullivan			
29 a	Texas Migrant Council Head Start	Knox						
30	SCCAP Head Start	Monroe						
31	Ohio Valley Opportunities Project Head Start	Jefferson	Jennings	Scott				
32	Hoosier Uplands EDC Head Start & Early Head Start	Lawrence	Martin	Orange	Washington			
33	CAPE of Evansville Head Start & Early Head Start	Gibson	Posey	Vanderburgh				
34	TRI-CAP head Start	Dubois	Pike	Warrick				
35	Lincoln Hills Development Corp. Head Start	Crawford	Harrison	Perry	Spencer			
36	Floyd County Head Start	Floyd						
37	Community Action of So. Indiana Head Start	Clark						

Appendix B

New Purdue Study Using Data from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B)

As a part of the Purdue University study that produced this technical report, Dr. Jennifer Dobbs-Oates conducted new analyses using data from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B) to investigate the relationship between Head Start participation and a variety of child and family outcomes. The ECLS-B is a nationally representative longitudinal study of child development conducted by the National Center for Education Statistics at the U.S. Department of Education. The complete ECLS-B dataset includes information on approximately 10,700 children, their families, and their child care experiences collected at three time points. The present analyses use data collected in the “preschool” wave of data collection. This information was collected when the children were in their pre-kindergarten year and approximately 4.5 years of age.

Description of Sample

These analyses compare two groups of children selected from the complete dataset – children who were currently enrolled in Head Start and a comparison group. The Head Start group consists of all children who, at the time of the data collection, had been attending Head Start for at least one full month (rounded N = 1350). Head Start eligibility is based primarily on family income, so that most children attending Head Start are living below the poverty line. A second important eligibility criterion is disability status. Head Start is mandated to serve children with disabilities as well as typically developing children. A certain percentage of children enrolled at Head Start may be from families with incomes above the poverty line; many Head Start organizations reserve these spots for children with disabilities. Thus, in any group of Head Start children, most children will be of low socio-economic status (SES). As children’s SES rises, so does their likelihood of being identified with a disability. This distribution pattern is true of the Head Start sample in these analyses. Since SES and disability status are the most important Head Start eligibility criteria, a comparison group was selected based on those key variables. Stratified random selection was used to create a comparison group of children (rounded N = 1850) who had never been enrolled in Head Start with SES and disability-status distribution identical to the Head Start group.

Special Data Considerations. Due to the nature of the ECLS-B data, all analyses must be weighted to correct for non-response, oversampling, and design effects. These weighted analyses preserve the nationally representative nature of the data. Furthermore, ECLS-B confidentiality regulations require that all unweighted N’s be rounded to the nearest 50. Thus, all analyses reported here are weighted and all reported group sizes are rounded.

Demographic Descriptions of the Head Start and Comparison Groups. Weighted descriptive analyses were run to describe the Head Start and comparison groups on a number of key demographic variables. This information is presented in the table that follows.

Demographic Information Separately by Group

	Head Start Group	Comparison Group
Child Sex	48.8% female 51.2% male	48.4% female 51.6% male
Child Age	M = 53.0 months SD = 3.9 months	M = 52.5 months SD = 4.3 months
Child Race/Ethnicity	29.5% White 27.1% Black/African American 35.2% Hispanic/Latino 1.1% Asian 0.5% Native Hawaiian/Pacific Islander 1.2% American Indian/Alaska Native 4.9% Multiracial 0.4% Missing	45.1% White 15.1% Black/African American 33.9% Hispanic/Latino 2.0% Asian 0.2% Native Hawaiian/Pacific Islander 0.4% American Indian/Alaska Native 3.1% Multiracial 0.1% Missing
Mother's Age	M = 29.8 years SD = 7.1 years	M = 31.0 years SD = 6.7 years
Family Structure	59.2% Two-parent family 38.3% Single-parent family 2.5% Missing or Undefined	72.8% Two-parent family 24.8% Single-parent family 2.4% Missing or Undefined
Household Income ¹	Mdn = \$20,001 to 25,000	Mdn = \$25,001 to \$30,000
Primary Home Language	71.9% English 27.7% Other 0.4% Missing	74.8% English 24.6% Other 0.5% Missing
Urbanicity ²	63.9% Urban/Suburban 15.8% Town 18.7% Rural 1.6% Missing	69.3% Urban/Suburban 12.2% Town 15.2% Rural 3.2% Missing

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

¹Household income was reported within ranges.

²Urbanicity was determined by census classification.

Analytic Plan

To identify child- and family-level outcomes associated with Head Start enrollment, multiple regressions and logistic regressions were conducted. For each outcome of interest, a regression was conducted with control variables only, and then with the independent variable as well. This technique allowed a determination of the unique predictive value of Head Start enrollment, over and above the impact of the control variables.

Control Variables. Control variables for the analyses were identified by testing the demographic variables listed above for their relationship to Head Start status and length of Head Start enrollment. The control variables identified for these analyses were child's age and minority status, mother's age, single-parent status, and household income. Control variables were centered at meaningful zero points, generally at or near the median value. Children's age was measured in months and the variable was centered at 54 months (4.5 years). Mother's age was measured in years and the variable was centered at 30 years. Children's race/ethnicity was measured by creating a dummy variable where "0" equaled

White and “1” equaled any other race or ethnicity. Single-parent status was also measured with a dummy variable; “0” indicated that the child lived with two parents, whereas “1” indicated that the child lived with one parent. These classifications were made regardless of parent status (biological, adoptive, step, etc.). Household income was centered at the median value (the \$20,001 to \$25,000 range). Mean imputation was used for missing values. Child minority status was missing for 0.2% of the cases; mother’s age was missing for 1.4% of the cases; and single-parent status was missing for 2.8% of the cases. There were no instances of missing data for child age or household income.

Independent Variables. Two different independent variables were used for these analyses, depending upon the type of dependent variable being investigated. For child-level outcomes measuring aspects of children’s school readiness, months of Head Start enrollment was the independent variable. For these outcomes, it was hypothesized that the bigger the “dose” of Head Start, the more children’s language, literacy, and math skills would benefit. For family-level outcomes measuring parent actions and beliefs, Head Start status was the independent variable. For these outcomes, it was hypothesized that contact with the Head Start system was the key change agent, rather than length of time enrolled. For instance, one of Head Start’s goals is to make sure that children access the appropriate medical services soon after enrollment. Once a child is in the Head Start system, he or she would reap these benefits. It would not matter if the child had been enrolled for two months or two years. Therefore, these analyses used the dichotomous variable of Head Start status as the independent variable.

Children’s Pre-Academic Development

Dependent Variables. Four measures of children’s pre-academic development were investigated. These outcomes consist of children’s scores on assessments of four domains of pre-academic skills: receptive vocabulary, expressive vocabulary, literacy, and math.

Results. For each of the dependent variables in this section, a multiple regression was run in which the control variables were entered in the first block and the months of Head Start enrollment was entered in the second block. The coefficients for the independent variable, as well as the change in R² when the independent variable was added to the regression, are listed for each of the pre-academic outcomes in the table below. Length of Head Start enrollment was uniquely positively related to children’s receptive vocabulary, literacy, and math skills. There was no significant result for expressive vocabulary.

Pre-Academic Skills Regressed on Length of Head Start Enrollment

Dependent Variable	B	SE B	Beta	R ² Change	Rounded N
Receptive Vocabulary	.016	.005	.078**	.006	2900
Expressive Vocabulary	.002	.003	.022	N/A	2850
Literacy	.074	.025	.078**	.006	2850
Math	.095	.025	.097***	.009	2900

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

***p* < .01

****p* < .001

In this sample of children in their pre-kindergarten year, including children enrolled in Head Start and non-enrollees who were similar in socioeconomic and disability status, children’s receptive vocabulary and their literacy and math skills improved with each additional month of Head Start enrollment. When controlling for all the variables identified earlier, a year of Head Start enrollment was associated with a 0.10 standard deviation gain in receptive vocabulary skills, a 0.10 standard deviation gain in early literacy skills, and a 0.12 standard deviation gain in early math skills. Although the size of these effects is modest, this pattern of results indicates a consistent benefit for children enrolled in Head Start when compared to their peers.

Children’s Access to Health Services

Dependent Variables. Children’s access to health services was measured with two dichotomous parent-reported variables. Parents indicated whether the child had ever received care from a dentist, and they also indicated whether the child was covered by any form of health insurance.

Results. For each of the dependent variables in this section, a logistic regression was run in which the control variables were entered in the first block and the child’s Head Start status (1 = yes; 0 = no) was entered in the second block. The coefficients for the independent variable, as well as the chi-square test for the addition of the Head Start status variable, are reported in the table below. Children who were enrolled in Head Start were more likely than children in the comparison group to have received dental care and to be covered by health insurance.

Logistic Regression of Health Services Variables on Head Start Status

Dependent Variable	B	SE B	Wald	Exp (B)	Block Chi-Square	Rounded N
Dental Care	1.308	.136	92.114***	3.699	103.748***	3200
Health Insurance	.954	.294	10.531**	2.596	12.071**	3200

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

** $p < .01$

*** $p < .001$

These analyses indicate that children enrolled in Head Start are 3.7 times more likely to receive dental care than children in the comparison group. Similarly, children enrolled in Head Start are 2.6 times more likely than children in the comparison group to be covered by health insurance. Since the comparison group was selected to be socioeconomically similar to the Head Start group, it is particularly notable to see such a substantial difference in the two groups’ access to health care services. The performance standards which govern the functioning of Head Start programs require that Head Start assist families in obtaining health care for their children. For instance, programs must make sure the child has an ongoing, accessible source of health care. Programs must also ensure that the children receive appropriate health-related screenings and follow-up treatments, including dental care. The results of the current analyses suggest that these performance standards result in increased access to health services for at-risk children.

Home Literacy Environment

Dependent Variables. The literacy activities variable is a composite variable created by averaging the frequency of three parent-reported literacy-related activities: reading to the child, telling stories to the child, and singing songs with the child. Parents also indicated the number of children’s books present in the home and the number of minutes the parent read to the child in a typical instance of shared reading. Finally, the parent indicated whether s/he took the child to the library, borrowed library books for the child’s use, or took the child to a library story hour in the past month.

Results. For each of the continuous dependent variables – literacy activities, number of children’s books, and minutes read per session – a multiple regression was run in which the control variables were entered in the first block and Head Start status was entered in the second block. The results are detailed in the table below. There was no significant relationship between Head Start status and these three indicators of the home literacy environment.

Continuous Home Literacy Environment Variables Regressed on Head Start Status

Dependent Variable	B	SE B	Beta	R ² Change	Rounded N
Literacy Activities	.023	.037	.016	N/A	3200
Number of Children’s Books	-4.498	3.529	-.032	N/A	3200
Minutes Read	.973	1.074	.025	N/A	3200

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

For each of the dichotomous dependent variables – visiting the library, borrowing library books, and taking the child to story hour – a logistic regression was run in which the control variables were entered in the first block and the child’s Head Start status was entered in the second block. The results are reported in the table below. Children who were enrolled in Head Start were more likely than children in the comparison group to have visited the library in the past month and to have borrowed books from the library in the past month. There was no significant result for the likelihood of attending a library story hour.

Logistic Regression of Dichotomous Home Literacy Environment Variables on Head Start Status

Dependent Variable	B	SE B	Wald	Exp (B)	Block Chi-Square	Rounded N
Visited library in last month	-.695	.113	37.628***	1.287	4.622*	3200
Borrowed children’s library books in last month	.303	.124	5.946*	1.354	5.932*	3200
Took child to story hour in last month	.234	.178	1.716	1.263	1.703	3200

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

* $p < .05$

*** $p < .001$

In this sample of young children who are at risk based on socio-economic and disability status, Head Start enrollment is associated with more usage of the library, both in terms of visiting the library and in terms of borrowing children's books from the library. These analyses indicate that children enrolled in Head Start are 1.3 times more likely than their comparison peers to have visited the library in the past month and 1.4 times more likely to have borrowed books from the library in that same time frame. There were no significant differences between the two groups on the other home literacy environment variables.

Parent-School Involvement and Communication

Dependent Variables. Parent involvement in their child's preschool was measured by a count of the different type of school activities participated in by any parent or adult family member. These activities could include attending a general meeting at the school, a parent-teacher conference, a class event, or a field trip, or volunteering at the school in any way. The school's communication with the parent was measured by the parent's report of the quality of five different types of school-to-parent communication. Schools were evaluated on their communication regarding the child's progress, ways to promote the child's learning at home, typical child development, volunteering opportunities, and community services. A mean of these five items was calculated to indicate the overall quality of the school's communication with the parent.

Results. These outcomes were each analyzed with a multiple regression in which the control variables were entered in the first block and Head Start status was entered in the second block. The results are listed in the table below. Compared to the non-Head Start group, the parents of children in the Head Start group reported more involvement in their child's preschool and better school-to-parent communication.

Expectations of Educational Attainment Regressed on Head Start Status

Dependent Variable	B	SE B	Beta	R ² Change	Rounded N
Parent-School Involvement	.464	.099	.155***	.021	2300
Parent-School Communication	.210	.034	.204***	.036	2250

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

*** $p < .001$

In this sample of Head Start participants and a comparison group similar on socioeconomic and disability status, the parents of Head Start children reported participating in 0.5 more types of school-related activities, on average, compared to the parents in the comparison group. The parent-rated quality of the communication from Head Start was 0.41 standard deviations above the quality of the communication from other preschools. Head Start performance standards require Head Start programs to make a variety of efforts to promote parental involvement and to communicate successfully with the families of enrolled students. For instance, programs must provide a variety of opportunities throughout the year for interaction with parents and must provide families with assistance in accessing community services and resources. These analyses suggest that Head Start programs elicit more parental

involvement and communicate more successfully with parents than do other programs serving similar children.

Parent Beliefs Regarding Children’s Education

Dependent Variables. Two variables in the ECLS-B dataset address parents’ beliefs regarding their children’s education. Parents were asked to report on their expectations of their children’s educational attainment; that is, they indicated how far they expect their children to progress in school and higher education. Additionally, parents indicated whether they had any concerns about their children’s kindergarten readiness.

Results. Parents’ expectations of their children’s educational attainment is a continuous variable, and so this outcome was analyzed with a multiple regression in which the control variables were entered in the first block and Head Start status was entered in the second block. The results are listed in the table below. There was no significant relationship between Head Start status and parents’ expectations of children’s educational attainment.

Expectations of Educational Attainment Regressed on Head Start Status

Dependent Variable	B	SE B	Beta	R ² Change	Rounded N
Expectation of Educational Attainment	.032	.072	.012	N/A	3150

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

Parental concern about kindergarten readiness is a dichotomous variable – parents responded that they either were or were not concerned about their child’s readiness for kindergarten in the coming year. For this variable, a logistic regression was run in which the control variables were entered in the first block and the child’s Head Start status was entered in the second block. The results are reported in the table below. Children who were enrolled in Head Start were less likely than children in the comparison group to have parents who indicated concerns that their child would not be ready for kindergarten.

Logistic Regression of Parental Concern About Readiness on Head Start Status

Dependent Variable	B	SE B	Wald	Exp (B)	Block Chi-Square	Rounded N
Concerned About Kindergarten Readiness	-.511	.150	11.696**	.600	12.130***	3100

Note. Estimates weighted by W3R0; only those cases with a valid weight are included in the table.

** $p < .01$

*** $p < .001$

These analyses indicate that the parents of comparison group children were 1.7 times more likely than the parents of Head Start children to indicate concern that their child would not be ready for kindergarten the next year. There are several possible reasons for this difference. It may be that Head Start parents’ observations of their children suggest to them that their children are academically, behaviorally, or otherwise well-prepared for kindergarten. Indeed, analyses reported above did show advantages for Head Start children in terms of receptive vocabulary, literacy, and math skills, although these differences were small. Another possible explanation is that Head Start parents receive better communication from their child’s school about their child’s progress, typical child development, what to expect in kindergarten, and so forth, and that this communication leads to more confidence in their

child's preparedness. The analyses of school-to-parent communication reported above would support such a conclusion. Other explanations are also possible and these data do not permit a conclusive determination of the reasons for this difference.

Conclusions and Implications

This new study used data from the ECLS-B, a nationally representative, longitudinal study of young children's development. Two groups of children were selected for these analyses, and all data was collected in the pre-kindergarten year. The first group consisted of all children who had been attending Head Start for one full month or more. From the set of children who had never been enrolled in Head Start, a comparison group was selected to have the same distribution of socioeconomic status and disability status as the Head Start group. All analyses controlled for the following variables: child age, child minority status, mother's age, single-parent status, and household income. Thus, the results indicate the *unique* contribution of Head Start enrollment (or length of enrollment) to the prediction of the outcomes considered, over and above the influence of those key demographic variables.

The number of months children had been enrolled in Head Start was positively associated with their receptive vocabulary, literacy, and math skills. Although the effect size was modest, the finding is quite notable, in that this effect was found after controlling for a number of variables that consistently show relationships with children's pre-academic skills. Additionally, the children in the comparison group may be in a wide variety of care settings (including the home, family child care, other center-based care, etc.), yet the outcomes associated with Head Start were consistently superior to this "community control" group. Helping children to learn and to be adequately prepared for school success is arguably the foremost goal of the Head Start program. These results suggest that children are acquiring benefits in this area.

Head Start enrollment was associated with a significant improvement in children's access to health care services, relative to the comparison group. The chances of receiving dental care and of being covered by health insurance were substantially higher for the children in Head Start. Adequate health care not only promotes children's physical well-being, it may also contribute to their school success by reducing absenteeism or the distraction created by medical symptoms. Furthermore, when children are covered by health insurance, there is less chance that they will require emergency care their families are unable to pay for, placing a burden on both public and private healthcare systems.

Children enrolled in Head Start were more likely than comparison children to have visited the library with their parents in the last month. Additionally, Head Start children were more likely to have borrowed books from the library during those visits. This is an example of Head Start families accessing a valuable community resource. The comparison families did not use libraries to the same extent. Head Start performance standards emphasize connecting families to community resources and communicating with parents about ways to support their children's learning and development. These results suggest that increased library usage may be one benefit realized through these efforts.

Parents of Head Start children reported more involvement in their child's preschool than did comparison parents. Additionally, Head Start parents rated the communication coming from their child's school to be of higher quality than did comparison parents. Parental involvement in school has been repeatedly found to be a predictor of children's academic achievement. Thus, by establishing a pattern of parental involvement, Head Start programs are supporting children's future school success. School-to-parent communication is an important method of encouraging such participation, and also of

supporting family well-being by connecting parents with community resources, providing information about their children's development, and so forth. The quality of school-to-parent communication may be one contributor to some of the previously mentioned findings, such as Head Start children's access to health care services.

Parents of children in the Head Start group were less likely than parents of children in the comparison group to be concerned that their child would not be ready for kindergarten. There are many possible explanations of this increased confidence on the part of Head Start parents. It may be an accurate reflection of children's increased academic preparedness; it may be a result of parents having more information and less anxiety about their children's progress and the upcoming transition to formal education; it may be an unrealistic optimism arising from having enrolled their children in a well-known educational program. Other explanations are surely possible as well. With the current data set, it is impossible to empirically determine the reason or reasons for Head Start parents' enhanced confidence in their children's school readiness.

The study reported here is not experimental. Families were free to enroll their children in whatever early care and education setting they selected, or to enroll their child in no program at all. Thus, these results describe associative, not causal, relationships. It is not possible to conclude that Head Start *causes* the outcomes reported herein. What can be said is that Head Start is associated with these outcomes, above and beyond the influence of key demographic variables, and that children attending Head Start reaped a number of benefits not received by a highly similar group of children. Head Start attendance was associated with benefits to pre-academic skills, access to health care, library usage, parent-school involvement and communication, and parent-report of kindergarten readiness.

Appendix C

Quotes from Indiana Head Start Programs

Children

What are the benefits children receive from Head Start?

- “Socialization -- children have the chance to participate with a peer group to learn sharing, conversation, group dynamics and a multitude of other social skills.” –HS Director, Fort Wayne
- “[An] environment where each child can be safe, healthy, engaged, supported, and challenged.” –HS Director, Kokomo
- “School readiness, which includes a focus on literacy, social skills, and a love for learning.” –HS Director, Lafayette
- “[Head Start and associated] services [provide] support for nutrition, health, mental health, and special needs to help...remove barriers to [children’s] success.” –HS Director, Indianapolis
- “Children make developmental gains that are often larger gains than would be expected over the time period enrolled. For instance a child may gain 18 months in language over a 9 month period.” –HS Director, Monrovia
- “Exposure to the possibilities in life. Head Start provides children with experiences in the community that deal with the arts, culture, science, positive community role models, etc.” –HS Director, Indianapolis
- “Children experience success, gain self-esteem, and leave with a love for school.” –HS Director, Lafayette
- “Children go into kindergarten more prepared than children who go to a regular day care or stay at home.” –HS parent, Lafayette
- “I think the menus are great. Head Start is doing great to make sure that all the children eat healthy.” –HS parent, Terre Haute

Share a success story about a child.

- “A young African boy enrolled in our program. He was burned badly in his native country in a house fire when he was six months old. He was adopted and moved to the states at two. He had many surgeries and his fingers were lost to gangrene. His dad put him in Head Start at age 3. The young boy was withdrawn and non verbal. The teachers, staff, and children were very loving to him. His sadness became happiness. He became social and very verbal. He brought joy to the program and despite the fact he had many surgeries and will still need dozens more he has taught the children acceptance and he has gained confidence in his challenges.” –HS Director, Indianapolis
- “Beverly was a Head Start child living in poverty. She grew up to become a community representative to Policy Council while working on her law degree. She wanted to give back to Head Start.” –HS Director, Fort Wayne
- “We had eight children from our program test into the gifted and talented classes this year in kindergarten within our school corporation. They are excelling in education by having Head Start equip them and give them a strong start.” –HS Director, Kokomo
- “In my first year with Head Start, we had a little girl who was painfully shy when she came to us. She never made eye contact, always looked at her toes. Later, I saw her with her kindergarten class, walking down the hallway, laughing and smiling. Head Start did that for her in just a year.” –HS Director, Garrett

- “Head Start has benefitted my son so much – from motor skills to speech to learning how to get along with others. Everything he has learned over the years from Head Start he still applies in his everyday living. I believe that without this program, a lot of children would not have the skills they would need once they enter kindergarten. This program is overall the best that I have ever encountered.” –Former HS parent, Lafayette
- “I am so glad that Indiana has...programs for our children [to] help them succeed down the road. We all feel very grateful and relieved to know that there is help and not just a place to send children for the day.” –HS parent, Lafayette
- “I went to Head Start as a kid. As a Head Start kid, I was the first in my family to graduate from high school. Now I am the first in my family to attend college. No one else in my family went to Head Start. That’s proof that Head Start is doing something!” –HS parent, Lafayette
- “Head Start has helped my older child come out of her shell. My youngest daughter has a speech problem and is working with the speech therapist.” –HS parent, Lafayette
- “[Head Start] is a wonderful opportunity. When my child first started he was shy and hardly spoke. He has come such a long way in his development thanks to the help and support here.” – HS parent, Terre Haute

Other comments:

- “Head Start is a wonderful program. The faculty and staff are all professionals, concerned with the children’s well-being and educational development. They are more than teachers, they are life nurturers.” –HS parent, Terre Haute
- “[Head Start] is a really good school.. My daughter learned a lot. The teachers are really genuine and caring, very interested in your child’s learning, moods, etc. My child also learned a lot and really enjoyed going to school. She never liked to miss!” –HS parent, Terre Haute
- “[Head Start] is a wonderful program and I would prefer it over any private preschool.” –HS parent, Terre Haute
- “I think Head Start is a blessing to this county. We’d be suffering without Head Start. The unconditional care is amazing. You gave the children education and nutrition and educated parents as well.” –HS parent, Terre Haute
- “Head Start is an excellent program. My son has learned so much and I love all the teachers and helpers. This is a wonderful school.” –HS parent, Terre Haute
- “The children have a lot of fun while learning and growing. It really helps them develop and get ready for school for years to come.” –HS parent, Terre Haute
- “Head Start is the best beginning of school that you could enroll your child into. These children have grown so much in just one year of school. I thought my son was smart before head start, but after one year I realize that he is so much smarter. I could have never imagined that he would do this well after just one year.” –HS parent, Terre Haute
- “I really enjoyed [Head Start]. I would not have sent my child anywhere else. It has taught him to play well with others and has improved his speech.” –HS parent, Terre Haute
- “Head Start is an outstanding program that addresses the needs of preschoolers in a positive manner that is age appropriate and addresses the children and family as a whole. Wonderful start to children’s education!” –HS parent, Terre Haute

Families

How do you measure family outcomes?

- “Each family develops a family partnership agreement where goals are listed to be achieved within the program year. Each goal is designed to have two to four steps. Progress is tracked throughout the year to determine the extent to how much of the goal was completed.” –HS Director, Covington

What are the benefits families receive at (Early) Head Start?

- “Over 1/3 of our staff are past [Head Start] parents. ...Four of my six managers are past [Head Start] parents.” –HS Director, Monrovia
- “Families gain skills and a sense of having some control by setting goals and working to achieve them. They are hopeful.” –HS Director, Lafayette
- “[Parents become]...empowered in their active roles in the program, whether as a classroom volunteer or as an officer or member of their parent group or Policy Council.” –HS Director, Covington
- “Very young parents have care for their child so that they can graduate from high school or from higher educational institutions.” –EHS Director, Lafayette
- “To be able to get great care for my children for a price I can afford, as a student, is amazing. You can’t get that anywhere else.” –HS parent, Lafayette
- “I have been referred to many resources.” –HS parent, Lafayette

Share a success story about a parent/family.

- “A mother of four once had her children enrolled in the program. She was on assistance and single trying to make ends meet. She came from a background of abuse (sexual) and neglect. She was angry and confrontational to staff. While a parent, our education coordinator took her under her wing. Her attitude started to change. When an opportunity for employment became available she was encouraged to apply. She worked herself up from part time to full time. She is now enrolled in an associate’s degree program and all of her children have graduated from high school and have never been in trouble. She always gives credit to Head Start for her success and helping her and empowering. She makes it her mission to help the children and families we serve.” –HS Director, Indianapolis
- “Many of our parents work to become employed. We assist parents with training to become bus monitors, bus drivers and teacher assistants. At this writing, about 30% (50 staff) of our staff are former Head Start parents. We have parents who have pursued the associate’s and even the bachelor’s degree to become a teacher. Our current Coordinator for Community Services is a Head Start parent who is completing her master’s degree in public administration.” –HS Director, Merrillville
- “I first met John at a parent meeting. John listened but didn’t really share at that parent meeting. Later, he applied for a job as a bus driver. We were beginning to work toward a transition of in-house transportation to contracted transportation, and so through encouragement, he applied with the subcontractor and was hired. Within a year he advanced to the person in charge of routing and transportation for our Head Start program. When our program stopped doing transportation and the company he worked for stopped providing transportation services, he got a job for another transportation company. He advocated within the new company and they agreed to let us store our buses on their property at no cost (in-kind) until we could dispose of the oldest of them. John came a long way from a quiet, unemployed parent to one who through his job advocated for Head Start!” –HS Director, Fort Wayne

- “We have several parents who are now staff. One of our managers was the parent of two Head Start children over 20 years ago. She started as a parent volunteer. She became an Assistant Teacher/Bus Driver, then a Lead Teacher. She applied and was hired as a Program Site Manager. She has since completed a college degree and is currently Head Start Site Manager for 3 sites in Morgan County. She has been instrumental in obtaining accreditation from National Association for the Education of Young Children (NAEYC) for her main site. She was influential in moving a classroom to a small town to serve children there rather than bussing them to the larger town 14 miles away. This summer, she moved another classroom to another small community so we can better serve children and families in that area.” –HS Director, Monrovia
- “One of our Head Start parents volunteered in the classrooms, served on policy council, and now sits on the school board. She also will be serving as a friend to Head Start at the state level this coming year.” –HS Director, Kokomo
- “A parent, who started out in the Pregnant Women's Program, graduated from high school this past May, received a Disney Scholarship to an 8 week culinary school, and was hired by the Polynesian Hotel. Her little girl receives child care through her new employer.” –HS Director, Lafayette
- “In the last couple of years, we have seen some of our fathers become very involved in parent meetings, policy council, the dads’ group, and even going to Head Start conferences. They become strong advocates for their children. Our current policy council chair is a Head Start father who also leads the dads’ group. He recently led a community-based activity for families all by himself, with no need for staff support.” – HS Director, Garrett
- “The program has benefited my family so much. We love the family activities that they have. I also love the fact that most of the teachers would go out of their way to help you and your children.” –Former HS parent, Lafayette
- “[Head Start] has helped us because [before Head Start] I did not know how to get my child help and to see what problems he has and to catch them very quickly.” –HS parent, Lafayette

Communities

What are the benefits communities receive from Head Start?

- “Schools receive ready and eager learners. Many Head Start students become fluent in the language most often used by teachers in school systems.” –HS Director, Lafayette
- “We employ over 90 staff so we are supporting the workforce.” –HS Director, Monrovia
- “Any gain made by the families will serve as a gain for the whole community. This can be in terms of increased adult education, job training, budgeting [skills], or various other factors that influence the 'living state' of our families.” –HS Director, Covington
- “As parents/families reach the goals they set, the community as a whole benefits/” –HS Director, Fort Wayne
- “Head Start brings federal dollars into our community, not only providing services, but providing jobs and funds to purchase what is needed to run a successful program.” –HS Director, Lafayette

Share a success story about collaborations with other community organizations.

- “Our program has collaborated with the city of Fort Wayne, Fort Wayne Community Schools, and United Way to bring training opportunities for parents whose children are headed to kindergarten. A series of workshops entitled "Off to a Good Start" have been presented for the past three years. A "Passport to Kindergarten" was developed that follows the child to kindergarten and shares information with the kindergarten teacher.” –HS Director, Fort Wayne
- “Our newest collaboration is moving our Head Start classrooms into the building with the AREA 30 Career Center in Greencastle, which is the vocational and alternative school for the area. We

will have 1/2 day and full day Head Start classes there. The Child Development high school students will be able to get their field experience in our Head Start rooms while we gain those ever valuable 'extra set of hands.'"—HS Director, Monrovia

- "We teamed with a local university and they have early childhood education classes on site in our facility. Then their practicum and student teachers work in our Head Start classrooms. All parties benefit and the children and families benefit most of all. We plan special events together, receive in-kind, and prepare future educators." —HS Director, Kokomo
- "We collaborate with the IUK Center for Early Childhood Education to provide totes with activities in them for families to use with their children at home. This provides our families with programming if they have to wait for Head Start services to begin." —EHS Director, Kokomo
- "We collaborate with Young Audience. We bring the arts to our children's classrooms and our children bring joy to many of the retired artists that work with them. Our program was highlighted for this partnership by region V as innovative." —HS Director, Indianapolis
- "We [partner] with the School of Nursing at Valparaiso University.Graduate level Registered Nurses (RN)...visit each of our sites and provide lead and hemoglobin testing and physical examinations while accruing practicum experience. Not only does this provide a needed service for our children, it assists us in meeting one of our many Head Start Standards and provides an in-kind resource to support our required federal dollar match." —HS Director, Merrillville
- "Our family advocates are able to resolve things very quickly by working through our community partnerships. We had a family who was being forced from their home because of a gas leak; the family advocate contacted United Way for assistance and they got it fixed the same day. In another situation, a woman received her emergency custody of her grandchildren without any supplies. Although she wasn't a client, she called us for help. We were able to get resources (food, diapers, etc.) for her immediately." —HS Director, Garrett
- "The community knows who we are...and has respect for our program. Last year the Fire Department in a neighboring city found a three-year-old child wandering the streets at 3:00 am. They contacted us because they know we know the young children in town. We were able to help identify the child and get him home." — HS Director, Garrett