

**University of the Virgin Islands  
St. Croix Campus**

**An Investigation into the Success Rate  
of  
Head Start Students and Non-Head Start Students  
Who Enter Kindergarten  
at  
Charles H. Emanuel Elementary Public School,  
St. Croix, United States Virgin Islands**

**Thesis Presented  
In Partial Fulfillment of the Requirements  
for:  
Education 600: Thesis**

**Submitted by: De'Anne A. Harley**

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## **Abstract**

The purpose of this study was to investigate the readiness in kindergarten of children who attended Head Start compared to their peers who did not attend Head Start on St. Croix, United States Virgin Islands. The study focused on reading readiness, number readiness, and social readiness of the two groups of students. The study also focused on the benefits of the Head Start program and other early care and education programs, barriers in the transition from Head Start and Non-Head Start programs to kindergarten, and studies questioning the effectiveness of the Head Start program. Student readiness was indicated by an S-Satisfactory assessment or an O-Outstanding assessment by teachers. NI-Needs Improvement indicated a lack of readiness. The end of the year report cards were analyzed. Four strands of skills on the kindergarten report cards were reviewed for each of the three broad categories examined. Descriptive statistics (percentages) were compared and t-tests were performed to determine the statistical difference between the percentages for Head Start and non-Head Start students in the three major categories examined. A summary of the results were also presented. Students who attended Head Start consistently out performed students who did not attend Head Start.

## **Chapter 1**

### **Introduction**

School systems across the United States and those in St. Croix, United States Virgin Islands, are taking steps to ensure a quality education for every child so that no one will be left behind. To accomplish this goal, the Head Start program, launched in 1965, was designed to give children a variety of basic readiness skills. It supports children's social and emotional development while ensuring general school readiness in the Language Arts and Mathematics (Head Start and Early Head Start Directors' Institute, Head Start Bureau, 2002).

Head Start's educational program is comprehensive and is based on developmentally appropriate practices. The program is designed to focus on the uniqueness of each child in order to meet his/her individual needs, as well as the educational priorities of the community. It is the expectation that upon leaving the Head Start program, each child will have participated in a challenging, child-centered environment, enriched with the opportunities to learn to function effectively for success in school and in everyday life (Education: Child Start Incorporated, 2005).

A successful start in the early grades, especially in kindergarten, builds the self-confidence of the students and gives them a positive outlook on education and a love for attending school. This of course has a profound impact on the type of school career students will have. Head Start bridges the gap between the home environment and the first year of formal schooling, kindergarten (About Head Start, 2001). However, there are some parents who have not taken advantage of these opportunities, either by choice or because of an inability to do so. Some students have never been to Head Start; others



have never even watched Sesame Street. Yet, there are others who have never been read to (Newton, 1986).

When one considers some of the reasons why students enter kindergarten unprepared (poverty, poor health, limited exposure to educational materials, and programs, etc.), the importance of the Head Start program is magnified (Pianta and Cox, 2000). Project Head Start, launched as an eight-week summer program in 1965, was designed to help break the cycle of poverty by providing preschool children from low-income families with a comprehensive program to meet their emotional, social, health, nutritional, and psychological needs. Recruiting children age three to school entry age, Head Start was enthusiastically received by educators, child development specialists, community leaders, and parents across the nation. The program improves the chances for the most disadvantaged children to grow healthy, to learn, and to prepare for school, while providing support to mothers and fathers to improve their parenting and other skills.

Although the Head Start program is available, many students do not have the opportunity to attend. As a kindergarten teacher, the researcher has noticed that there is a difference between the academic and social readiness skills of students who have attended Head Start and those students who have not.

Children entering kindergarten for the first time are often quite intimidated by the size, structure, and setting of a public elementary school. The transition from home to school can be traumatizing for the five year olds, particularly those who have not had the opportunity to attend a Head Start program. Thompson (2002) determined that children who attended Head Start demonstrate more appropriate social skills and behavior patterns

(e.g. engaging in tasks in a focused manner, and showing less aggression) than those who did not attend Head Start.

Another significant problem observed in non-Head Start students is a delay in the mastery of letter identification and letter sounds. This tends to negatively impact students' reading readiness. Mathematical and fine motor skills are similarly affected. Early success in school is a very good predictor of later success. With this in mind, it is clear that the non-Head Start students begin school at a disadvantage and may require more remediation, individualized instruction, and other intervention strategies to catch up with their Head Start peers. School readiness, the preparedness of children to learn what is taught in school, is the cornerstone of academic success (Edwards, 1999).

### **Statement of the Problem**

A study of the difference between kindergarten students who attend Head Start (HS students) and students who did not attend Head Start (non-Head Start students) in kindergarten at the Charles H. Emanuel School has not been done. This study will address this void.

### **Purpose of the Study**

The purpose of this study was to investigate the success rate of Head Start students and non-Head Start students in kindergarten. The end-of-year report cards were reviewed to determine the success of the students. In addition to investigating the success of these two distinct groups of students in kindergarten at the Charles H. Emanuel School, this study will provide answers to the following questions:

1. What percentage of Head Start students at the Charles H. Emanuel School demonstrated reading readiness?



2. What percentage of non-Head Start students at the Charles H. Emanuel School demonstrated reading readiness?
3. What percentage of the Head Start students at the Charles H. Emanuel School demonstrated number readiness?
4. What percentage of the non-Head Start students at the Charles H. Emanuel School demonstrated number readiness?
5. What percentage of the Head Start students at the Charles H. Emanuel School demonstrated social skills readiness?
6. What percentage of the non-Head Start students at the Charles H. Emanuel School demonstrated social skills readiness?
7. Is there a difference in the reading, number, and social skills readiness of Head Start and non-Head Start students in kindergarten at the Charles H. Emanuel School?

Readiness was defined by S-Satisfactory and O-Outstanding performance on the report cards for those strands examined. An NI-Needs Improvement assessment served as the indicator for lack of readiness.

### **Operational Definition**

In this study, success or readiness is defined by a satisfactory assessment (S) and by an outstanding assessment (O) of the kindergarten students, by their teachers, in all three of the broad categories and the four subcategories under investigation.

### **Limitations**

This study is limited to students who attend kindergarten at the Charles H. Emanuel Elementary School. The results and conclusions of this study therefore are not



generalizable to all schools on St. Croix and beyond. Secondly, since grading is not a totally objective process, some subjectivity enters into the end-of-year assessments. The degree of this subjectivity is not accounted for in this study. Lastly, some non-Head Start children may have attended a preschool other than Head Start and therefore may have been exposed to the same early educational and social experiences as their Head Start peers. Students so situated are not identified in this study.

### **Significance of the Study**

This study has great significance for parents, primary teachers, and school administrators who can all benefit from the findings. Parents will be able to see and understand what the literature says about the benefits of the Head Start program and may be able to incorporate different aspects of the program into the home environment.

After reviewing the findings of the study, primary teachers may be able to configure their groups in a more practical and effective manner pairing Head Start and non-Head Start students to foster maximum academic and social outcomes for all students. Furthermore, teachers could be better able to devise strategies to improve teaching methods and provide extension and remediation for students with all levels of abilities.

School administrators may utilize this study as the basis for creating outreach programs in the communities within their assigned districts, urging parents to enroll their children in Head Start as a precursor to attending kindergarten. Finally, this study is very significant to other students who may want to conduct further research on this topic and related topics.

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## Chapter II

### Review of the Literature

In this chapter, studies detailing the benefits of Head Start and other early care and education programs are cited and discussed. Some barriers in the transition from Head Start and non-Head Start to kindergarten are considered and several studies questioning the effectiveness of Head Start programs are examined.

#### **Benefits of Head Start and Other Early Care and Education Programs**

A review of the literature reveals the importance of a successful start academically, nutritionally, socially, and physically in fostering long-term proficiency in school. Sound parenting skills effectively enhance these favorable outcomes. The Head Start program, with its holistic approach, ensures a certain degree of student and family readiness for the critical early years of school.

Maslow (1987) observed the importance of meeting children's basic physical, safety, and nutritional needs before they can maximize their potential or reach the self-actualization stage. An integral part of the Head Start experience is the parental involvement component. Parents receive training in a variety of areas to bolster the academic, social, and emotional well-being of their children. As the primary teachers of their children, parents are not left out of the equation.

The spectrum of research on the benefits of early childhood programs is overwhelmingly positive. One study has shown that after participating in Head Start, children were nearly 30 percent more likely to graduate from high school, 40 percent less likely to repeat a grade, and 32 percent less likely to be arrested as a juvenile. Other



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studies show that Head Start children have higher IQ scores when entering school and better scores on achievement tests (Anderson, 2005).

Smith (2005) points out that early childhood education has demonstrated remarkable results. For example, one study found that early childhood education programs of urban children of color led to a 41 percent reduction in special education enrollments.

Holloway (2005) asserts that to reduce inequities in students' success in kindergarten, society must address the differences that exist among children before they start school. He recommends that policymakers identify children who are at risk for school failure and make quality Head Start experiences available for these children to ensure that they have the opportunity to develop readiness skills. We can and should be creating a preschool system that would be good enough for everyone, insists Barnett and Hustedt (2005). They further assert that "Head Start helps to ensure that preschools are built the same way we construct our highway system: the same road available to all Americans, rich and poor" (Barnett and Hustedt, p. 54).

Although kindergarten teachers clearly value academic skills, they also place strong emphasis on children's social and task-oriented skills as indicators of their readiness for school. Such skills (for example, following directions, working independently, and working as a part of a group) determine the child's ability to be taught (Pianta and LaParo, 2005). Preschool academics may be a key priority for many elected leaders, but to kindergarten teachers, a "school ready" child is one who has social skills to complement academic readiness and can get along well with others. These essential

skills are greatly enhanced in Head Start and other preschool programs (Gale Group, March 2005).

Children who attend Head Start are better prepared for their first year of school than children without such access, kindergarten teachers said when one hundred of those teachers were surveyed in a 2004 poll. About two-thirds of the teachers said that children who attended Head Start were “substantially better prepared” to start school and ready to learn (Gale Group, August 2004).

The National Association for the Education of Young Children (NAEYC) believes that the commitment to promoting universal school readiness requires:

1. Addressing the inequities in early life experience so that all children have access to opportunities to promote school success through Head Start and other preschool programs.
2. Recognizing and supporting individual differences among children including linguistic and cultural difference and
3. Establishing reasonable and appropriate expectations of children’s capabilities upon school entry (NAEYC, August 2005, p.1).

According to the “Future of Children” (a new research report released in February 2005), sizeable gaps in school readiness exist between white and minority children at school entry. The authors argue that more children would receive quality care and educational preparation prior to starting school if states were allowed to combine Head Start with state pre-kindergarten programs (Bosland, 2005).



### **Barriers in the Transition from Head Start to Kindergarten**

One major study (Decker, 2002) found that Head Start parents were more likely to read to their children, be emotionally supportive, and to participate in more education and employment-related activities than parents of non-Head Start children. The study further details some factors that negatively impact on emergent literacy development and therefore the readiness of students for kindergarten. Some of these barriers are:

1. Not being read to and limited exposure to books that support early literacy
2. The inability of families to access basic resources
3. Unmet needs in physical and mental health areas
4. The poor educational background of parents

In a survey of 3,600 kindergarten teachers by the National Center for Early Development and Learning (NCEDL), the teachers were queried about different barriers they observed in the transition of Head Start students and non-Head Start students to kindergarten. Seventy percent of the teachers out of 3,500 (2450) responded that they detected a greater reading, number, and social skills readiness among the Head Start students than the non-Head Start students (Pianta and Cox, 2000). Of all the data compiled, the responses of the teachers were more consistently in agreement in the three areas mentioned (reading readiness, number readiness, and social skills development) than in any other area of the survey. Some barriers to kindergarten success mentioned in the survey were low parental engagement, poor nutrition, and poor health.

Clifford (2000) conducted a study that involved childcare centers in four states from 1993-1996. Researchers followed a group of children from age 3 through the early

elementary years. Data was collected on the quality of the language, mathematical, reading, and social skills experiences of the children from age 3 through kindergarten.

Some key findings are:

1. Over the three-year period, childcare quality affected children across all math, language, social skills, and reading ranges.
2. The type and quality of the childcare affected children from all socio-economic backgrounds.
3. The effects of early care or lack of care are long-term for all children.

National Education Goal One, which indicates all children in America will start school ready to learn seems simple but being ready for school requires meeting certain needs related to physical, social, emotional, cognitive, and language development. Homes that promote readiness as well as schools and communities that promote readiness facilitate this process. Ready schools, such as Head Start, allow space for children to work alone and in groups, allow for classroom exploration, and provide opportunities for play in order to strengthen the social and motor skills of students. Failure to provide these necessary opportunities, in a structured setting, creates barriers to kindergarten success. (Perroncel, 2000).

Another study (Heavyside, 1993) examined the characteristics, experiences, and outcomes for children and families from Head Start and non-Head Start programs. Sixty-five percent (65%) of the students in Head Start programs demonstrated readiness for kindergarten socially and academically while only 35% of their non-Head Start peers were adequately prepared for kindergarten.



### **Studies Questioning the Effectiveness of the Head Start Program**

Several studies were cited in the literature that questioned the effectiveness of the Head Start Program. Lutz (1999) in her doctoral dissertation asserts that children with emotional and behavioral difficulties are under-identified in Head Start. Her study suggests that reliable assessment instruments need to be developed in order to improve Head Start's capacity for early identification of children with these problems.

A study conducted by the Bureau of Indian Affairs (2003) suggests that literacy experiences (scribbling, copying, and talking about printed work) observed in publicly subsidized preschools such as Head Start are inadequate to support literacy development and therefore may not arm children with the school readiness skills they need.

Garces, Thomas and Currie (2000) found that the short term effects of Head Start are relatively non-controversial. However, the long-term effects are more questionable. Their study found that the positive effects of Head Start on test scores often fade by around the third grade. Previous research by Thomas and Currie (1995, 2001, 2004), however, shows that a majority of children retain lasting benefits of Head Start and that the decline in test scores is often due to poor schools and low motivation on the part of students in higher grades.

The literature is replete with references about the efficacy of the Head Start program in particular and preschool programs in general in preparing students to enter kindergarten. This early preparation is critical in developing the academic, social, motor skills, and self-esteem of the students. However, parents, elementary school teachers, and school administrators are cautioned not to fall victim to a false sense of security since



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The literature is replete with references about the efficacy of the Head Start program in particular and preschool programs in general in preparing students to enter kindergarten. This early preparation is critical in developing the academic, social, motor skills, and self-esteem of the students. However, parents, elementary school teachers, and school administrators are cautioned not to fall victim to a false sense of security since

after Head Start, continuity of intervention strategies and appropriate assessments are still necessary to maintain the gains realized in the Head Start program.

### Chapter III

#### Methodology

The purpose of the study was to compare the academic and social readiness of Head Start students and non-Head Start students in kindergarten at the Charles H. Emanuel Elementary School. The Charles H. Emanuel Elementary School is located on St. Croix, United States Virgin Islands.

#### Population

The population included all children enrolled in kindergarten at the Charles H. Emanuel Elementary School from 2000-2003. As of October 1, 2005, four hundred thirty-five students (435) were enrolled at the Charles H. Emanuel School. Seventy-five percent (326) are of African American descent and twenty-five percent (109) are of Hispanic origin. All students qualify for participation in the Federal School Lunch Program free of charge. Charles H. Emanuel Elementary School, like all public schools in the Virgin Islands, receives Federal Title I funds to help close the achievement gap between disadvantaged students and their more advantage peers (School Improvement Plan 2006-2007, p.3).

All students who attended Head Start were identified as the experimental group. Their peers who did not attend a Head Start program made up the control group. The report cards for all 70 Head Start and 103 non-Head Start students were reviewed. Examining the entire school population increases the likelihood of a statistically significant result, increases the validity of the results, and reduces the likelihood of sampling bias.



**Procedures**

The kindergarten report cards of the Head Start and non-Head Start students of the Charles H. Emanuel Elementary School who were in kindergarten during the 2000-2001, 2001-2002, and 2002-2003 school years were reviewed to determine proficiency in the skills to be mastered on that grade level. In the area of academic development, reading readiness, and number readiness were investigated. In the area of social skills, the investigation focused on the students' interactions with their peers and their teachers.

In each category to be studied, the proficiency of students was assessed utilizing O-Outstanding, S-Satisfactory, and NI-Needs Improvement in accordance with the grading policy of the United States Virgin Islands Department of Education. The end of year report cards of the Charles H. Emanuel Elementary School were the instruments used to examine four key sub-categories under the broader categories of reading readiness, number readiness, and social skills.

**Data Collection**

It is important to note some of the methods teachers use in arriving at their final assessment of Satisfactory, Outstanding, and Needs Improvement on the report cards. They utilize a variety of assessment methodologies to ensure the highest possible degree of objectivity in the generally subjective grading process. Kindergarten teachers wisely use non-reading and non-writing assessment methodologies as much as possible due to the students' limited skills in those areas at this early age. Some assessment methods used are as follows.

1. Personal Observation
2. Recitation
5. Games
6. Recall

3. Show and Tell
4. Sequencing
7. Re-enactments
8. Songs

To determine reading readiness, four factors were examined and the data were collected for the Head Start and non-Head Start children. Their levels of ability to do the following were assessed.

1. Speak in complete sentences
2. Retell stories in sequence
3. Recognize basic sight words
4. Read short sentences

Number readiness was determined by the ability of students to do the following:

1. Arrange objects in logical order
2. Count objects to 20
3. Match the word forms with numerals 0-12
4. Show the value of pennies, nickels, and dimes

To determine the degree of social development, the students' demonstrated ability and inclination to do the following were assessed.

1. Show courtesy in speech and action
2. Relate well to teacher and classmates
3. Exercise self-control
4. Show respect for adults and students

### **Data Analysis**

The data collected were analyzed to provide answers to the seven research questions enumerated. Trends in the reading, number, and social skills readiness of Head Start and non-Head Start students in kindergarten at the Charles H. Emanuel School were



assessed. Descriptive statistics were used to report the findings and bar graphs and charts are used to summarize the data in an easily understood format that highlights the differences in the performance between both groups of students. A t-test was performed to determine the significance in the performance difference between Head Start and non-Head Start students. This test helped to provide an answer to research question number seven.

## Chapter 4

### Results of the Study

The kindergarten report cards of one hundred seventy-three (173) students of the Charles H. Emanuel School were reviewed to determine the proficiency of Head Start compared to non-Head Start children in the areas of reading readiness, number readiness, and social readiness. In each category, the students were assessed using O-Outstanding, S-Satisfactory, and NI-Needs Improvement. Four factors were examined in each area for seventy (70) Head Start and one hundred three (103) non-Head Start students, the total population in each category for the period under study (school years 2000-2003). Satisfactory and outstanding evaluations served as the indicators of readiness and a needs improvement assessment was used as the indicator for lack of readiness.

In the area of reading readiness, the ability of students to speak in complete sentences, retell stories in sequence, recognize basic sight words, and read short stories was assessed. Number readiness was determined by the degree to which students were able to arrange objects in logical order, count objects to twenty, match word forms with numerals 0-12, and show the value of pennies, nickels, and dimes. The extent of the students' social development was determined by their demonstrated ability and inclination to show courtesy in speech and action, relate well to their teachers and classmates, exercise self-control, and show respect for adults and students.



**Reading Readiness**

Table A below summarizes the findings for reading readiness.

Table A

**Head Start Students vs Non-Head Start Students****Reading Readiness**

	Head Start			Non-Head Start		
	O	S	NI	O	S	NI
Speaks in complete sentences	52%	44%	4%	28%	52%	20%
Retells stories in sequence	48%	40%	12%	20%	56%	24%
Recognizes basic sight words	60%	24%	16%	20%	52%	28%
Reads short sentences	56%	28%	16%	12%	60%	28%
<u>Averages</u>	<b>54%</b>	<b>34%</b>	<b>12%</b>	<b>20%</b>	<b>55%</b>	<b>25%</b>

O = Outstanding

S = Satisfactory

NI = Needs Improvement

Fifty-two percent of the Head Start students were assessed as outstanding in the subcategory "speaks in complete sentences" compared with only 28% of their non-Head Start peers. Forty-eight percent of the Head Start students were outstanding in retelling stories in sequence compared to 20% of the students who did not attend Head Start. Twenty percent of the non-Head Start students were outstanding in recognizing basic sight words and 12% were outstanding in reading short sentences. The number for their Head Start counterparts were 60% and 56% respectively. In summary, eighty-eight percent (88%) of the Head Start students demonstrated reading readiness (54% outstanding + 34% satisfactory) compared to seventy-five percent (75%) of the non-Head Start students (20% outstanding + 55% satisfactory).



**Number Readiness**

Table B summarizes the findings for number readiness.

**Table B** **Head Start Students vs Non-Head Start Students**

**Number Readiness**

	Head Start			Non-Head Start		
	O	S	NI	O	S	NI
Arranges objects in logical order	64%	32%	4%	8%	84%	8%
Counts objects to 20	60%	36%	4%	20%	60%	20%
Matches word forms with numerals 0-12	60%	32%	8%	12%	64%	24%
Shows the value of pennies, nickels, and dimes	48%	44%	8%	8%	72%	20%
<u>Averages</u>	<b>58%</b>	<b>36%</b>	<b>6%</b>	<b>12%</b>	<b>70%</b>	<b>18%</b>

O = Outstanding

S = Satisfactory

NI = Needs Improvement

Sixty-four percent of the Head Start children were outstanding in arranging objects in logical order and 60% attained that distinction in matching word forms with numerals 0-12 and in counting objects to 20. Forty-eight percent of the Head Start students were outstanding in showing the value of pennies, nickels, and dimes. Conversely, only 8% of the non-Head Start students were outstanding in arranging objects and showing the value of coins. Twenty percent of the non-Head Start children were outstanding in counting objects to 20 and 12% of that group were outstanding in matching word forms with numerals 0-12. In summary, ninety-four percent (94%) of the Head Start students demonstrated number readiness (58% outstanding + 36% satisfactory) compared to eighty-two percent (82%) of their non-Head Start peers (12% outstanding + 70% satisfactory).

**Social Skills Readiness**

Table C summarizes the findings for social skills readiness.

**Table C** **Head Start Students vs Non-Head Start Students**

**Social Skills Readiness**

	<b>Head Start</b>			<b>Non-Head Start</b>		
	<b>O</b>	<b>S</b>	<b>NI</b>	<b>O</b>	<b>S</b>	<b>NI</b>
Shows courtesy in speech and action	48%	48%	4%	32%	56%	12%
Relates well to teacher and students	60%	40%	0%	32%	52%	16%
Exercises self-control	56%	40%	4%	28%	56%	12%
Shows respect for adults and students	60%	32%	8%	32%	56%	12%
<u>Averages</u>	<b>56%</b>	<b>40%</b>	<b>4%</b>	<b>31%</b>	<b>55%</b>	<b>13%</b>

O = Outstanding

S = Satisfactory

NI = Needs Improvement

Forty-eight percent of the Head Start students were outstanding in showing courtesy in speech and action compared with 32% of the non-Head Start students. Sixty percent of the Head Start students were outstanding in relating to teachers and students versus 32% of the non-Head Start students. Fifty-six percent of the Head Start students were outstanding in exercising self-control compared to 28% of the students who did not attend Head Start. Approximately twice the percentage of students who attended Head Start were outstanding compared to non-Head Start students in showing respect for adults and students (60% to 32%) as evidenced by the report cards. The four subcategories under reading readiness, number readiness, and social skills were selected for review from the report cards of kindergarten students at the Charles H. Emanuel School from 2000-2003. In summary, ninety-six percent (96%) of the Head Start students demonstrated social readiness (56% outstanding + 40% satisfactory) compared to eighty-six percent of their non-Head Start counterparts (31% outstanding + 55% satisfactory).



**Analysis**

The researcher analyzed the three categories that were examined. The bar graphs below summarize the data in one format.



**T-Test**

A t-test was performed to determine a statistical significance in the difference between the performance of Head Start and non-Head Start students.

**T-test output for OUTSTANDING (in all three areas)**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	HS	.5600	12	.05657	.01633
	NonHS	.2100	12	.09361	.02702

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	HS & NonHS	12	-.110	.734

**Paired Samples Test**

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
HS - NonHS	.35000	.11457	.03307	.27720	.42280	10.582	11	.000

**T-test output for NEEDS IMPROVEMENT (in all three areas)**

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	HSNI	.0733	12	.05069	.01463
	NonHSNI	.1900	12	.06410	.01850

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	HSNI & NonHSNI	12	.739	.006

In the Needs Improvement assessment category, a fairly strong positive correlation exists in the percentages of both groups as indicated by a .739 correlation. This indicates that the mean of the percentages were closer in the Needs Improvement assessment category than in the outstanding assessment category.

## Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
HSNI - NonHSNI	-.11667	.04334	.01251	-.14421	-.08913	-9.324	11	.000

A t-test was performed to determine the statistical difference between the percentages for Head Start and non-Head Start students in the three major categories examined. The t-test revealed that there is a significant difference in the percentages of Head Start and non-Head Start children who received an Outstanding assessment and a Needs Improvement assessment in reading, number, and social readiness. A significance value of less than .05 indicates a significant difference in the data for the two groups. The significance value in this study, as indicated by the Paired Samples Test component of the t-test, was .000.

### Outputs and Analysis of the T-Test

An analysis of the t-test revealed the following.

1. There is a significant difference in the percentages of Head Start and non-Head Start students who demonstrated reading, number, and social readiness as evidenced by the .000 significance value in the Paired Samples Test component of the t-test.
2. There is a negative correlation between the percentages of the two groups in the outstanding assessment category as evidenced by a -.110 correlation in the Paired Samples Correlations component of the t-test. This indicates that the scores of both groups were moving in opposite directions.
3. In the Needs Improvement assessment category, a fairly strong positive correlation exists in the percentages of both groups as indicated by a .739 correlation. This indicates that the mean of the percentages were closer in the Needs Improvement assessment category than in the outstanding assessment category.



## Summary of the Result

Comparison of the three categories (reading, number, and social readiness) using the three assessment markers (Outstanding, Satisfactory, Needs Improvement)

### Outstanding

	HS	NHS
Reading Readiness	54%	20%
Number Readiness	58%	12%
Social Readiness	56%	31%

**Average Difference 35%** (Head Start students received an outstanding assessment, on average, at a 35% higher rate than the non-Head Start students).

### Needs Improvement

	HS	NHS
Reading Readiness	12%	25%
Number Readiness	6%	18%
Social Readiness	4%	14%

**Average Difference 12%** (Non-Head Start students received a Needs Improvement assessment, on average, at a 12% higher rate than their Head Start counterparts).

### Satisfactory

	HS	NHS
Reading Readiness	34%	55%
Number Readiness	36%	70%
Social Readiness	40%	55%

**Average Difference 23%** (Non-Head Start students received a satisfactory assessment, on average, at a 23% higher rate than their Head Start peers).

**Note:** The non-Head Start students received a satisfactory assessment at a higher rate than the Head Start students due to the greater degree to which the Head Start students received an outstanding assessment. When the two indicators of readiness (outstanding and satisfactory) are combined, the Head Start students demonstrated overall readiness at a 12% higher rate.

### Readiness

	HS	NHS
Reading Readiness	88%	75%
Number Readiness	94%	82%
Social Readiness	96%	86%

**Average Difference 12%**



**Answers to Research Questions**

- 1. What percentage of Head Start students at the Charles H. Emanuel School demonstrated reading readiness?**

On average, 88% of the Head Start students demonstrated reading readiness. Fifty-four percent were outstanding and thirty-four percent performed at a satisfactory level ( $54\% + 34\% = 88\%$ )

- 2. What percentage of non-Head Start students at the Charles H. Emanuel School demonstrated reading readiness?**

On average, 75% of the non-Head Start students at the Charles H. Emanuel School demonstrated reading readiness. Twenty percent were outstanding and 55% performed at a satisfactory level ( $20\% + 55\% = 75\%$ ).

- 3. What percentage of Head Start students at the Charles H. Emanuel School demonstrated number readiness?**

On average, 94% of the Head Start students at the Charles H. Emanuel School demonstrated number readiness. Fifty-eight percent were outstanding and thirty-six percent performed at a satisfactory level ( $58\% + 36\% = 94\%$ ).

- 4. What percentage of the non-Head Start students at the Charles H. Emanuel School demonstrated number readiness?**

On average, 82% of the non-Head Start students at the Charles H. Emanuel School demonstrated number readiness. Twelve percent were outstanding and seventy percent performed at a satisfactory level ( $12\% + 70\% = 82\%$ ).

- 5. What percentage of the Head Start students at the Charles H. Emanuel School demonstrated social readiness?**

On average, 96% of the Head Start students at the Charles H. Emanuel School demonstrated social readiness. Fifty-six percent were outstanding and forty percent performed at a satisfactory level ( $56\% + 40\% = 96\%$ ).

- 6. What percentage of the non-Head Start students at the Charles H. Emanuel School demonstrated social readiness?**

On average, 86% of the non-Head Start students of the Charles H. Emanuel School demonstrated social readiness. Thirty-one percent were outstanding and fifty-five percent performed at a satisfactory level ( $31\% + 55\% = 86\%$ ).

**7. Is there a difference in the reading, number, and social readiness of Head Start and non-Head Start students in kindergarten at the Charles H. Emanuel School?**

There is a difference in the reading, number, and social skills readiness of Head Start and non-Head Start students in kindergarten at the Charles H. Emanuel School. This difference was illustrated in each of the broad categories examined as well as within each subcategory. A t-test was performed to determine the statistical difference in the performance of both groups of students.



## Chapter 5

### Conclusion

The hypothesis in this study tested whether Head Start students at the Charles H. Emanuel School enter kindergarten with better reading readiness, number readiness, and social readiness than non-Head Start students. The study validated this hypothesis in all areas examined. After reviewing the report cards of all 70 Head Start and 103 non-Head Start students at the Charles H. Emanuel School who were in kindergarten during the 2000-2001, 2001-2002, and 2002-2003 school years, the data suggest that the children who attended a Head Start Program entered kindergarten with stronger reading readiness, number readiness, and social readiness than those children who did not attend Head Start. This finding held true for each major category and subcategory of the study. Readiness in this study was indicated by an S-Satisfactory and an O-Outstanding assessment on the end of the year report cards in the skills areas examined. An NI-Needs Improvement assessment served as the indicator for lack of readiness.

### Discussion

Some very consistent trends emerge when one analyzes the data. In all three categories, reading readiness, number readiness, and social readiness, the students with the Head Start experience demonstrated greater readiness than their non-Head Start peers. The greatest disparity in performance in kindergarten for the two groups can be seen in the percentage of students receiving "Outstanding" evaluations on their report cards. In the area of reading readiness, 54% of the Head Start students performed in an outstanding manner compared to 20% of their non-Head Start peers. For number readiness, the "Outstanding" assessment was 58% and 12% respectively. The data for outstanding



performance in the area of social readiness was 56% for the Head Start students and 31% for the non-Head Start students. In the area of reading readiness, 12% of the Head Start students needed improvement compared to 25% of their non-Head Start peers. For number readiness, the Needs Improvement assessment was 6% and 18% respectively. The data for Needs Improvement in the area of social readiness was 4% for Head Start students and 14% for non-Head Start students.

In the area of reading readiness, 34% of the Head Start students performed in a satisfactory manner compared to 55% of their non-Head Start peers. For number readiness, the Satisfactory assessment was 36% and 70% respectively. The data for satisfactory performance in the area of social readiness was 40% for Head Start students and 55% for non-Head Start students. The percentage of non-Head Start students performing in a satisfactory manner was higher than the percentage for the Head Start students because the Head Start students received an Outstanding assessment to a greater degree. When the two indicators of readiness (satisfactory and outstanding) are combined, however, the Head Start students demonstrated a greater overall readiness.

In the three major categories, an average of 56% of the Head Start students performed in an outstanding manner compared to an average of 21% of the non-Head Start students, a ratio of more than 2.5 to 1. Slightly more than twice the percentage of non-Head Start children were assessed as needing improvement in the area of reading readiness than the Head Start students (25% to 12%). In number readiness, 18% of the non-Head Start students needed improvement compared to 6% of the Head Start students, a 3:1 ratio. In the area of social readiness, 14% of the non-Head Start students received a



“Needs Improvement” assessment versus 4% for the Head Start population, more than 3 to 1.

The findings are consistent with the experience of the researcher as a kindergarten teacher for two years in one respect and somewhat surprising in another. Head Start students and students of other early care programs tend to demonstrate a greater degree of academic and social readiness than those students who don't have similar early experiences. In general, they seem to maintain this edge for the entire kindergarten year. What the researcher finds a little surprising is the great disparity in the percentage of Head Start students who were assessed as outstanding compared to their non-Head Start peers. The difference in overall readiness between the two groups, as demonstrated in this study, is not as great as the difference seen in the two groups as it relates to the top of the readiness scale (outstanding).

The percentage of Head Start students demonstrating reading readiness was 88% compared to 75% for non-Head Start students. In number readiness, the percentages were 94% and 82% respectively. Ninety-six percent (96%) of the Head Start students demonstrated readiness compared to 86% for non-Head Start children. Although the disparity in readiness was relatively narrow (an average difference of 12%) when combining outstanding and satisfactory, the readiness indicators, a much greater difference is demonstrated between the two groups of students when the outstanding category is examined separately (an average difference of 35%). Within the outstanding category, the greatest average difference between both groups was in number readiness where an almost 5 to 1 difference exists in the readiness of Head Start versus non-Head Start students (58% to 12%).



### Other notable findings are:

1. In reading readiness, non-Head Start students needed improvement at a 5 to 1 ratio compared to Head Start students in the subcategory "speaks in complete sentences" (20% to 4%).
2. No Head Start student needed improvement in the subcategory "relates well to teacher and students." For this strand, 16% of the non-Head Start students needed improvement.
3. From a behavioral perspective, in the social readiness category, 16% of the non-Head Start students needed improvement in exercising self-control compared to 4% of their Head Start peers, a 4 to 1 ratio.
4. The smallest percentage of students receiving an outstanding assessment in any subcategory was the non-Head Start students in the subcategories "arranges objects in logical order" and "shows the value of pennies, nickels, and dimes" under the broader number readiness category (8% in both subcategories).
5. The smallest percentage of Head Start students receiving an outstanding assessment was 48% in retelling stories in sequence, showing the value of pennies, nickels and dimes, and showing courtesy in speech and action.

### Important Findings and Implications

The major finding, which is consistent with the literature, is that the students in this study who attended Head Start demonstrated greater readiness for kindergarten than their non-Head Start peers in the academic as well as the non-academic areas of the kindergarten curriculum of the Charles H. Emanuel School. These results may lead one to ask, why aren't the benefits of the Head Start Program more widely publicized locally? And why is only 60% of the eligible children participating in the program nationally (Scott, 2003)? The results of this study have significant implications for policymakers. Representatives of our local Head Start Program may use the findings to establish a community awareness program after conducting further investigations into the degree to which eligible children are enrolled locally. The findings may be utilized to bolster the status of the program and to increase federal funding on the local level.



**Recommendations for Further Study**

It is recommended that educators at other schools replicate this study with their individual school populations and that the Division of Planning, Research, and Evaluation, within the Department of Education, conduct a similar study territory-wide and use the results to shape future policy in the Early Childhood Programs of the department.

As a former kindergarten teacher, this researcher would recommend that public schools in general, and in this case Charles H. Emanuel School, institute a pre-kindergarten program for students who did not attend Head Start, a private pre-school program, or some other early care program. This would allow the students to develop and strengthen their readiness skills without feeling overmatched by their classmates who may enter kindergarten with a greater degree of readiness for school. The teacher, in this setting, would be better able to devise strategies, programs, and activities specifically designed to address the unique needs of this group.

A mechanism should be in place within the school to make certain that students are moved to the regular kindergarten classrooms as soon as they are developmentally ready to make this transition. This may take some students one quarter or one half of the school year while others may need the entire school year to develop the required academic and social readiness for placement in the regular kindergarten classes.

It is further recommended that parents explore the different early care options available for their children. Parents in general need to become more aware of what programs are available in order to better match programs with the personality, temperament, and aptitude of their children.

## **Final Conclusion**

Head Start students demonstrated a greater readiness in academic and non-academic areas of the curriculum at Charles H. Emanuel School in each of the three major categories and twelve subcategories examined in this study. Transitional programs are recommended to help bridge the performance gap between the two groups of students.



## References

- About head start.* (2001). Retrieved September 8, 2003, from <http://www.2.act.dhhs.gov/programshsh/about.index.htm>.
- Anderson, E. (2005, July 10-11). Curiosity and imagination: The investigator's club new way to educate preschoolers. *St. Croix Avis*, pp. 1-2.
- Barnett, S. W., & Hustdedt, J. T. (2005, April). Preschool: The most important grade. *Educational Leadership*, 54-57.
- Bosland, J. (2005, March). Forum focuses on head start, school readiness. *Nation's Cities Weekly*, 68-69.
- Clifford, D., & Peisner, F. (2000). *Quality care does mean better child outcomes*. Report No. R307A60004. (ERIC Document Reproduction Service No. ED 437157).
- Decker, J. (2001). *Increasing parent involvement through effective home/school communication*. (ERIC Document Reproduction Service No. 439790).
- Defining school readiness. (2005, March). *The Gale Group: Report on Preschool Programs*, 37, 33.
- Education: Child Start Incorporated.* (2005). Retrieved February 22, 2006, from <http://www.nshs.com/Education/default.asp>
- Edwards, D. (1999). *Public factors that contribute to school readiness*. Report No. ISSN-1524-5039. (ERIC Document Reproduction Service No. 435503).
- Garces, E., Thomas, D., & Currie, J. (2000). *Long-term effects of head start*. Retrieved September 25, 2005, from <http://www.papers.ssrn/so 13/papers.cfm>.

*Head start and early head start director's institute.* (2002). Retrieved September 5,  
from <http://www.headstart.info/publication/im02/im021.htm>.

*Head start may provide negative knowledge.* (2003). Retrieved September 24, 2005,  
from <http://www.orbitalmindcontrollaser.net>.

Heaviside, S. (1993). *Public school kindergarten teachers' views on children 's  
readiness for school.* (ERIC Document Reproduction Service No. 364332).

Holloway, J. H. (2005, May). When children aren't ready for kindergarten.

*Association for Supervision and Curriculum Development, 89.*

Lutz, M. N. (1999). *Contextually relevant assessment of the emotional and  
behavioral adjustment to head start.* Doctoral Dissertation retrieved September  
25, 2005, from <http://www.repository.upenn/dissertation>.

Maslow, A. (1987) *Motivation and personality* (3<sup>rd</sup> ed.). New York: Harper. ISBN  
0060419873.

*NAEYC Position statement on school readiness.* (2003). Retrieved August 31, 2005,  
from <http://www.naeyc.org/about/positions/pdf/PSready98.pdf>

Newton, R. (1986). *Differences in home environments and kindergarten readiness as  
related to early prevention of school failure.* Unpublished Master's Thesis,  
University of Virgin Islands, St. Croix, U.S. Virgin Islands.

Perroncel, C. B. (2000). *Getting kids ready for school in rural America.* (ERIC  
Document Reproduction Service No. ED 45849).

Pianta, R. C., & Cox, M. (2000). *Kindergarten transitions.* Report No. R307A6004  
(ERIC Document Reproduction Service No. 437156).



Pianta, R. (2005, April). Improving early school success. *Educational Leadership*, pp. 24-27.

*School Improvement Plan for Charles H. Emanuel School (2006-2007)* St. Croix, United States Virgin Islands.

Scott, R.C. (2003) *Future of Head Start*, Retrieved October 2, 2005, from [www.house.gov/swtt/press/floor](http://www.house.gov/swtt/press/floor).

Severide, R. (1998). *Establishing a baseline for school readiness of Washington County children entering kindergarten*. (ERIC Document Reproduction Service No. ED 437155)

Smith, R. A. (2005, November). A call for universal preschool. *Educational Leadership*, 38.

Teachers: pre-kindergarten benefits for kindergarten. (2005, August 25). *The Gale Group Report on Preschool Programs*, 36, 132.

Thomas, D., & Currie, J. (1995, 2001, 2004). *Does head start make a difference?* Retrieved September 26, 2005, from <http://www.deas.repec.org/alaca>.

Thompson, T. G. (2002). *Study shows positive results from head start program*. Retrieved September 8, 2003, from <http://www.2.act.dhhs.gov/net/news/press/2002/release.603.html>.

**Appendices**

**Appendix A**

Charles H. Emanuel Elementary School  
Kindergarten Report Card

**Appendix B**

Study Approval Documents



**APPENDIX A**



**ATTENDANCE**

	1ST	2ND	3RD	4TH
Total days				
Days absent				
Times tardy				



**CHILDREN LEARN AS THEY LIVE**

- A child that lives with ridicule  
*Learns to be timid.*
- A child that lives with criticism  
*Learns to condemn.*
- A child that lives with distrust  
*Learns to be deceitful.*
- A child that lives with antagonism  
*Learns to be hostile.*
- A child that lives with affection  
*Learns to love.*
- A child that lives with encouragement  
*Learns confidence.*
- A child that lives with truth  
*Learns justice.*
- A child that lives with praise  
*Learns to appreciate.*
- A child that lives with sharing  
*Learns to be considerate.*
- A child that lives with knowledge  
*Learns wisdom.*
- A child that lives with patience  
*Learns to be tolerant.*
- A child that lives with happiness  
*Will find love and beauty.*



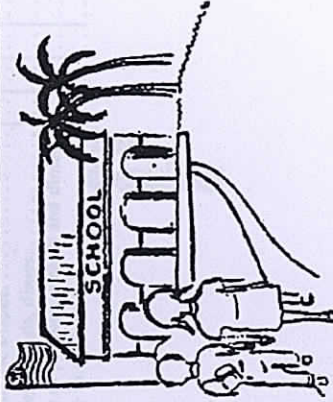
BY R. RUSSELL

ISLAND

**PROGRESS REPORT  
KINDERGARTEN**

Pupil's Name \_\_\_\_\_  
 School \_\_\_\_\_  
 Teacher \_\_\_\_\_  
 School Year \_\_\_\_\_  
 Principal \_\_\_\_\_

1ST REPORT	2ND REPORT	3RD REPORT	4TH REPORT



FIRST REPORT (COMMENTS) \_\_\_\_\_  
 Parent's Signature \_\_\_\_\_  
 SECOND REPORT (COMMENTS) \_\_\_\_\_  
 Parent's Signature \_\_\_\_\_  
 THIRD REPORT (COMMENTS) \_\_\_\_\_  
 Parent's Signature \_\_\_\_\_  
 FOURTH REPORT (COMMENTS) \_\_\_\_\_  
 Parent's Signature \_\_\_\_\_  
 Grade Placement \_\_\_\_\_ for School Year \_\_\_\_\_  
 Principal's Signature \_\_\_\_\_





MUSIC, ART and PHYSICAL DEVELOPMENT

	1	2	3	4
Takes part in musical activities				
Enjoys singing				
Responds to rhythms				
Demonstrates artistic expression				
Uses art materials correctly				
Has satisfactory large muscle coordination				
Has adequate small muscle coordination				
Fastens own shoes				
Coordinates eye and hand movements				



SOCIAL DEVELOPMENT

	1	2	3	4
Recognizes official first and last name				
Knows home address				
Knows and uses names of adults in authority				
Knows names of other children in classroom				
Shows courtesy in speech and action				
Relates well to teacher and classmates				
Exercises reasonable self-control				
Shows growth in self-confidence				
Plays constructively alone				
Shows respect for adults				
Respects the rights of others				
Observes rules				
Recognizes community helpers				
Listens while others speak				
Takes care of equipment and supplies				
Shares and takes turn				



HEALTH and SAFETY HABITS

Demonstrates good health habits				
Observes safety rules				
Keeps reasonably neat and clean				
Exhibits good nutrition habits				



	1	2	3	4
Identifies capital and small letters				
Understands left to right progression				
Recognizes basic sight words				
Uses word attack skills to identify words				
Reads short sentences				
<b>HANDWRITING</b>				
Shows an awareness of printed symbols				
Traces letters and numbers				
Prints: first name				
last name				
capital letters				
small letters				
Copies simple sentences				
<b>NUMBER READINESS SKILLS</b>				
Recognizes similarities and differences in objects				
Arranges objects in logical order				
Makes one-to-one matchings between objects in two sets				
Counts objects to 20				
Recognizes numerals from 0-12				
Matches numerals with sets of objects from 0-12				
Writes numerals from 0-12				
Matches the word forms with the numerals 0-12				
Recognizes geometric shapes				
Identifies pennies, nickels, dimes				
Shows the value of pennies, nickels and dimes				
Recognizes time to the hour				



Government of the Virgin Islands of the United States

**APPENDIX B**

DEPARTMENT OF EDUCATION  
OFFICE OF PLANNING, RESEARCH AND EVALUATION  
1831 Mangens Circle, Charlotte Amalie  
St. Thomas, V.I. 00802-8746

February 28, 2005

Ms. Anna Harley  
PO Box 2903  
Kingshill, St. Croix 00851-2903

Dear Ms. Harley:

We are pleased to inform you that your research proposal has been approved. Enclosed is a copy of your proposal with all necessary approval signatures.

Best wishes in your endeavors.

Sincerely,



Diana R.P. Matthew  
Administrative Assistant, PRE



