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THEY'VE COME A LONG WAY SINCE P.L. 94 – 142:

STANDARDS – BASED INSTRUCTION AND ITS IMPACT ON INCREASING SCHOOL ATTENDANCE RATES FOR STUDENTS WITH DISABILITIES

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Education

By

Lywinda Anne Siegler

August 2009

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Lywinda Anne Siegler

2009

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By

Lywinda Anne Siegler

Approved Month Day, and Year of Defense

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ABSTRACT

THEY'VE COME A LONG WAY SINCE P.L. 94 – 142:

STANDARDS – BASED INSTRUCTION AND ITS IMPACT ON INCREASING SCHOOL ATTENDANCE RATES FOR STUDENTS WITH DISABILITIES

By

Lywinda Anne Siegler

August 2009

Dissertation supervised by Professor Gary Shank

Students with disabilities have a higher rate of missed days of school as compared to their nondisabled peers. This dissertation examined the effect standards – based instruction (SBI) had on the school attendance rates for children with disabilities. The purpose was to determine whether rates of attendance would increase for students with disabilities who received standards-based instruction over the period of the 2003 -2004, 2004 -2005, and 2006 - 2007 school years. The Commonwealth of Pennsylvania implemented standards in mathematics and reading, writing, speaking, and listening in 1999. The Commonwealth of Pennsylvania has 500 public school districts. The Pennsylvania Department of Education has designated the districts into the categories of urban, suburban and rural. The study was a quasi-experimental design because it examined differences between pre-existing populations of students with disabilities' attendance rates for each district in Pennsylvania. The independent variables were time

and density (urban, suburban, and rural) and the dependent variable was attendance records. To determine the effect of standards-based instruction on student attendance, the researcher conducted a simple analysis on student attendance. A t-test was conducted comparing attendance rates for students with disabilities at two different time periods. Data were collected to compare ADA percentages between urban, suburban, and rural school districts. Three ANOVAs were also conducted, comparing attendance rates for urban, suburban, and rural districts at three different time periods. Attendance rates were obtained for a period of time; the school years of 2003 – 2004, 2004 – 2005, and 2006 – 2007 to determine if more exposure to standards – based instruction would increase school attendance rates for students with disabilities. Attendance rates were obtained to determine if there is any improvement in the frequency of attendance after the implementation of SBI. These school years were examined to allow time for all the districts to have developed curriculum plans which reflect the state standards in mathematics and reading.

The study found that over the extended period of time, attendance rates increased for students with disabilities in Pennsylvania districts, regardless of their density regions and findings from the t-test also supported an increase in attendance over the same period of time.

DEDICATION

This dissertation is dedicated to my mother, Katherine V. Siegler, who encouraged and supported me throughout my life. She provided the application fee and was responsible for me attending college and pursuing a career in the education field. She is a very strong woman who I love and admire very much. This dissertation is also dedicated to my brother, Raymond J. Siegler, whose encouragement enabled me to realize my goal of earning my doctorate degree. Although he is no longer with us physically, I know that he has supported me spiritually throughout this rigorous process. I have felt his presence throughout this process. I also dedicate this dissertation to my daughters, Mairead E. Stewart and Sean A. Stewart, who have supported and encouraged me even when I was struggling to continue. Thanks to all of you and know I love you.

ACKNOWLEDGEMENT

I have many people to acknowledge and thank who supported me in the completion of my dissertation and educational journey. Dr. Sara Willoughby-Herb was my first mentor during my undergraduate career at Penn State University. I learned so much from her that I continue to use each day. We have remained friends over the years. My next mentor was my elementary cooperating teacher, Ms. Susan Regola – Ciarimboli. She was an inspiration to me and helped me to become a caring and compassionate teacher. Ms. Mary Rovila was my first special education supervisor who encouraged my ideas and provided the support necessary for a beginning teacher. Mr. Carl DeJulio provided instruction in the writing of psychological reports and pushed me to exceed even my expectations. Mr. Daniel Moore supervised my School Psychology Internship and set high standards for my work that I strove to achieve. My coworkers, Mr. John Odioso, Mr. Richard Lewis, and Mr. Frank Ferris who showed me the ropes during our child study team meetings. Mr. Jim Meehan was my supervisor during my tenure at Riverside Beaver County School District. He encouraged and supported all my work in the district. Dr. Stanley Herman, who was my mentor during the doctoral program. He shared his wealth of knowledge as well as giving me many educational books and encouraged my pursuit of knowledge. I especially want to thank my fellow IDPELites, especially Group 4, who provided encouragement through the many assignments and projects. I have enjoyed the journey and it was a privilege to work with all of you. I want to thank my chairperson, Dr. Gary Shank, who was extremely supportive and kept me going when the going got rough. Dr. Orlando Villella joined my committee near the end

of the process and provided vital assistance with the data analysis. My other committee members, Dr. Rick McCown and Dr. Stanley Herman, supported me every step of the way. Lastly, I would like to thank Dr. John Salvia, a professor I had at Penn State and I have consulted through the years concerning questions on special education issues. He was always very helpful and encouraging. I can never thank all of you enough. All of you have helped me become the person I am and I have learned so much from each and every one of you. I am eternally grateful.

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Chapter 1

Standards – based Instruction and Students with Disabilities

Introduction

Can standards-based instruction increase school attendance rates for students with learning disabilities? Before that question can be answered, other questions must be answered. What is standards-based instruction? When was standards-based instruction introduced into the American education system? What were school attendance rates for students with learning disabilities before the introduction of standards-based instruction?

What is standards-based instruction? Each state in the United States has developed a set of standards for each of the academic content areas. Standards define goals of what every child should know and be able to do. Standards provide the target on which all other efforts and structures informal education should be focused (Tucker, 1998). Content standards as well as performance standards (how good is good enough?) need to be clearly defined. Standards need to be properly implemented, as well.

Standards-based instruction is the teaching of the important skills identified in the content area standards to allow for students to ensure their mastery of skills necessary to be successful members of society. In addition, standards – based instruction should be designed to connect learning tasks to real-world situations, to personalize learning, and to respond to diversity (Lachet, Williams & Smith, 2006). Each school district will align

their curriculum to their state standards. Students are then taught skills that correlate with the state standards. Each year students are assessed on their proficiency in meeting the state standards.

According to Marzano (2004), standards-based instruction is one of the most significant educational reforms in the last half of the 20th century. (p.107) In the last decade concentrated pressure for national educational standards has emerged. This was evidenced by efforts of federal and state legislators, president and governors, teachers, subject matter specialists, councils, government agencies, and private foundations (Marzano, 2004).

The Beginning of the Standards Movement

The beginning of the modern standards movement can be traced to publication of A Nation at Risk (1983) during the Reagan administration. This publication was a comprehensive study of the health of the American educational system. Concerns of the state of the educational system prompted President George H. W. Bush to call the nation's governors together for an educational summit. The summit took place in Charlottesville, VA in September 1989. From this summit six broad national goals were set and published in The National Educational Goals Report: Building a Nation of Learners (National Educational Goals Panel [NEGP] 1991). Two of the six goals dealt with academic achievement. Goal 3 stated that by the year 2000 students will leave grades 4, 8, and 12 demonstrating competence in English, math, science, history, and geography. In addition goal 3 stated that students will learn to use their minds well and be prepared for responsible citizenship, further learning and productive employment. That

the United States students will be first in the world in science and math achievement by the year 2000 was Goal 4 (Marzano, 2004).

How will standards-based instruction impact students with disabilities? The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) specifically says that during the Individual Education Plan (IEP) meeting the IEP team will address the issue of participating in state and local assessments and what accommodations, if any, will be needed. The Pennsylvania State System Assessment (PSSA) has been aligned to measure students' performance on state standards. Chapter 4, the Commonwealth regulations for curriculum, now requires that special education needs for curriculum be specifically addressed. Chapter 4 specifically states, "Children with disabilities shall be provided an education which enables them to be involved in and progress in the general education curriculum" (1999, p.19).

Standards and Attendance among Students with Special Needs

With the reauthorization of the Individuals with Disabilities Education Act of 1997, students with disabilities were expected to have access to the general education curriculum for the first time. Although access to the general education curriculum was implied in the previous law, now it was stated implicitly. No Child Left Behind of 2000, (NCLB) the reauthorization of the Elementary and Secondary Education Act (ESEA), made school districts accountable for achievement, adequate yearly progress, and school attendance for all students. With curriculum being aligned with state standards, students with disabilities were held to the same standards as their nondisabled peers.

Past research shows that students with disabilities miss more school days than their nondisabled peers partially due to having lowered expectations and using watered –

down curriculum (OSEP, 2001). For the first time ever students with disabilities were held to the same standards and expectations as all other students. One of those expectations is increased attendance rates. Can this be part of the answer educators are looking for to increase attendance rates for students with disabilities? Will standards – based instruction increase attendance for students with disabilities? Since standards – based instruction has been implemented for about ten years, more studies need to be completed in order to examine this question to determine if standards – based instruction will have a positive impact on school attendance for students with disabilities.

Problem Statement

During the 1998-1999 school year, 302,078 students in the Commonwealth of Pennsylvania were classified as students with disabilities and required special curriculum adaptations as mandated by law. However, there is little evidence as to the effect of many of these adaptations on academic achievement or rate of school attendance. The reauthorization of P.L. 94-142 has mandated that all students receive standards-based instruction. Ten years have passed since these data were reported, and now it is time to look for explicit and specific impacts of standards implementation. While there is little evidence to indicate the superiority of the standards-based approach over the present approach, it is hypothesized that standards-based instruction may have a positive impact on rate of attendance of students with special education needs.

Purpose Statement

Based on the above concern, and the paucity of evidence as to the educational effect of standards aligned curriculum, the purpose of this study is to determine if

students with disabilities who receive adaptations for their mathematics and English/Language Arts education curriculum that are aligned to the standards will exhibit a decrease in their rate of absenteeism. This will be done through examining attendance records of students with disabilities in all five hundred school districts in the Commonwealth of Pennsylvania, which is available on the Pennsylvania Department of Education website. Average Daily Attendance (ADA) and Attendance Daily Membership (ADM) data will be collected over a period of three school years. The attendance data will be looked at for the 2003-2004, 2004-2005, and 2006-2007 school years. These school years have been selected to permit each school district time to align their individual curricula to the Pennsylvania standards and to allow time for students with disabilities access to the general education curricula. Attendance data for students with disabilities prior to the 2002-2003 school year was not disaggregated. Standards for mathematics and reading were approved in January and February 1999, respectively.

Of specific interest is whether students with disabilities exposed to a standards-based curriculum will demonstrate improved desirable school outcomes as measured by indicators of school attendance.

Significance of the Study

This study is important because in the past the majority of students with disabilities have not achieved at their current grade level and successfully exited special education services for reading and mathematics. The academic achievement of students with disabilities continued to be significantly below grade level in the areas of reading and mathematics. Too many students with disabilities, once receiving special education services, continued to receive them until graduation and/or reaching age 21. The

attendance rates of students with disabilities were below their nondisabled peers and this in turn affected their academic achievement. Because the students missed so many days, perhaps because of their frustration with not being able to successfully attain achievement at their current grade level in reading and mathematics, they became further and further behind which caused more frustration and more missed days of school. Hopefully this study will support the fact that standards-based instruction will increase school attendance rates for students' with disabilities.

Why do students with disabilities have higher absenteeism than their nondisabled peers and how can standards-based instruction solve the attendance problem? Many reasons can be found for students with disabilities missing school. Prior to the PARC decree in 1972 and the passage of Public Law 94-142 in 1975, students with disabilities could be refused the right to attend school. Now, however, that is no longer a reason for students with disabilities to miss school. Sometimes students with disabilities may have a medical problem that may cause them to miss school. This may be a common reason for some students. But this argument can also be used for students without disabilities as well. Frustration with learning and achieving concepts of subject matter can be another reason for missing school. Students with disabilities having difficulty with school work can find excuses for missing school or pretending to be ill to avoid the frustration they feel when attending school. Another reason for students with disabilities missing school has been school suspension. Whether due to added frustration with low achievement, students with disabilities have been found to have higher rates of school suspension than their nondisabled peers (Swanson, 2008). Again, not being in the classroom for instruction can lead to lower academic achievement and higher frustration levels.

Prior to standards-based instruction being introduced into classrooms, attendance rates for students with disabilities were lower than their nondisabled peers. Since data have not been collected to determine if the use of standards-based instruction for students with disabilities can increase their school attendance rates, data need to be collected to determine if standards-based instruction can improve school attendance rates for students with disabilities. Because standards-based instruction provides exposure to the same content standards and provides access to the general education curriculum for all students, students with disabilities may experience less frustration and display a more positive attitude regarding attending school.

One other variable will be examined, as well. It is reasonable to assume that logistics might play a role in attendance. In particular, it might be the case that urban, suburban, and rural students might have different logistical challenges that could impact attendance. Therefore, this dimension will be examined to see if it might play a role in looking attendance rates.

Research Questions

This study addresses the following specific questions:

1. Do students with disabilities who receive instruction by teachers who align the district curriculum to the state standards increase their rate of attendance as measured by school attendance records over time?
2. Do students with disabilities living in urban, suburban, and rural school districts have differing attendance rates as measured by school attendance records based on logistical issues?

Definition of Terms

A definition of terms is appropriate to clarify words that will be used throughout this research study. The following terms and their definitions are explained as they are to be understood by the reader.

- Academic achievement –what has been learned as a result of a specific course of instruction; to show an increase in schoolwork as measured by an achievement test.
- Adaptations – to make modifications to the school curriculum to enable students to learn the material successfully.
- Attendance – to be physically present in school.
- Average Daily Attendance – number of students who are physically in school every day
- Average Daily Membership – total number of students who are expected to be physically present in school each day
- Chapter 4 – 22 PA Code – Education Academic Standard and Standards
- Chapter 14 – PA Special Education Services and Program Standards
- Child with a disability – a child with one of the thirteen categories of exceptionality
- Constructivism – a philosophy of learning founded on the premise that, by reflecting on our experiences, we construct our own understanding of the world

we live in.

- Curriculum – all of the courses offered by an educational institution; all written or intended, academic and nonacademic instructional objectives for a student or group of students.
- Education for All Handicapped Children Act – Public Law 94 – 142 signed into law in 1975; insured that to the maximum extent possible, handicapped children are educated with children who are not handicapped.
- Handicapped children – children with a disability (see child with a disability).
- Individuals with Disabilities Education Act (IDEA) – National law reauthorized in 1990 and 1997; provides protections to children with disabilities.
- Individuals with Disabilities Education Improvement Act – National law reauthorized in 2004 by
- Individual Education Plan (IEP) – a written statement for each child with a disability that is developed, reviewed, and revised
- Learning Support student - a student not achieving at grade level; requiring academic support
- Learning Support class - a classroom providing academic support for students not achieving at grade level
- Local Education Agency (LEA) – a school district or intermediate unit
- Least Restrictive Environment – placement which meets the needs of the special education student to be educated to the maximum extent possible with peers

without disabilities

- Modifications – making changes to improve the child's opportunity to be successful in school.
- Nonhandicapped peers – children who do not have a disability or handicap and do not require an IEP.
- PSSA (Pennsylvania State School Assessment)- test administered each year to students in grades 3, 4, 5, 6, 7, 8 & 11 in mathematics and reading and grades 5, 8 & 11 in writing measuring progress on PA state standards.
- Public Law 94 – 142 – The Education for All Handicapped Children Act; passed in 1975.
- Special education – a program of services provided for children who are identified as having a disability.
- Standards-based instruction – Students are instructed using curriculum which has been aligned to the state standards in academic content areas.

Chapter 2

Standards – based Instruction, Students with Disabilities and School Attendance

Introduction

Over 20 years of research and experience have demonstrated that the education of children with disabilities can be made more effective by having high expectations for children with disabilities and insuring their access in the general education curriculum to the maximum extent possible. According to Wright and Wright (1999), current research has shown that low expectations and an insufficient focus on applying replicable research have impeded the implementation of the Education of the Handicapped Children Act of 1975 on proven methods of teaching and learning for children with disabilities. As stated by the researchers, special education has generated negative publicity because the system often fails to teach children the basic academic skills they need. Special education outcomes are poor and in most cases, educational progress is not measured objectively.

Wright and Wright, (1999) further stated that special education programs usually include modifications and compensatory techniques, which do not teach basic skills. Because of this, special education children received programs that had low expectations for children with disabilities. Thus, they suggested that greater emphasis needs to be

placed on measurable progress and positive outcomes. By coordinating the resources provided through the Education for All Handicapped Children Act of 1975 with other local educational service agencies, State, and Federal school improvement efforts, special education can become a service for children with disabilities rather than a place where they are sent (Wright & Wright, 1999).

Historical Background - Education for All Handicapped Children Act

Prior to 1971 in the Commonwealth of Pennsylvania, the law did not protect children with disabilities right to attend school to receive an education. In seeking to address what to many was considered a denial of the right to an education, the Pennsylvania Association of Retarded Citizens (PARC) and 13 school-age children with mental retardation brought a class action suit against the Commonwealth of Pennsylvania for its alleged failure to provide its school-age children with mental retardation a publicly supported education and the right to attend public school in their home school district. The success of the Pennsylvania case initiated other class action suits on behalf of children with special education needs. One such case was Mills v. Board of Education (1972). The parents and guardians of seven District of Columbia children brought a class action suit against the D.C. Board of Education on behalf of school-age children with disabilities (NICHY, 1996). As a result of the constant agitation and the ever-increasing legal action by parents and organizations representing children with disabilities, in 1975 the Education for All Handicapped Children Act or Public Law 94 – 142 was passed into to law.

Described as one of the finest achievements of American Public Education by Lipsky & Gartner (1989), the Act required nine basic principles that must be met in

providing education to children with disabilities. Although all principles were equally important, providing an Individual Education Plan (IEP), education in the Least Restrictive Environment (LRE), and a Free Appropriate Public Education (FAPE) are probably the most well known of the principles.

However, despite the requirements of the legislation, the principles of the right of access to public education programs and the assumption that children with disabilities do not need to be removed from the regular class were not always ascribed much importance and so often were not adhered to by education authorities. Additionally, the law did not address the relationship between the delivery of services for regular education and special education or the instructional methods and curricular content of special education. This allowed for various interpretations of what needed to be provided in order to meet the educational needs of children with disabilities. A consequence of this technical deficiency in the law was the development of categories of exceptionalities and the establishment of separate classrooms for each category of exceptionality.

While as can be gleaned from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), there may be factors common to a category of disability that present challenges to learning, according to Ysseldyke (1987) there is no evidence to support the contention that specific categories of students learn differently from their non-categorized peers. It is the accepted fact that all students exhibit preferred learning styles that transcend soundly constructed categories. However, as pointed out by Ysseldyke, the above occurrence was one of the unintended facts of the Education of All Handicapped Children Act of 1975. The intent of the law was not to provide separate classrooms or establish separate curricula, but to provide a support system for children

with disabilities that would allow them, as far as possible, access to a regular education within the regular classroom. Therefore the notion that special education students learn differently and should be instructed in categorical groups remains questionable.

Individuals with Disabilities Education Act

Instead of a largely separate and unequal system of special education that developed, the law required that each student receive an appropriate placement in the least restrictive environment (LRE), i.e., the placement most conducive to meeting the student's needs. Therefore the law provided a continuum of services ranging from totally separate environments to inclusion in the regular classroom, depending on the placement deemed most appropriate to the child. However the availability of these options did not necessarily result in educators fully utilizing them. More often than not, a restricted interpretation was applied to the LRE, which resulted in too many students being placed in separate settings. This widespread occurrence mandated that something had to be done and so, in 1990 Congress passed the Education of the Handicapped Act Amendments of 1990 (PL 101-476) which was renamed the Individuals with Disabilities Education Act (IDEA). The IDEA of 1990 added transition services and assistive technology services as new definitions of special services that must be included in a child's Individual Education Plan, (IEP). Rehabilitation counseling and social work services were added as related services under the law for the purpose of supporting students in their educational setting (NICHCY, 1996). Other key requirements of the IDEA of 1990 included what strategies were most effective in helping children with disabilities to meet higher educational standards and determining how school districts could use assessment data to improve educational opportunities for children with disabilities.

Reauthorization of IDEA in 1997

Despite PL 101-476, many issues still remained unresolved and so, on June 4, 1997 the Individuals with Disabilities Education Act or IDEA of 1990 was reauthorized and signed into law by President Clinton. The rationale for the changes came about because the promise of PL 94 – 142 remained unfulfilled for too many children with disabilities. A consequence of P.L. 94-142 was twice as many students with disabilities dropped out of school as compared to their peers without disabilities. Students with disabilities had lower rates of attendance which led to the occurrence of dropping out of school.

The Senate Committee identified seven major objectives that were to be obtained by the reauthorization of the IDEA (Levin, 1997). One objective that was not addressed previously was the access to the general education curriculum and reforms. Least Restrictive Environment (LRE) has always been an important part of special education law, and the reauthorization of the IDEA put into place measures to reinforce that concept. It mandated to the maximum extent appropriate, that children with disabilities, including children in public or private institutions or other care facilities, are to be educated with children who are not disabled (Levin, 1997). In the Individual Education Plan (IEP) a statement is required of how the child's disability affects the child's involvement and progress in the general education curriculum. It also must address the unique needs of a child to progress in the general education curriculum.

The emphasis on participation in the general education curriculum is intended to focus attention on accommodations and adjustments that will allow children with

disabilities to access the general education curriculum. An intent of IDEA is to focus on integrated opportunities for children with disabilities. Thus, the legislation requires that the IEP include an explanation of the extent, if any, to which a child with a disability will not participate with nondisabled peers in the regular class and the general education curriculum including extracurricular and non-academic activities (Levin, 1997).

PA Special Education Regulations (Chapter 14) and PA Curriculum Standards (Chapter 4)

To be in compliance with the reauthorization of the Individuals with Disabilities Education Act, the Commonwealth of Pennsylvania recently revised their special education regulations, better known as Chapter 14. The purpose of Chapter 14 is to specify how the Commonwealth will meet its obligation to identify exceptional children and to provide appropriate, quality education services.

Chapter 4, the Commonwealth regulations for curriculum, now requires that special education needs for curriculum be specifically addressed. Chapter 4 specifically states, "Children with disabilities shall be provided an education, which enables them to be involved in and progress in the general education curriculum" (1999, p. 19). Academic Standards have been adopted and approved for Reading, Writing, Listening and Speaking, and Mathematics, for grades 3, 4, 5, 6, 7, 8, and 11. Additionally, State Board of Education approved academic standards for Arts and Humanities, Career Education and Work, Civics and Government, Economics, Family and Consumer Sciences, Geography, Health, Safety and Physical Education, History and World Languages at their July 18, 2002 meeting. Arts and Humanities, Civics and Government, Economics, Family and Consumer Sciences, Geography, Health, Safety and Physical

Education, and History received regulatory approval on January 11, 2003. Environment and Ecology, and Science and Technology received regulatory approval on January 5, 2002. Career Education and Work received regulatory approval on July 8, 2006.

When approved, these academic standards became effective upon publication in the Pennsylvania Bulletin. Children with disabilities will have access to these academic standards and their teachers will be expected to align the district's curriculum with these standards. According to the IDEA, all students with disabilities will have access to the general education curriculum and receive standards – based instruction. These academic standards establish the content in each area the students will be taught. Examples of Reading Standards at grade 5 are: Learning to Read Independently, Reading Critically in All Content Areas, and Reading, Analyzing and Interpreting Literature.

Despite the reauthorization of IDEA in 1997, many lawsuits filed by parents or school districts continue to demonstrate that children with disabilities may not be receiving special education services that are needed. In 1999 major court decisions concerning IDEA involved eligibility, discrimination, inclusion, exhaustion, and qualified immunity. In one particular case, Timothy H. v. Cedar Rapids Community School District, the school district refused to provide a student with disabilities with specialized transportation to a high school outside the assigned attendance area into a district transfer program (178F 3d 968). In PJ v. Eagle Union Community School Corp. the district violated the student's rights under IDEA by failing to identify the student as a student in need of special education services (U.S. App. LEXIS 30208).

Specific to the Commonwealth of Pennsylvania, despite the reauthorization of Education for All Handicapped Education Act embodied in the Individuals with

Disabilities Education Act, in some school districts, students with disabilities are taught using curriculum that is not aligned with the PA academic standards. As can be gleaned from teachers, parental concerns and observations from the Office of Special Education Services, some teachers, instead of adapting material to the district curriculum, use below grade level books as a method of instructional adaptation for their students with disabilities (OSEP, 2001). Based upon these allegations, one can assume a direct effect of these actions on the quality of education provided to students with disabilities which can have a direct affect on regular school attendance. Instead of being stretched, these students are provided a substandard curriculum, which makes them candidates for failure which in turn can lead to an increase in absenteeism. According to Malian & Love (1998), this results in students with disabilities having low self – esteem, low rates of attendance and lower achievement levels. Few students with disabilities successfully exit special education services and return to the general education classes.

Individuals with Disabilities Education Improvement Act of 2004

In order to address the failings of the revised IDEA, President Bush signed the Individuals with Disabilities Education Improvement Act (P.L. 108-446) on December 3, 2004 to provide even more significant changes (Apling & Jones, 2005). Twelve significant changes were made to this revision. These changes are:

1. An extensive definition of "highly qualified" special education teachers and the requirement that all special education teachers be highly qualified;
2. Children with disabilities who are homeless or members of highly mobile populations receive special education and related services;
3. Significant changes to procedural safeguards, including a resolution period prior to a due process hearing to encourage the resolution of disputes;
4. Major changes in compliance monitoring to focus on student performance;
5. Extended services for infants and toddlers beyond the age of 2;

6. Provisions to reduce paperwork and other non-educational activities;
7. Increased funds and increased requirements for statewide activities;
8. Authority for LEAs to use some of their local IDEA grant for early intervention services aimed at reducing or eliminating the future need for special education services for children with educational needs who do not currently qualify for IDEA;
9. Authority for LEAs that qualify to off-set some expenditures for special education with annual increases in their IDEA grant;
10. Modification to requirements for parents who place their children with disabilities in private schools to help ensure equal treatment and participation;
11. Revised state performance goals and requirements for participation in state and local assessments to align these requirements with those in the Elementary and Secondary Education Act of 1965 (ESEA);
12. Authorization for states to use IDEA funds to establish and maintain "risk pools" to aid LEAs that provide high-cost IDEA services.

How will standards-based instruction impact students with disabilities? The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) specifically says that during the Individual Education Plan (IEP) meeting the IEP team will address the issue of participating in state and local assessments and what accommodations, if any, will be needed. The Pennsylvania State System Assessment (PSSA) is the state assessment and the PSSA has been aligned to measure students' performance on the state standards. Chapter 4, the Commonwealth regulations for curriculum, now requires that special education needs for curriculum be specifically addressed. According to the Individual with Disabilities Education Act (IDEA), all students with disabilities will have access to the general education curriculum and receive standards-based instruction.

Specific to the Commonwealth of Pennsylvania, despite the reauthorization of Education for All Handicapped Education Act embodied in the Individuals with Disabilities Education Act, in some school districts, students with disabilities are taught using curriculum that is not aligned with the PA academic standards. As can be gleaned

from teachers, parental concerns and observations from the Office of Special Education Services, some teachers, instead of adapting material to the district curriculum, use below grade level books as a method of instructional adaptation for their students with disabilities (OSEP, 2001). Based upon these allegations, one can assume a direct effect of these actions on the quality of education provided to special education students. Instead of being stretched, these students are provided a substandard curriculum, which makes them candidates for failure. According to Malian & Love (1998), this results in students with disabilities having low self – esteem, low rates of attendance and lower achievement levels. Few students with disabilities successfully exit special education services and return to the general education classes.

With the reauthorization of IDEA in 1997, the law specifically stressed a significant change in the strengthening of academic expectations and accountability for the nation's 5.8 million children with disabilities. It bridges the gap that has existed between what children with disabilities learn and what is required in the general education curriculum (OSEP, 2001). In this regard, IDEA now requires that the IEP provide a statement of measurable annual goals related to meeting the child's needs that result from the child's disability. Also included in the IEP must be a statement of the program modifications that will be provided for the student to advance appropriately toward attaining the annual goals. In addition to the above, the IEP also has to include a statement of the expected involvement and progress in the general curriculum and participation in extracurricular and other nonacademic activities. Additionally, the extent of their education and participation with other children with disabilities and nondisabled children is also addressed in the IEP.

Instruction for children with disabilities can take place in the regular education classroom, resource rooms, special education classrooms, or in public or private day schools and residential facilities. However, what is critically important is the quality of education received in the environment deemed most appropriate for the students' needs.

Bimodal Education System

With only 40% of students with special education needs receiving education in the regular education classroom, in place was a bimodal system of education (Lipsky & Gartner, 1989). However, (Stainback and Stainback, 1984) emphasize, "that there are not two distinct groups of students, regular or normal students and others who deviate from the norm, but rather that all students vary across a range of physical, intellectual, psychological, and social characteristics" (Lipsky & Gartner, 1989). Stainback and Stainback further suggest that it is not only special education students who can benefit from individualized services, but also all students can benefit. The system was the result of the assessment and classification policies developed for the purpose of placing students with disabilities in appropriate programs.

In a comparison of dual and unified systems, Lipsky and Gartner (1989) argue that the unified system has many advantages when compared to the dual system. In the unified system all students receive an education based on their individual needs. In a dual system students are identified as special and segregated from their nonhandicapped peers to receive the individualized instruction. A unified system recognizes the individual learning needs of all students and provides what is necessary to meet those needs. In a dual system all students do not receive the same quality of education. If one were to accept Lipsky & Gartner's contentions, an effective unified system will meet the

educational needs of all students. According to Lipsky and Gartner (1989) the current failure to provide quality education to all students and the perpetuation of segregated settings is morally unsound and educationally unnecessary and can lead to a decrease in rates of attendance for students with disabilities.

Table 2.1

Comparison of Bimodal and Unified Education Models

Concern	Dual System	Unified System
Student Characteristics	Dichotomizes students into special and regular	Recognizes continuum among all students of intellectual, physical, and psychological characteristics
Individualization	Stresses individualization for all students labeled special	Stresses individualization for all students
Instructional strategies	Seeks to use special strategies for special students	Selects from range of available strategies according to each student's learning needs
Type of educational services	Eligibility generally based on category affiliation	Eligibility based on each student's individual learning needs
Diagnostics	Large expenditures on identification of categorical affiliation	Emphasis on identifying the specific instructional needs of all students
Professional relationships	Establishes artificial barriers among educators that promote competition and alienation	Promotes cooperation through sharing resources, expertise. And advocacy responsibilities
Curriculum	Options available to each student are limited by categorical affiliation	All options available to every student as needed
Focus	Students must fit regular education program or be referred to special education	Regular education program is adjusted to meet all students' needs

Table 2.1 (Continued)

The real world	Some students educated in an artificial special world	All students educated in mainstream of regular education
Attitude	Some students given an education as a special or charity-like favor	All students given an education as a regular and normal practice

(Lipsky & Gardner, 1989)

State of Special Education

Lipsky and Gartner (1996) state the current state of special education is characterized by:

- "High dropout rates, e.g., nationally, one-quarter of the students who exited school in the 1990-91 school year dropped out."
- "Low graduation rates, e.g., only 43.9 percent of students with disabilities leave school with a regular diploma"
- " Graduates with disabilities go on to post-secondary education at less than half the rate of general education graduates"
- "Persons with disabilities have the highest rate of unemployment of any population subgroup. Two-thirds of persons with disabilities are not working."
- "Limited community integration of adults with disabilities"

During the 1996-97 school year, the Philadelphia School District introduced standards-based instruction into their classrooms. Qualitative research was conducted in 21 schools, 14 clusters. District administrators were interviewed and teachers were asked to complete a survey. A comparison of Traditional and Standards-based Instruction is

below. The chart is taken from Mitchell and Willis' book, *Learning in Overdrive* (Simon, Foley, and Passantino, 1998).

Table 2.2

Comparison of Traditional and Standards-based Instruction

	Traditional	Standards-based
Time	• 40 –50 minute periods • Text-book bound	• Flexible, with units varying on duration and length of lessons • Timed for completing tasks
Instruction	• Text-book bound teacher –centered • Standardized • Breadth over depth	• Standards-driven, learner-centered • Individualized • Depth over breadth
Curriculum	• Text-book driven • Fragmented • Emphasis on basics and coverage	• Best thinking about what students should know and do • Interconnected • Higher level thinking within and across disciplines
Learning	Passive	Active
	• Rote • Predigested information • One right answer	• Real world problems • Learner constructs meaning • Diversity of possibilities
Teaching	• Isolated • Solitary • Bureaucratic	• Collaborative • Teams • Professional

(Simon, Foley, and Passantino, 1998).

The teacher survey responses indicated that teachers were using a variety of instructional activities. From the data collected, many teachers were in the beginning stages of implementing standards-based instruction in their classrooms. The District was

successful in raising the awareness of standards-based instruction during the 1996-97 school year. Teachers were largely satisfied with their instructional practice and thought it was improving. The observations revealed, however, that the teachers did not put their ideas into practice. The District of Philadelphia would continue to move toward standards-based instruction so that all children can achieve standards. Looking at the comparison of traditional and standards-based instruction, many opportunities for students to take part in their learning is evident. This approach seemed like it would work with all students, including special education students.

In the past special education emphasized finding the deficits in the student but not in the curriculum. Curriculum reform now is emphasizing constructivism while special education views its role as remediator of traditional basic skills. The individual within the student model continues to be the focus of special education. The mantra of special education is that with adaptation and individual support suited to the needs of the individual, all students can be successful in achieving the same curricular goals (Kraft & Wheeler, 1996).

Curricular Reform

Refocusing on the general education curriculum as problematic rather than the student as deficit has recently become a topic of discourse in the professional special education community. Some educators are questioning whether the standard curriculum is designed to foster or squelch the diverse learning needs of students who carry the labels of mild disability (Kraft & Wheeler, 1996). They question whether special educators should teach mildly disabled students the learning strategies and social skills necessary to access the teacher's lessons, even if they are not appropriate, or should

educators find radically different routes to accessing what is worth knowing in the curriculum (Kraft & Wheeler). Many of the remediation activities special educators engage in are aimed at getting the students access to the teacher's lessons rather than producing any authentic learning outcomes of importance for their students (Kraft & Wheeler).

All children can learn with effort and good instruction (Resnick, 1995). It is important for teachers to look at each individual student's needs and provide the necessary instruction to meet those needs. The same holds true for curriculum. There is not a need for a separate special education curriculum for children with disabilities. Different instructional strategies work for different students. Teachers should have a large repertoire of instructional strategies to use with all their students.

In 1987 a newsletter, the Indiana Federation Newsletter, Council for Exceptional Children published a list of 248 special education curriculum guides. These were separate curriculum guides, specifically for students with disabilities. Each guide listed the category of students for which the curriculum should be used. Again, it was not the intent of PL 94 – 142 to have separate curricula for students with disabilities and this was addressed with the reauthorization of IDEA in 1997. Special educators and their professional entities were responsible for promoting and supporting a dual system of education.

Costa (1993) reports that to establish higher curriculum standards, educators must be prepared for a paradigm shift. He states that intellectual development, thinking, problem solving, and cooperating must become the core of the curriculum, and process will become the content of instruction. Smart will be redefined to mean knowing how to

draw forth from a repertoire of strategies, knowledge, perceptions, and actions according to contextual demands. The view of learning will shift from learning of the content to learning from the content. Standards will be focused on applying concepts from a variety of fields to produce new knowledge, transfer strategies to new situations, and solve complex problems. Setting standards to achieve these skills is important for all students. The skills mentioned are necessary for all students to acquire so that they will be productive members of society. Achieving higher standards requires the commitment of our greatest share of our resources to the development of each person's fullest potential (Costa, 1993).

Standards-based instruction does not dictate curriculum content but leaves room for the creative choice of material. Curriculum is aligned to the standards and the standards are identified for each lesson. By expecting all children to achieve standards, more children can be successful and begin to feel good about themselves. Children become active participants in their learning. Teacher collaboration is encouraged in a standards-based classroom (Resnick, 1995).

Ysseldyke (1994) stated that by asking states to set academic standards, the United States took its first critical step toward providing a plan that will create an excellent educational system for the 21st century. He further posits that it is important for those working on standards and those educating students with disabilities to work together as standards are being developed. He goes on to say that four kinds of standards need to be understood in order to address ways of including students with disabilities. These are content standards, performance standards, opportunity-to-learn standards, and assessment standards.

Ysseldyke (1994) discussed three alternative approaches to standards to include students with disabilities. IEP-Based standards could be used as an outcomes accountability by translating the goals and objectives into relevant outcomes that match those of the school district or state. Another approach could be Standards for group gains. Within education, a system-wide, average standard could be set and improvement for all student groups would be required. The third approach could be separate standards that would be created for students in special education programs. There were merits and limitations for each approach.

Table 2.3

IEP-Based Standards

Merits	Limitations
They capitalize on the familiarity of the document	They capitalize on the familiarity of the document
They eliminate another layer of paperwork	They eliminate another layer of paperwork
By using the concept of personal best, they correspond with the individualization sought for students on IEPs	Because the quality of IEPs is highly variable, adding to or changing the format might further increase the variability
IEP procedures require input from parents and students, a procedural component that increases the possibility of realistic goals and expectations	Low standards might be set for students, with the rationalization that they should not experience failure.
IEPs are already the basis for reporting to state and federal government	Monitoring IEPs would become even more difficult for monitors, and probably would require new skills and criteria

Table 2.3 (Continued)

	Aggregating data may be problematic because of IEP individualization; common standards may not be possible (Yssldyke, 1994, p.5).

Table 2.4

Standards for Group Gains

Merits	Limitations
• All quartiles of students are targeted for improvement along with the overall system. • No group of students would be targeted for special instruction.	• There is no guarantee that each student will show a gain. • It will be difficult to develop meaningful assessments of progress for the full range of students in schools. (Ysseldyke, 1994, p.5)

Table 2.5

Separate Standards

Merits	Limitations
They would be better aligned to students' particular needs.	Expectations may be lowered for students with disabilities.
They might help identify a realistic set of goals or competencies.	Separate standards might legitimize using a less rigorous approach with students with disabilities.
They could be organized around concepts such as communication, functional literacy, and job/employability skills rather than content areas.	They might promote the development of category-specific standards. They could narrow curricular choices.

Table 2.5 (Continued)

	Educators will have a more difficult time making comparisons in progress with the general population of students
	They might inhibit achievement and lower the self-esteem of students with disabilities.

(Ysseldyke, 1994, p.6)

There should be one set of standards for all students. What is important for some students is important for all students to know. Content standards can be translated into curricular and instructional programs for students; therefore, educators can prepare individualized goals for students with disabilities. Some students will need different experiences, levels of service, and instructional accommodations to meet the content standards (Ysseldyke, 1994). The preferred practice is to move all students to the highest level of content standards by varying the instructional accommodations.

A study in Colorado (Watson, 1995) explored the beliefs of administrators, teachers, and school board members regarding the concept that all students can learn including students with learning disabilities and achieve Colorado's educational standards. One of the study's objectives was to determine whether differences existed in beliefs of staff that held various positions. In two school districts, interviews were conducted with two school board members, the superintendent, the curriculum director, a special education director, two principals, two special education teachers, and four general education teachers. Their responses were categorized as either ambivalent, high belief, or low belief in the concept of all students can learn.

The high belief group expressed the views that standards-based education could or should be used to close the learning gap between students with learning disabilities and their peers who do not have difficulties. Central office administrators (superintendent, special education director, and curriculum coordinator) were the only category of staff that consistently held high beliefs that all students can learn. The study found that those who had very strong knowledge of their subject and high expectations also appeared to get the most from their special education students.

Individuals classified as having a high belief expressed views that standards could or should be used to close the learning gap between students with learning disabilities and their nondisabled peers. These individuals viewed intelligence and learning as a multi faceted process. Individuals classified as having a low belief expressed views that students with learning disabilities cannot be expected to achieve academically at levels, which exceed current expectations. They viewed intelligence and learning as a single faceted process. Individuals classified as ambivalent expressed situational views toward students with learning disabilities regarding achievement of the standards which:

- Imply positive and negative feelings toward student success,
- Devalued the disability (i.e. students with learning disabilities cannot learn this material,
- Demonstrated compassion benevolence (i.e. they should be expected to meet the standards without frustration

The results of this study are not surprising. However, the study needs to be replicated with a large sample size before any conclusions can be made.

The impetus for standards-based reform was the desire to improve teaching and

learning so that all students could demonstrate the knowledge and skills needed in the global economy of today and the future (Thurlow, 2000). The characteristics of standards-based classrooms that Thurlow identifies are "students know the standards and level of proficiency required, student assignments reflect an integration of facts, concepts, and strategies, each assignment is an assessment in itself, and students are provided multiple opportunities to team." (p.9).

She suggested that IEPs must be linked to standards. This is a concept that aligns with access to the general education curriculum and those standards should be mapped to instruction. Students must receive appropriate instruction, characterized by both access to the general education curriculum and by appropriate accommodations. The instruction must reflect high expectations and data based instructional corrections. Students with disabilities must have access to all the remedial and honors programs to which other students have access.

Though not universally supported at this time, the standards-based approach has the potential to help students with disabilities overcome a history of lower expectations, and provide true access to the general curriculum through accommodations and differentiated instruction (Thurlow, 2001). Thus, the challenge facing educators is how to provide access to the general curriculum, how to provide instructional accommodations and differentiated instruction that help every student to achieve high standards including students with disabilities. In adopting this approach, several assumptions are implied. First, educators must believe that all students can learn. Second, students with disabilities should be working toward the same standards as other students, with adequate instructional support. Third, assessment systems must be

designed to be fully inclusive and accessible, allowing for different ways for students to participate (Thurlow, 2001). Standards-based instruction can provide benefits for students with disabilities who take part in state and district assessments, decrease the number of referrals to special education, and promote high expectations for many students who have not been held to high standards (Thurlow, 2002). Attaining the goals of standards-based education for students with disabilities remains a challenge in three ways: reaching agreement that content and performance standards should apply to all students; determining how to extend assessments to students who may need accommodations; and translating assessment results into instructional changes and interventions (Thurlow, 2002). Through the use of standards-based instruction a careful monitoring of student learning using frequent assessment of progress toward standards will be necessary. Instruction will need to be differentiated to meet the individualized needs of all students and instruction will need to be integrated to include standards reflecting behavioral skills, independence, cooperation, as well as academic areas (Thurlow, 2002).

Defur Virginia Study for Students with Disabilities

In August of 2000, Sharon Defur, conducted a brief mail survey of Virginia local special education administrators to gather information on high-stakes reform experiences for students with disabilities in their local districts (Defur, 2002). Ninety-eight out of one hundred thirty-two responded to the survey (74% response rate). In 1998-1999, the percentage of students with disabilities taking the test was 74.5% and of that 74.5%, thirty-four percent of the students passed the test. That was an increase of 7% from the previous year. The intended consequences of participation by students with disabilities are as follows:

Table 2.6

Consequences of Participation by Students with Disabilities

Consequence	% special education administrators reporting
Extent of benefit to students	
Great	3
Large	9
Some	50
Small	21
None	17
Type of positive impact	
Increased access to general curriculum	73
Improved daily performance	21
Improved test scores	15
Other	1
None	20

Table 2.7

Unintended Consequences of Participation by Students with Disabilities

Consequence	% special education administrators reporting
Negative impact	
Higher failure rates	51
Lowered self-esteem	50
Higher drop-out/no diploma	44
None	11
Increase in referral rates	

Table 2.7 (Continued)

More than 40%	74
20%-40%	12
5%-20%	51
<5%	5
None	6
Extent of increase in exemption rates	
Great	4
Large	10
Some	28
Small	33
None	23

While the data collected from the survey indicated an increase in pass rates for students with disabilities and positive impact and benefits to students, the study also indicated some unintended consequences. Some of the students experienced higher failure rates, lowered self-esteem, higher drop-out/no diploma rates, increases in referral rates and an increase in exemptions. This data indicates that the school districts in Virginia need to examine closely these results and develop a plan to increase the positive impact and decrease the negative impacts. Also, the districts will need to examine the reasons for each.

However, despite the fact that there is currently little information available on the participation of students with disabilities in standards-based instruction, according to Marzano, standards hold the greatest hope for significantly improving student achievement. (Scherer, 2001).

Academic Achievement

Three research projects were undertaken at the University of Pittsburgh, the University of Washington, and Vanderbilt University (Zigmond, Jenkins, Fuchs, and Fafard, et.al, 1995). Each university developed a model for altering general education classroom conditions that previously had necessitated the referral of students to special education, returning students with disabilities from special education settings to general education, and accommodating students with disabilities more effectively within those mainstream classrooms. The models were implemented at six schools. The University of Pittsburgh model was implemented in one suburban school and three rural schools across Pennsylvania. The University of Washington model was implemented in one small-town elementary school and the Vanderbilt University model was implemented in one urban middle school. Data were reported from the 1990-91 school year. The planning stage was implemented at all schools before the model was implemented.

The shared purposes of the three models were to increase the capacity of general education to accommodate student diversity and to increase the meaningful participation and improve the achievement outcomes of Learning Disabled (LD) students within the general education structure of the school. The University of Pittsburgh and University of Washington eliminated all forms of pullout service when the implementation stage of the project began. Vanderbilt University's model adopted the goal of gradually decreasing the time LD students spent in special education classes.

In the University of Pittsburgh model the special education teachers co-taught with general education teachers who had special education students in their classrooms. Time was spent planning each week with the special education teacher and general

education teacher. In the University of Washington model one special education teacher spent time in general education classrooms assisting individual students or small groups during reading, language arts, and mathematics lessons. The special education teacher and 1.5 compensatory teachers and one compensatory aide spent 20 minutes each day teaching phonics to 30 primary students. The Vanderbilt University model intensified special education instruction by increasing the amount of individually tailored instruction in an attempt to raise the number of students who had skills that would permit reintegration. As students were reintegrated, the special education teachers served as consultants to general education teachers. Reverse mainstreaming classrooms were developed and special education and general education teachers were paired.

A reading assessment, the Basic Academic Skills Sample (BASS) was administered at all six schools. Over the three projects, 54% of the students with learning disabilities achieved gains in excess of one standard error of measurement. 46% of the students with disabilities failed to register a gain in reading achievement. The results showed that 40% of students with learning disabilities who were being educated in general education classrooms not only were failing to make average gains, but were also slipping behind at a disturbing rate. The findings from these studies suggest that general education settings produce achievement outcomes with learning disabilities that are neither desirable or acceptable (Zigmond, Jenkins, Fuchs, and Fafard, et. al, 1995).

In a study in Florida, data were collected from observations of 1906 students (Taherbhai, 1998). It was conducted over a four-year period during the 5^{th} grade to 8^{th} grade year. There were 1025 females and 881 males included in this study. One hundred ten students received special education services and 419 were students who received free

or reduced meals. This study looked at students' race, gender, SES, and inclusion in the exceptional student program as correlates of academic achievement. The study confirmed the relation between these indicators and students' language, math and reading achievement scores by means of a structural equation model and also evaluated the longitudinal effect of gender, race and SES on scholastic achievement over a four-year period. Results indicated that although the Chi square was significant, the model's acceptability was considered borderline based on the values of other key incremental fit indices. Repeated measures analyses further indicated that race and gender were significant factors in the three categories of achievement and SES was reflective of the early years of change from elementary to junior high school.

Taherbhai (1998) concluded that the structural equation model needs to be modified since only 15% of the variance in achievement is explained by the four variables. Other variables such as parental influence and locus of control should be included in the model. Females significantly outperformed males but the male/female discrepancy is not uniform across race. However, this study did not separate the data for the special education students. Therefore, it cannot draw conclusions about their academic achievement. This study should be done looking specifically at that.

School Attendance

School attendance is an important part of a child's success in school. The rate at which children are absent from school has continued to rise from 1979 when it was 8% nationally to 10% in 1994 (Haberling & Shaffer, 1995). This increasing rate of absenteeism has had its effect on the academic achievement of students in our schools. When children are not in school, it is difficult for them to learn. When they are not in

school, their chances for academic achievement are jeopardized. In this study conducted by Haberling and Shaffer (1995), an attempt was made to show the effects of school on regular education students and students with learning disabilities grade point averages. The study produced a number of results. First, it was demonstrated the significant effect attendance had on grade point averages. As the rate of absenteeism increased, the level of grade point average decreased. The study also confirmed that students with disabilities grade point averages were significantly different from regular education students. However, no difference was found with the rate of absenteeism between students with disabilities and regular education students.

In another study conducted by the New York City Board of Education (1993), it was found that general education students show a higher rate of attendance than do special education students. The average daily attendance for special education classes was 82.3 percent compared to 87.6 percent for general education classes. In every district in the city, general education attendance was higher than special education attendance. The results of this study indicated the following:

- There are differences between the attendance rates of students with disabilities and general education students. Overall, attendance rates for special education classes are lower than general education classes at the elementary, middle school, and high school levels
- The differences between the two groups increase between elementary and middle school and high school.
- The attendance rates for general education and students with disabilities vary together, indicating that schools with high general education attendance rates also

have high special education attendance rates.

- The differences in attendance rates for general education and students with disabilities are not differentially affected by school-level variables. While these variables do influence student attendance there is no discernible difference in their effect.

Brookfield Park High School Attendance Study

In a study that examined the reasons four high school students who did not attend school willingly would increase their attendance at an alternative school for students with special needs. The school was Brookfield Park, a public school in the Northeast. Two research questions were asked of the four students during an interview. The questions were (a) why do students who refused to attend their regular schools willingly attend Brookfield Park? And (b) in what ways is Brookfield Park different from traditional schools? (Wilkens, 2008). Four themes emerged from the interviews that motivated the students to attend school. The themes were school climate, discipline, relationships with teachers, and academic environment. The participants were three males and one female in grades eight through eleven.

Stephen missed 3 months before he was transferred to Brookfield. From January to the end of the school year, he missed a total of 15 days.

Jacob missed 63 days by April during third grade. Then he transferred to Brookfield Park where he missed only two days of the remaining 31 days. In grades 4 through 8, he missed an average of 12 days per year and in ninth grade he missed 16 days.

James missed 191 days between pre-K and sixth grade. After he was transferred to Brookfield Park, he missed only 10 days in his first year.

Courtney missed a total of 128 days in seventh grade. During her first year at Brookfield, she missed 46 days, which was an 82-day improvement over her previous school year's attendance. In ninth grade her absences decreased to 26 days.

Once the students transferred to Brookfield Park, the number of days absent decreased significantly. The author of the study found that the students attributed this to a positive school environment. The students felt accepted and cared about the other students. The small student body gave all the students the opportunity to get to know one another atmosphere was calmer and more conducive to work. The discipline at Brookfield was seen as fair and non-punitive. Teachers at Brookfield were described as caring and understanding. The students trusted the teachers and felt the teachers showed concern and more attuned to the students' feelings. All of these reasons were responsible for the four students' positive attitudes toward school and their willingness to attend (Wilkens, 2008).

Annie E. Casey Foundation Attendance Study

Another study funded by the Annie E. Casey Foundation looked at the potential contributing factors, prevalence, possible responses, and consequences to chronic absence in grades K-3 (Chang & Romero, 2008). Nine urban & some suburban school districts across the United States participated in the study. Chronic absence is defined as missing 10 percent or more of the school year. The percent of chronically absent students ranged from 6.0% to 26.7%. The percentage of students receiving special education services in each district ranged from 7.8% to 21.78%. The data showed that chronic absentees in

kindergarten have the lowest academic performance in first grade (Chang & Romero, 2008). The study looked at the school-related issues of lack of effective and clear communication as contributing to chronic absenteeism as well as barriers to getting to school. Family-related issues that contributed to chronic absenteeism are poverty, unawareness of the adverse impact of chronic absenteeism to achievement, and mobility. Community-related issues were lack of adequate supports to help children make a positive transition to elementary school, distressed areas, and violence. The study suggested each district develop a plan to ensure an increase in school attendance.

An assumption widely understood but rarely examined is that children need to be in school in order to learn. The more days a child misses, the more the child falls behind academically. The issue of not attending school is a serious problem facing society today. Attendance of students with disabilities is an area that needs to be looked at closely. More must be done to encourage students with disabilities to attend school on a more regular basis. And during the time they are in school, their learning needs to be meaningful and they need to be provided with opportunities to experience success. There is a link between chronic absenteeism in high school and dropping out that has been documented (Attwood & Croll, 2006).

Summary

The literature review looked at the overall state of special education with a focus on standard-based instruction which has been mandated by the Individuals with Disabilities Education Act (IDEA). While there have been numerous research articles written about academic achievement, attendance rates, and curriculum, the aligning of standards with the general education curriculum and making adaptations is a new area for

education. Many different educational approaches and instructional strategies have been recommended for educators to use with students with disabilities. Because the standards reform has been around for approximately ten years, there is not much research in this area to determine whether it has a positive effect with children with disabilities. This quantitative study will examine the attendance of students who receive standard- based instructions.

Standard based instruction: The research on standard-based instruction is recent and limited at this point. Each state has defined standards in subject areas determined by its Board of Education. In Pennsylvania Reading, Writing, Listening and Speaking, Mathematics, Environment and Ecology, and Science and Technology , Arts and Humanities, Career Education and Work, Civics and Government, Economics, Family and Consumer Sciences, Geography, Health, Safety and Physical Education, and History have been designated the academic standards for all students. In a student's IEP how a student will achieve these academic standards is addressed. By defining what the academic standards are and determining how a student with disabilities will achieve these standards, educators are providing clear expectations and opportunities for success.

Attendance: Over the years from 1979 to 1994 the research on the attendance of students with disabilities has shown an increase in the rate of absenteeism by two percent nationally. It has been found that the higher the rate of absenteeism, the lower the academic achievement rate. However, a few studies found there to be no difference between the attendance of students with disabilities and their general education peers while more studies found children with disabilities had a lower rate of school attendance. Research has also found that school attendance rates between children with disabilities

and their general education peers increase as they progress to higher grades. This means that children with disabilities miss more school than their general education peers the older they are. The New York study found differences in rates but the Haberling and Scheaffer study did not find any differences.

Chapter 3

Methodology

Introduction

This study will investigate the effect of standards-based instruction on the school attendance of students with disabilities. In conducting this study, school attendance rates will be compared for students with disabilities in 500 school districts in the Commonwealth of Pennsylvania. The purpose is to determine whether rates of attendance will increase for students with disabilities who receive standards-based instruction over the period of the 2003 -2004, 2004 -2005, and 2006 - 2007 school years. In addition this study will determine if students with disabilities in urban, suburban and rural school districts have any difference in their rates of attendance.

Population and Sample

The Commonwealth of Pennsylvania has 501 public school districts. Of the 501 public school districts one school district, Bryn Athen, sends their students to a neighboring district and their attendance is not reported separately. Each of the 500 school districts in Pennsylvania is required to report their student attendance and submit it to the Department of Education in Harrisburg. The attendance data used in this study was accessed on the Pennsylvania Department of Education website (www.pde.state.pa.us/child_acct/site/default.asp). Attendance data for students with disabilities was collected from the 2003 – 2004, 2004 – 2005, and 2006 – 2007 school

years. A t-test was conducted on data from 2003 and 2007 only, because end points of the range were being looked at.

The population in this study is all students with disabilities in the United States. The sample in this study is all students with disabilities in the Commonwealth of Pennsylvania. Students with disabilities are defined as school age children, ages 6 – 21, who receive special education services in one of the thirteen exceptionality categories. The thirteen exceptionality categories are autism, communication disorders, deaf/blind, emotional disability, hearing impairment, learning disability, traumatic brain injury, visual impairment, other health impairment, mental retardation, developmental delay (to age 9), multiple disabilities, and physical disabilities.

The school districts in the Commonwealth of Pennsylvania have been given the designation of urban, suburban or rural. A school district is defined as urban when it is a territory inside an urbanized area and inside a principal city with a population of 250,000 or more, population of less than 250,000 but greater than or equal to 100,000, or a population of less than 100,000. Suburban is defined as territory outside a principal city and inside urbanized area with a population of 250,000 or more, population of less than 250,000 but greater than or equal to 100,000, or a population of less than 100,000. A designation of rural means territory that is greater than or equal to 5 miles from an urbanized area as well as rural territory that is greater than or equal to 2.5 miles from an urban cluster, rural territory than is more than 5 miles but less than or equal to 25 miles from an urbanized area as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster or rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from urban cluster.

Table 3.1

Students Ages 6-21 Receiving Special Education Services in Pennsylvania as of December 1, 2006

Disability*	Total # Students
Mental Retardation	24,056
Hearing Impairment including Deafness	2,757
Speech or Language impairment	39,661
Visual Impairment including Blindness	1,169
Emotional Disturbance	26,159
Orthopedic Impairment	852
Other Health Impairment	14,267
Specific Learning Disability	143,976
Multiple Disabilities	74
Deaf-Blindness	2,766
Autism	9,855
Traumatic Brain Injury	848
Total	266,440

*excludes Developmental Delay

Table 3.2

Public School District Density Designations

Urban	Suburban	Rural
# of districts	**# of districts**	**# of districts**
16	302	182

Research Design

The study will be a quasi-experimental design because it will examine differences between pre-existing populations of students with disabilities attendance rates for each school district in Pennsylvania. This study will also examine differences in attendance rates during a period of three specific school years; 2003 – 2004, 20004 – 2005, and 2006 – 2007 to determine if exposure to standards – based instruction will increase attendance rates for these students. Urban, suburban, and rural school districts will be examined to determine if density impacts attendance rates. The independent variables are time and density (urban, suburban, and rural) and the dependent variable is attendance records. To determine the effect of standards-based instruction on student attendance, the researcher will conduct a t-test on student attendance over the period of time from 2003 to 2007. Three separate ANOVAs will be conducted for the years 2003 – 2004, 2004 – 2005, and 2006 - 2007. The null hypotheses for this study will be:

1. There is no difference in attendance rates for students with disabilities receiving standards – based instruction over the period of time from the 2003 – 2004 to 2006 - 2007.

2. There is no difference in attendance rates for students with disabilities in urban, suburban, and rural school districts over the period of time from the 2003 – 2004, 2004 - 2005, and 2006 – 2007 school years.

Data Collection

In each of the 500 Pennsylvania school districts, student attendance records will be examined to determine if attendance rates will increase over time for students receiving standards-based instruction and to determine if there will be any difference among attendance rates for students attending school in urban, suburban, and rural districts.

Information on attendance for each district in the study will be collected from the Pennsylvania Department of Education website (www.pde.state.pa.us/child_acct/site/default.asp). The attendance data is easily accessible and in the public domain. Attendance information will be collected from the school years of 2003 – 2004, 2004-2005, and 2006-2007. All data are archival and will be retrieved from Pennsylvania's records of student attendance. All data to be analyzed currently exists and no new data will be collected. No interventions will be utilized in this study.

Analysis

In conducting this study descriptive statistics – (means and standard deviations), inferential statistics, and percentages will be used to compare the data. A paired t-test comparison will be conducted using Average Daily Attendance (ADA) percentages for each school district for the school years of 2003 – 2004 and 2006 – 2007.

Data will be collected to compare ADA percentages between urban, suburban, and rural school districts. Three ANOVAs will be conducted to compare attendance rates over three different periods of time.

The school years of 2003 – 2004, 2004 – 2005, and 2006 – 2007 were used to determine if more exposure to standards – based instruction will increase school attendance rates for students with disabilities. In 2003 few if any school districts had fully implemented standards-based curricula. By 2007, nearly all districts had done so. Since district data for implementation by district is not available, these end points were used as reasonable points for extrapolation of trends. Attendance rates will be obtained to determine if there is any improvement in the frequency of attendance after the implementation of SBI. Statistical tests will be computed using SPSS 13.0. Significance will be determined at .05 level.

Limitations

Among the limitations of the study, the three major limitations will be the quality of teacher instruction, actual dates of curriculum implementation, and accuracy of student records. The quality of teacher instruction will vary depending on the years of teaching experience and level of education. Each district's curriculum will be written and aligned to the Pennsylvania standards differently. The record- keeping process will vary from district to district and accurate information may not have been updated or the type of data in the student records may be different from district to district. A sample is limited to all 500 public school districts in Pennsylvania.

Chapter 4

Findings of Study

Descriptive Statistics for Means of Attendance Data

This chapter presents the findings of this study. The independent variables of density and time were studied to determine their effects on the dependant variable of school attendance. Average Daily Attendance (ADA) data and Average Daily Membership (ADM) data for the 500 school districts in the Commonwealth of Pennsylvania were collected for the school years of 2003 – 2004, 2004 – 2005, and 2006 – 2007. Since the attendance data were reported for each district by buildings, the total ADA's and ADM' s for each district was added to compute the total ADA and ADM for each district. Of the 500 school districts in Pennsylvania, thirteen school districts did not report attendance data separately for students with disabilities and were not included in the study. The Average Daily Attendance (ADA) mean was computed by adding all the ADA's for all school districts' students with disabilities and dividing the total to get the mean for each of the years of 2003 – 2004, 2004 – 2005, and 2006 – 2007. The same procedure was followed to obtain the mean for the Average Daily Membership for each of the school districts for each of the previously mentioned school years.

The following table shows the ADA and ADM mean for each year for all school districts included in the study and the standard deviation. The ADA percent is the ADA divided by the ADM to calculate the ADA percentage.

Table 4.1

Average Daily Attendance and Average Daily Membership

	N	Minimum	Maximum	Mean	Standard Deviation
2003 – 2004 ADA	500	.000	7825.450	256.11056	421.117180
2004 – 2005 ADA	500	.000	7751.520	279.39292	435.877173
2006 – 2007 ADA	500	.000	8159.500	275.76842	441.698685
2003 – 2004 ADM	500	.000	7875.860	273.59556	235.909479
2004 – 2005 ADM	500	.000	8918.380	298.33157	487.495477
2006 – 2007 ADM	500	.000	9281.600	294.54780	492.754661
2003 – 2004 ADA pct.	496	.5181	.9975	.937125	.0318077
2004 – 2005 ADA pct.	492	.3052	.9947	.942374	.0333056
2006 – 2007 ADA pct.	495	.7863	1.0000	.941396	.0178291
Valid N (list wise)	488				

Descriptive Statistics for Density Categories

The school districts are designated into the density categories of urban, suburban, and rural. This was done to determine if students with disabilities' attendance rates vary depending upon their density category and to determine if their attendances rates vary over time.

A total of 488 school districts were involved in the study, the reason being some of the rural and suburban districts did not report their attendance rates for students with disabilities. The reasoning will be discussed in Chapter 5. The total number and

percentage of school districts reporting attendance rates for students with disabilities by density category is presented in the table below.

Table 4.2

Urban, Suburban & Rural ADA/ADM Percentage

Year	Category	# of School Districts	Percent
2003 – 2004 ADA	Rural	176	96.7
2003 – 2004 ADA	Suburban	296	98.0
2003 – 2004 ADA	Urban	16	100.0
2004 – 2005 ADA	Rural	176	96.7
2004 – 2005 ADA	Suburban	296	98.0
2004 – 2005 ADA	Urban	16	100.0
2006 – 2007 ADA	Rural	176	96.7
2006 – 2007 ADA	Suburban	296	98.0
2006 – 2007 ADA	Urban	16	100.0
2003 – 2004 ADM	Rural	176	96.7
2003 – 2004 ADM	Suburban	296	98.0
2003 – 2004 ADM	Urban	16	100.0
2004 – 2005 ADM	Rural	176	96.7
2004 – 2005 ADM	Suburban	296	98.0
2004 – 2005 ADM	Urban	16	100.0
2006 – 2007 ADM	Suburban	296	98.0
2006 – 2007 ADM	Urban	16	100.0
2006 – 2007 ADM	Rural	176	96.7
2003 – 2004 ADA pct.	Rural	176	96.7
2003 – 2004 ADA pct.	Suburban	296	98.0
2003 – 2004 ADA	Urban	16	100.0
2004 – 2005 ADA pct.	Rural	176	96.7
2004 – 2005 ADA pct.	Suburban	296	98.0
2004 – 2005 ADA pct.	Urban	16	100.0
2006 – 2007 ADA pct.	Rural	176	96.7
2006 – 2007 ADA pct.	Suburban	296	98.0
2006 – 2007 ADA pct.	Urban	16	100.0

The ADA mean and ADM mean for each rural, suburban, and urban school district was calculated for each of the years 2003 – 2004, 2004 – 2005, and 2006 – 2007. The table below indicates the results.

Table 4.3

ADA/ADM Means by Demographic Category

Year	Category	Mean	95% Confidence Interval Lower	95% Confidence Interval Upper	Standard Error
2003 -2004 ADA	Rural	146.10008	124.82905	167.37111	10.777715
2003 -2004 ADA	Suburban	267.91372	242.87013	292.95731	12.725157
2003 -2004 ADA	Urban	1371.44700	415.72260	2327.17140	448.391752
2004 -2005 ADA	Rural	152.40688	131.39401	173.41974	10.646904
2004 -2005 ADA	Suburban	301.66608	272.54569	330.78647	14.796658
2004 -2005 ADA	Urban	1437.39638	493.79402	2380.99873	442.704525
2006 -2007 ADA	Rural	150.16534	129.05993	171.27078	10.693799
2006 -2007 ADA	Suburban	295.71051	268.18772	323.23329	13.984885
2006 -2007 ADA	Urban	1444.71875	458.65878	2430.77872	462.624118
2003 -2004 ADM	Rural	155.22501	132.56276	177.88727	11.482627
2003 -2004 ADM	Suburban	287.22262	259.92900	314.51624	13.868439
2003 -2004 ADM	Urban	1456.24506	497.55346	2414.93666	449.783859
2004 -2005 ADM	Rural	162.85027	140.36018	185.34035	11.395389
2004 -2005 ADM	Suburban	319.19840	288.53513	349.86166	15.580625
2004 -2005 ADM	Urban	1587.78119	499.12793	2676.43444	510.757224
2006 -2007 ADM	Rural	159.31023	136.81560	181.80485	11.397691
2006 -2007 ADM	Suburban	313.98041	284.73614	343.22467	14.859604
2006 -2007 ADM	Urban	1589.6812	463.55948	2715.80302	528.336114

The ADA percentage rate mean for each of the three years was calculated for rural, suburban, and urban school districts. The information is presented in the following table.

Table 4.4

Average Daily Attendance Percentages

Year	Category	Mean	95% Confidence Interval Lower	95% Confidence Interval Upper	Standard Error
2003 -2004	Rural	.941625	.939107	.944144	.0012763
2003 -2004	Suburban	.935272	.930949	.939595	.0021965
2003 -2004	Urban	.921043	.903132	.938955	.0084035
2004 -2005	Rural	.941554	.934065	.949043	.0037945
2004 -2005	Suburban	.943756	.941811	.945700	.009881
2004 -2005	Urban	.925096	.911575	.938617	.0063436
2006 -2007	Rural	.943446	.941630	.945262	.0009201
2006 -2007	Suburban	.9411612	.939548	.943676	.0010488
2006 -2007	Urban	.925726	.915701	.935751	.0047033

t-test Data

A t -test was completed to determine if standards – based instruction would increase school attendance rates for students with disabilities over the period of time from 2003 – 2004 to 2006 – 2007 was collected. This period of time was used to allow districts time for the implementation of standards. The results are included in the tables that are below.

Table 4.5

Paired Samples Statistics

	Mean	N	Standard Deviation	Standard Error Mean
Pair 1 ADApct2003-2004	.937113	493	.0318546	.0014347
ADApct2006-2007	.941350	493	.0178435	.0008036

Table 4.6

Paired Samples Correlation

	N	Correlation	Significance
Pair 1 ADApct2003-2004 & ADApct2006-2007	493	.251	.000

A paired samples test was completed to determine if any increase in school attendance rates was evident over the 2003 – 2004 school year to the 2006 – 2007 school year for students with disabilities. The results are in the following table.

Table 4.7

Paired Samples Test

Paired Differences	Pair 1 ADA pct. 2003 – 2004 – ADA pct. 2006 - 2007
Mean	-.0042362
Std. Dev	.0323708
Std. Error Mean	.0014579
95% Confid. Int. of Mean	
Lower	-.0071007
Upper	-.0013717
t	**-2.906**
df	**492**
Sig. (2 tail)	**.004**

Review of Hypotheses

As a result of the t test findings, the first hypothesis is accepted. That is, there is there is a significant increase in attendance from the 2003 – 2004 year to the 2006 – 2007 year.

ANOVA Data

An Analysis of Variance (ANOVA) was computed for the three years between the groups and within the groups by density categories for each school year previously discussed. Listed below are the findings.

Table 4.8

ANOVA Data 2003 - 2004

Year	Group	Sum of Squares	df	Mean Square	F	Sig.
2003 -2004	Between groups	.008	2	.004	**4.068**	**.018**
2003 -2004	Within groups	.493	493	.001		
2003 -2004	Total	.501	495			

Table 4.9

ANOVA Data 2004 – 2005

Year	Group	Sum of Squares	df	Mean Square	F	Sig.
2004 - 2005	Between groups	.005	2	.003	2.437	.089
2004 - 2005	Within groups	.539	489	.001		
2004 - 2005	Total	.545	491			

Table 4.10

ANOVA Data 2006 – 2007

Year	Group	Sum of Squares	df	Mean Square	F	Sig.
2006 - 2007	Between groups	.004	2	.002	**6.994**	**.001**
2006 - 2007	Within groups	.153	492			
2006 - 2007	Total	.157	494			

Significant differences were found among density groups for 2 of the 3 years.

Multiple comparisons were completed using the Tukey HSD Post Hoc test. The results are listed in the table below. Comparisons were made between suburban, rural, and urban school districts for Average Daily Attendance percentages for students with disabilities for each of the school years.

Table 4.11

Post Hoc Tests for 2003 – 2004 Data

Dependant variable	Test	Group	(I) Category numeric	(J) Category numeric	Mean difference (I-J)
ADA pct. 2003-2004	Tukey HSD	Suburban	Rural	-.0058664	.0029872
			Urban	.0144424	.0081097
ADA pct. 2003-2004	Tukey HSD	Rural	Suburban	.0058664	.0029872
			Urban	**.0203088(*)**	.0082506
ADA pct. 2003-2004	Tukey HSD	Urban	Suburban	-.0144424	.0081097
			Rural	-**.0203088(*)**	.0082506

*****The mean difference is significant at the .05 level.

Table 4.12

Post Hoc Tests for 2004 – 2005 Data

Dependant Variable	Test	Group	(I) Category Numeric	(J) Category Numeric	Mean Difference (I-J)
ADA pct. 2004 - 2005	Tukey HSD	Suburban	Rural	.0019819	.0031458
			Urban	.0185994	.0085221
ADA pct. 2004 - 2005	Tukey HSD	Rural	Suburban	-.0019819	.0031458
			Urban	.0166174	.0086672
ADA pct. 2004 - 2005	Tukey HSD	Urban	Suburban	-.0185994	.0085221
			Rural	-.0166174	.0086672

*****The mean difference is significant at the .05 level.

Table 4.13

Post Hoc Tests for 2006 – 2007 Data

Dependant Variable	Test	Group	(I) Category Numeric	(J) Category Numeric	Mean Difference (I-J)
ADA pct. 2006 - 2007	Tukey HSD	Suburban	Rural	-.0015826	.0016620
			Urban	**.0155984(*)**	.0045205
ADA pct. 2006 - 2007	Tukey HSD	Rural	Suburban	.0015826	.0016620
			Urban	**.0171810(*)**	.0045957
ADA pct. 2006 - 2007	Tukey HSD	Urban	Suburban	**-.0155984(*)**	.0045205
			Rural	**-.0171810(*)**	.0045957

*****The mean difference is significant at the .05 level.

These findings, while significant, do not suggest any clear time or density trends. That is, in 2003 -2004, rural attendance is greater than urban attendance. There are no significant differences among density levels in 2004 -2005. And in 2006 – 2007, the trend is rural is greater than urban and suburban is greater than urban.

Chapter 5

Discussion

Introduction

This chapter discusses the determination of acceptance or rejection of the null hypothesis, draws conclusions from those acceptances and rejections, and delineates both implications for further research as a result of this study and a final analysis of the complete study, as well as limitations that may account for some of the results in this study. The need for further research studies will also be discussed.

Attendance rates for students with disabilities have generally been lower than their general education peers and research has supported this fact (OSEP, 2001). Prior to P.L. 94-142, local districts were not required to provide educational services to students with disabilities, so students with disabilities often did not attend school. However, with the passage of P.L. 94-142, attendance rates for students with disabilities did not increase automatically and some research studies as recent as 2008 (Swanson, 2008) have supported this. With the implementation of math and reading standards in 1999 in the Commonwealth of Pennsylvania and accessing the general education curriculum, looking at attendance rates for students with disabilities to determine if standards – based instruction would increase their attendance rates proved to be an interesting and important study.

Purpose of the Study

The purpose of this study is to determine if students with disabilities who receive standards – based instruction in mathematics and reading will exhibit an increase in their rate of attendance. This was done through examining attendance records of students with disabilities in all five hundred school districts in the Commonwealth of Pennsylvania. Average Daily Attendance (ADA) and Attendance Daily Membership (ADM) data was collected over a period of three school years. The attendance data was examined for the 2003-2004, 2004-2005, and 2006-2007 school years. Of specific interest was whether students exposed to a standards-based curriculum will demonstrate improved desirable school outcomes as measured by indicators of school attendance. Comparisons for school attendance rates for students with disabilities was conducted over a period of the 2003 – 2004, 2004 – 2005, and 2006 – 2007 school years to determine if attendance rates will increase over time. Density categories (urban, suburban, and rural) were examined to determine if density effected attendance rates. The following section draws conclusions from the statistical analysis completed utilizing SSPS, version 13.0

Conclusions

Of the 500 school districts for which attendance data was collected, 16 of the urban districts or 100% of the attendance were reported, 176 or 96.7% of the rural districts were reported, and 98.0% or 296 of the suburban districts were reported. Districts were not included in this study that did not disaggregate their attendance for students with disabilities or reported no attendance data for their district.

The mean ADA for the 2003 – 2004 school year for the rural school districts was 146.10008, the mean ADA for suburban districts was 267.91372, and the mean ADA for urban districts was 1371.44700. The mean ADM for the 2003 – 2004 school year for the rural districts was 155.22501, the mean ADM for suburban districts was 287.22262, and for the urban districts was 1456.24506. What this states is that of the total number of students with disabilities attending school on an average school day, 94% of the average daily membership of students with disabilities attended school in rural districts, 93.5% for suburban districts, and 92% for the urban districts for the 2003 – 2004 school year.

The mean ADA for the 2004 – 2005 school year for rural districts was 152.40688, for suburban the mean ADA was 301.66608, and for the urban districts it was 1437.39638. The mean ADM for the 2004 – 2005 school year was 162.85027 for rural districts, for suburban districts the mean ADM was 319.19840, and for urban school districts the mean ADM was 1587.78119. This says that 94% of students with disabilities attended school on an average day in rural districts, 94% of students with disabilities in suburban, and 92.5% of the same population in urban districts.

For the 2006 – 2007 school year the ADA mean for rural districts was 150.16534 and ADM mean was 159.31023 which states 94.3% of students with disabilities attended school on a given day. The same year the ADA mean was 295.71051 and ADM mean was 313.98041 or 94.1% of the student population requiring special education services attended school in suburban districts. For urban districts for the same year, the ADA mean was 1444.71875 and ADM mean was 1589.68125 or 92.6% of this population attended school on a given day.

ANOVA results support evidence that during the 2003 – 2004 school year, there was a statistically significant difference between the ADA percentage attendance rates for the groups of rural, urban and suburban districts. The differences between the ADA mean percentage for rural, suburban, and urban districts represent real differences between students with disabilities for the 2003 – 2004 school year in rural, urban, and suburban districts. The F ratio is 4.068 which indicate there is a significant treatment effect. What does this imply? This will be discussed in the next section.

For the 2004 – 2005 school year, ANOVA results support no significant findings between students with disabilities in rural, suburban or urban districts. The F ratio is 2.437 which do not indicate a significant treatment effect.

According to the ANOVA conducted for the ADA percentage for the 2006 – 2007 school year, again there is also a statistical significance between the ADA percentage for students with disabilities in rural, suburban, and urban school districts. The F ratio is 6.994 which indicate a significant treatment effect between these groups. This indicates and supports that over the extended time periods from the 2003 – 2004 and 2006 – 2007 school year, attendance rates increased for students with disabilities in Pennsylvania school districts, regardless of their density regions.

The Tukey HSD, which is a post hoc test, was completed to determine the minimum difference between treatment means that is necessary for significance. The ADA percentage mean for the 2003 – 2004 school year indicates a statistically significance between the ADA percentage mean for rural and urban school districts. There was not a statistically significance between the ADA percentage mean for suburban and urban school districts for the same year.

The Tukey HSD was completed for the 2004 – 2005 school year. For this school year, no statistical significance was found between school attendance rates for students with disabilities in urban, rural, or suburban school districts.

During the 2006 – 2007 school year, the ADA percentage mean between suburban and urban districts was statistically significant but not between suburban and rural districts. The ADA percentage mean between rural and urban districts was statistically significant. This mean difference was statistically significant at the .05 level. The data is interesting that rural students with disabilities have increased attendance rates when there are fewer options for them getting to school. Their urban counterparts would seem to have more options getting to school since they may live close enough to school, can catch another bus or catch a ride from someone who lives nearby.

The findings from the t – test found evidence that supported an increase in attendance from the 2003 – 2004 to the 2006 – 2007 school year. A paired samples test findings suggested standards – based instruction may help increase rates for students with disabilities in Pennsylvania school districts.

From this data, conclusions can be made to support that students with disabilities had a higher percentage of students attending school on an average school day in rural districts than in urban districts during the 2003 – 2004 school year. It can also be concluded that between suburban and urban districts, no statistically significance was found in attendance rates for students with disabilities during this same school year. During the 2004 – 2005 school year, no differences were found between attendance rates for students with disabilities in rural, suburban, or urban districts. For the 2006 – 2007 school year students with disabilities had a higher average attendance percentage rate

between suburban and urban districts, between rural and urban but not between suburban and rural districts.

Hypotheses

The hypotheses rejected were as follows:

H_{01}: There is no difference in attendance rates for students with disabilities receiving standards – based instruction over the period of time from the 2003 – 2004 to 2006 - 2007.

H_{02}: There is no difference in attendance rates for students with disabilities in urban, suburban, and rural school districts over the period of time from the 2003 – 2004, 2004 - 2005, and 2006 – 2007 school years.

Implications

Since mathematics and reading standards were approved in 1999 in the Commonwealth of Pennsylvania, the school attendance rates for students with disabilities has increased for the period of time examined in this study. It can be implied that standards – based instruction might positively impact school attendance rates for students with disabilities the longer and more they are exposed to standards – based instruction.

Density designations for school districts in Pennsylvania found that students with disabilities in rural school districts have higher attendance rates than in urban school districts but there was no difference found between attendance rates for student with disabilities in suburban school districts during the 2003 – 2004 school year. Students with disabilities in rural school districts attend school more than students in urban districts but students in suburban districts were not found to attend school more than students in urban districts or rural districts during the 2003 – 2004 school year. No differences were found

to exist for students with disabilities in their rate of school attendance regardless of density category during the 2004 – 2005 school year. Students with disabilities in rural, suburban or urban school districts did not attend school at increased rates when compared to each group for the 2004 – 2005 school year. With the 2006 – 2007 school year, students with disabilities in suburban school districts attended school more than students in urban districts and there was a difference in school attendance rates for students with disabilities in rural school districts when compared to their peers in urban school districts. Based on these findings, it can be implied that density categories can affect school attendance rates for students with disabilities. No differences in attendance rates were found between students with disabilities in rural or suburban school districts. No differences were found within groups during any of the school years that were examined in this study.

Differences in density regions might have occurred for any number of reasons. There might be different logistics in school districts based on their density designation. Differing cultural approaches to students with disabilities might account for density differences in school districts. Another reason might be in artifact in the data, especially since no effects were found for the 2004 – 2005 year.

Limitations

Three limitations were mentioned previously in Chapter 3. Quality of teacher instruction, curriculum and accuracy of student records were the limitations discussed in Chapter 3. Quality of teacher instruction is defined to mean the education level of the teachers assigned to provide special education services to students with disabilities, the

amount of time each student spends with the teacher receiving special education services, the quality of the instruction provided by the teacher providing the special education services, and the length of time the student has spent with the same teacher receiving services.

Curriculum is another limitation discussed. In the Commonwealth of Pennsylvania, each district addresses curriculum in its five year strategic plan. How each district addresses their curriculum will be different and how their curriculum is aligned to the state standards will vary. Some districts have aligned their curriculum to the state standards, some are in the process of aligning the curriculum to the standards and some districts may not have attempted to align their curriculum to the standards. Some districts may use a specific textbook series and consider that to be their curriculum. How the textbook company has aligned their specific subject textbooks to standards will vary among curriculum companies. Local school districts have control over how standards are addressed differences will vary from district to district.

Accuracy of student records is the third limitation addressed here. Each district will vary in their recording of attendance; how it is recorded, who is responsible for the record keeping, and how it is submitted to the Pennsylvania Department of Education. In this study, it was found that some districts did not submit attendance data for any students and some districts did not disaggregate attendance data for students with disabilities. These districts were not included in this study and their data may have resulted in changing the results of this study.

Another limitation not mentioned in Chapter 3 but which may have impacted this study, is the overrepresentation of minority students receiving special education services.

Some districts may have a large proportion of minority students receiving services while other districts may have a small proportion of minority students receiving special education services. These differences may have affected the results of this study. Urban areas have an increased population of minorities residing there while it has been found that rural areas have smaller populations of minorities residing there. This is a factor that may have impacted the results of this study and should be examined at a later date.

The quality of professional development teachers receive could impact the results of the study and should be examined at a later date. While teachers participate during their district's professional development sessions, other teachers participate in additional professional development sessions. This limitation was not mentioned earlier but could be a factor affecting the results.

A methodological limitation might have impacted the results of this study. When using ADA/ADM ratios, actually testing the means of means might influence the results. This substantially reduces the available amount of variance. Research would need to be conducted using the actual raw attendance data, which would have to be collected from each individual school. Since attendance was so high (in the 90+% range), there is a possibility of a ceiling effect. Since there was not very much room for variation to begin with, to find such significance in a small range is very surprising and has real effect.

Another methodological limitation that might have influenced this study is all categories of the thirteen exceptionalities were combined so that the data reported was for all categories of exceptionality. Each disability category needs to be examined separately. This requires disaggregated data again from individual schools.

Future Research

Future research studies could include examining academic achievement for students with disabilities. Since attendance rates can affect academic achievement, increased attendance rates could increase academic achievement for students with disabilities. Early research studies have indicated that academic achievement for students with disabilities has been lower than their general education peers and lower attendance rate for students with disabilities compared with their general education peers has been cited in this study. Following this reasoning, it can be deduced that increased attendance rates might increase academic achievement for students with disabilities.

Examining overrepresentation of minorities receiving special education services is another area for future research. Overrepresentation of minorities receiving services has been an issue and should be addressed to determine if this can impact attendance rates for students with disabilities by density categories.

Gathering data on professional development, aligning curriculum with the state standards, and individual district data on quality of teacher instruction can be other areas for future studies. Any or all of these areas may impact attendance rates for students with disabilities.

Examining self – esteem of students with disabilities and its affect on academic achievement and school attendance rates is another area of research that is important for students with disabilities.

One other area of interest for future research could be the examining the environment where students with disabilities receive special education services. This can be identified to mean receiving all services in the general education classroom, spending

part time receiving services in a part time special education classroom, receiving services in a full time special education classroom, receiving services in a special education school, receiving services in a hospital setting, or receiving services at home. Investigating the continuum of special education services would be important to determine if this has an effect on school attendance rates and academic achievement for students with disabilities.

Since this study examined attendance data for students with disabilities in Pennsylvania, it would be interesting to examine attendance for students with disabilities in another state to compare results. It would be interesting to determine if students with disabilities attendance rates would increase over time in another state and support the findings from this study.

All of the areas mentioned are important future research studies for students with disabilities. As has been discussed in this study, students with disabilities have had lower attendance rates and academic achievement than their nondisabled peers, and any or all of the aforementioned areas are important to improve educational outcomes for students with disabilities in Pennsylvania and the United States.

References

Academic Innovations; Secretary's Commission on Achieving Necessary Skills (SCANS): Final Report Available; 2000.

Bechard, S.; (2000). Students with Disabilities and Standards-Based Reform; Office of Educational Research and Improvement; Washington, D.C.

Bulik, R.J. (1994). A Need for Curricular Revision in Public School Special Education. Paper presented at the Annual Meeting of the American Educational Research Association; New Orleans, LA.

Carr, J.F. & Harris, D.E.; (2001). Succeeding with Standards: Linking Curriculum, Assessment, and Action Planning; Alexandria, VA: Association for Supervision and Curriculum Development.

Chang, H.N.; Romero, M. (2008). Present, Engaged, and Accounted For, The Critical Importance of Addressing Chronic Absence in the Early Grades; National Center for Children in Poverty; New York City, NY.

Costa, A.L.; (1993). The Challenge of Higher Standards; How World-Class Standards Will Change Us; Educational Leadership, 50 (5).

Daniel, L.G.; King, D. A. (1996). Psychometric integrity of the Self-Esteem Index: A Comparison of normative and field study results. Educational and Psychological Measurement, 65,537 – 550.

Daniel, L.G.; King, D. A. (1995). Relationships among Various Dimensions of Self-Esteem and Academic Achievement in Elementary Students.

DeFur, S.H.; (2002). Education Reform, High-Stakes Assessment, and Students with Disabilities. Remedial and Special Education, 23 (4); 203-211.

The Education of Children and Youth with Special Needs: What Do the Laws Say?. National Information Center for Children and Youth with Disabilities News Digest (NICHY, 1996/1997).

Friedland, S. (1992). Building Student Self-Esteem for School Improvement; NASSP Bulletin; 76(540).

Gable, R.K.; Rucker, C.N. & Smith, E.V. (1997). Assessing student perceptions of affective outcomes of special education programs: Instrument Development, validation, and comparisons to regular education students; Educational and Psychological Measurement; Durham; Aug.

Gale Encyclopedia of Childhood & Adolescence. Gale Research, Special Education (1998).

Gartner, A.; Lipsky, D.K. (1998). The 1997 Reauthorization of IDEA; Individuals with Disabilities Education Act; NCERI Bulletin.

Gay, L.R. & Airasian, P. W. (2000). Educational Research: Competencies for Analysis & Application (6th Ed.). New Jersey: Prentice Hall.

Gilhool, T.K. (1989). *The Right to an Effective Education From Brown to PL 94- 142 and Beyond.* In P.B. Brookes (Ed.), Beyond Separate Education: Quality Education for All, (pp.243 – 253). Maryland: Baltimore.

Gran, Judith, Esq. (2001). Major IDEA Court Decisions in 1999. Council of Parents, Attorneys and Advocates.

Haberling, K.; Shaffer D. V. (1995). School Attendance and Grade Point Averages of Regular Education and Learning Disabled Students in Elementary Schools.

Hoover, J.J. (1990). Curriculum Adaptation: A Five-Step Process for Classroom Implementation**.** *Academic Therapy, 24 (4),* 407-415.

Jones, R. (2000). *Making Standards Work,* American School Board Journal, 187 (9), 27-31.

Kaiser, D. & Abell, M. (1997). Learning Life Management in the Classroom. Teaching Exceptional Children, 70 -75.

Kraft, N.P. & Wheeler, J.; (1996). Developing Curriculum Using Action Research and Collaborative Inquiry: A Case Study; Paper presented at the Annual Meeting of the American Educational Research Association.

Lachet, M.A., Williams, M. & Smith, S.C. (2006). Making Sense of All Your Data. Principal Leadership 7 (2), 16-21.

Levin, M.I., *Congressional 'tweaking' of special education: Authority to fix some of the problems,* PSSA Bulletin, August 1997, 29 – 39.

Lipsky, D.K. & Gartner, A. (1996). The Evaluation of Inclusive Education Programs; NCERI Bulletin; 2 (2).

Lipsky, D.K. & Gartner, A. (1989). Beyond Separate Education: Quality Education for All; Baltimore, MD; Paul B. Brookes Publishing Co.

Malian, I.M., Love, L.L. (1998) Leaving High School: An Ongoing Transition Study. *Teaching Exceptional Children 30*(3), 4-10.

Marzano, R.J. (2004). Building Background Knowledge for Academic Achievement: Research on What Works in Schools; Association for Supervision and Curriculum Development.Alexandria, VA:

McLeskey, J.& Waldron, N.L. (2000). Inclusive Schools in Action Making Differences Ordinary. Association for Supervision and Curriculum Development. Virginia: Alexandria.

Meyan, E.L.; (1990). Exceptional Children in Today's Schools; Love Publishing Company; Denver, Colorado.

National Information Center of Children and Youth with Disabilities (1996). The Education of Children and Youth with Special Needs: What Do the Laws Say?, News Digest 15, Washington, D.C.

New York City Board of Education, Brooklyn, NY. Office of Research, Evaluation, and Assessment. A Comparative Study of Attendance among General Education and Special Education Students (1993).

Office of Special Education Programs (OSEP) (1997). IDEA '97 Final Regulations, http:/www.ed.gov/offices/OSERS/IDEA.

Office of Special Education Programs (OSEP) (2001). IDEA'97 Provisions of Special Interest to Teachers – Topic Brief, http:/www.ed.gov/offices/OSERS/IDEA.

PA Department of Education; Attendance Data; emails sent from G. Bennett, 10-27-2008, 4-17-2009, and 3-30-2009;

PA Department of Education; Chapter 14; Special Education Services and Programs, (1990).

PA Department of Education; Chapter 4; Academic Standards, (1999).

Resnick, L.B. (1995). From Apptitude to Effort: A New Foundation for Our Schools. Journal of the American Academy of Arts and Sciences, 124(4), 54-62.

Saint-Laurent, L., Dione, J., Giasson, J., Royer, E. et al. (1998). Academic Achievement Effects of an In-class Service Model on Students with and without Disabilities, Exceptional Children.

Scherer, M. (2001). *How and Why Standards Can Improve Student Achievement: A Conversation with Robert J. Marzano,* Educational Leadership 59(1), 1-6.

Simon, E.; Foley, E. Passantino, C. (1998). Making Sense of Standards: Implementation Issues and the Impact on Teaching Practice. Children Achieving: Philadelphia's Education Reform.

Stainback, W. & Stainback, S. (1984). A Rationale for the merger of special and regular education; Exceptional Children, 51(2), 102 – 111.

Stevenson, H.W. & Stigler, J.W. (1992). The Learning Gap; Why Our Schools Are Failing and What We Can Learn from Japanese and Chinese Education; Simon & Shuster, NY.

Strong, R.W., Silver, H.F., & Perini, M.J. (2001). Teaching What Matters Most: Standards and Strategies for Raising Student Achievement; Alexandria, VA: Association for Supervision and Curriculum Development.

Swanson, C.B. (2008). *Special Education in America,* The state of students with disabilities in the nation's high schools, Education Research Center.

Taherbhai, H. (1998). Determinants of Academic Achievement in Middle School Children: Are Conventional Beliefs Supported by Longitudinal Data; Educational Research Quarterly, 22 (2).

Thurlow, M.L. (2000). Standards – based reform and students with disabilities: Reflections on a decade of change; Focus on Exceptional Children; Denver.

Thurlow, M. (2001). Students with Disabilities in Standards – Based Reform; A National Summit on the Shared Implementation of the Individuals with Disabilities Education Act.

Thurlow, M. (2002). Positive Educational Results for All Students, The Promise of Standards-Based Reform; *Remedial and Special Education,* 23 (4), 195-202.

Wang, M.C., G. D. Hartel, and H. J. Walberg. (1990). "What Influences Learning? A Content Analysis of Review Literature." *Journal of Educational Research* 84:30-43.

Watson, D.E. (1995). Whom Do You Mean When You Say "All"? Educator Beliefs Regarding Students with Learning Disabilities Achieving Colorado's Educational Standards. (Report No. 143). San Francisco, CA: American Educational Research Association. (ERIC Document Reproduction Service No. ED 385 046)

Weintraub, F.J. (2000). IDEA on Its 25th Anniversary: It's Roots and Accomplishments; In Case, vol 42(3); pp. 3-5.

Wilkins, J. (2008). School Characteristics That Influence Student Attendance: Experiences of Students in a School Avoidance Program, The High School Journal, 91 (3), 12-24.

Wright, P.W.D. & Wright, P.D. (1999). 20 U.S.C. § 1400 – Congressional Findings and Purpose.

Yesseldyke, J.E. (1987). Classification of handicapped students. In M.C. Wang, M.C. Reynolds, & H.J. Walberg (Eds.), Handbook of special education: Research and practice: Vol. 1: Learner characteristics and adaptive education (pp. 253 – 271). Oxford, England: Pergamon Press.

Yesseldyke, J.E.; and Others, *Students with Disabilities & Educational Standards: Recommendations for Policy & Practice*, National Association of State Directors of Special Education, Alexandria, VA; National Center on Educational Outcomes, Minneapolis, MN; St. Cloud State University, MN; May 1994, 7 p.

Zigmond, N.; Jenkins, J.; Fuchs, L.S.; Fafard, M.B. (1995).Special Education in Restructured Schools: Findings from Three Multi-Year Studies; Phi Delta Kappan, 76 (7).

Appendix A

List of Urban School Districts in Pennsylvania

Allentown City

Altoona Area

Bethlehem Area

Erie City

Greater Johnstown

Harrisburg City

Lancaster

Lebanon

Philadelphia City

Pittsburgh

Reading

Scranton

State College Area

Wilkes – Barre Area

Williamsport Area

York City

Appendix B

List of Suburban School Districts in Pennsylvania

Abington	Central Bucks	Center Area	Havorford Township	Mechanicburg Area
Aliquippa	Central Cambria	Duquesne City	Hazelton Area	Mercer Area
Allegheny Valley	Central Columbia	East Allegheny	Hempfield Area	Midland Borough
Wissahickon	Central Dauphin	East Lycoming	Hempfield	Mifflin County
Ambridge Area	Central Greene	East Penn	Hermitage	Millcreek Township
Antietam	Central York	East Pennsboro	Highlands	Millersburg Area
Armstrong	Chambersburg Area	Eastern Lancaster County	Hollidaysburg Area	Milton Area
Athens Area	Charleroi	Easton Area	Hopewell Area	Minersville Area
Baldwin-Whitehall	Chartiers Valley	Elizabeth Forward	Huntingdon Area	Monaca
Beaver	Chartiers-Houston	Elizabethtown Area	Indiana Area	Monessen City
Bedford Area	Cheltenham Township	Ellwood City	Interboro	Montgomery Area
Belle Vernon Area	Chester-Upland	Ephrata Area	Iroquois	Montour
Bellefonte Area	Chichester	Exeter Township	Jeannette City	Kane Area
Bellwood-Antis	Clairton City	Farrell Area	Jenkintown	Kennett Consolidated
Bensalem Township	Clarion Area	Ferndale Area	Jersey Shore Area	Keystone Oaks
Berwick Area	Coatesville Area	Fleetwood Area	Johnsonburg Area	Kiski Area
Bethel Park	Cocalico	Forest City Regional	Kutztown Area	Montoursville Area
Big Beaver Falls	Columbia Borough	Fox Chapel Area	Lampeter-Strasburg	Moon Area
Blacklick Valley	Conestoga Valley	Franklin Regional	Laurel Highlands	Morrisville Borough
Bloomsburg Area	Conewago Valley	Freedom Area	Leechburg Area	Mount Union Area
Blue Mountain	Connellsville Area	Garnet Valley	Lehighton Area	Mt. Lebanon
Boyertown Area	Conrad Weiser Area	Gateway	Lewisburg Area	Muhlenberg
Brownsville Area	Cornell	Gettysburg Area	Penn Cambria	Muncy
Bryn Athyn	Cornwall-Lebanon	Girard	Littlestown Area	Greater Nanticoke Area
Brentwood Area	Corry Area	Farrell Area	Lower Dauphin	Nazareth Area
Abington Heights	Council Rock	Ferndale Area	Lower Merion	Neshaminy
Brentwood Area	Crawford Central	Fleetwood Area	Lower Moreland Township	Woodland Hills

Appendix B (Continued)

Bristol Borough	Curwensville Area	Forest City Regional	Methacton	New Brighton Area
Bristol Township	Dallas	Fox Chapel Area	Loyalsock Township	New Castle Area
Butler Area	Dallastown Area	Franklin Regional	Mahanoy Area	New Kensington - Arnold
California Area	Daniel Boone Area	Freedom Area	Manheim Central	New Hope - Solebury
Camp Hill	Danville Area	Garnet Valley	Manheim Township	Newport
Canon-McMillan	Delaware Valley	Gateway	Marple Newtown	Wayne Highlands
Carbondale Area	Derry Area	Gettysburg Area	McKeesport Area	Washington
Carlisle Area	Donegal	Girard	Spring Cove	Waynesboro Area
Carlynton	Downingtown	Hatboro-Horsham	Spring-Ford Area	West Allegheny
Catasauqua Area	Dubois Area	Ridgeway Area	Springfield	West Chester Area
Centennial	Dunmore	Ridley	Springfield Township	West Jefferson Hills
Norristown Area	Parkland	Ringgold	Saint Clair Area	West Mifflin Area
North Allegheny	Pen Argyl Area	Riverview	Steel Valley	West Shore
North East	Penn - Delco	Rose Tree Media	Steelton-Highspire	Wyoming Valley West
North Hills	Penn Hills	South Fayette Township	Sto-Rox	West York Area
North Penn	Penn Manor	Salisbury Township	Stroudsburg Area	Mifflinburg Area
Northampton Area	Penn - Trafford	Sayre Area	Susquehanna Township	Westmont Hilltop
Northern Lehigh	Pennsbury	Schuylkill Haven Area	Tamaqua Area	Whitehall-Coplay
Northern Cambria	Perkioman Valley	Schuylkill Valley	Riverside	Wilkinsburg Borough
Northeastern York	Peters Township	Selinsgrove Area	Titusville Area	William Penn
Northgate	Philipsburg-Osceola Area	Shaler Area	Towanda Area	Wilmington Area
Northwestern	Phoenixville Area	Shamokin Area	Tredyffrin-Easttown	Wilson Area
Norwin	Pine Grove Area	Sharon City	Trinity Area	Wilson
Oil City Area	Pittston Area	Sharpsville Area	Tunkhannock Area	Windber Area
Old Forge	Plum Borough	Shenandoah Valley	Tyrone Area	Wyoming Area
Oxford Area	Parkland	Shenango Area	Union Area	Wyomissing Area
Palmyra Area	Pen Argyl Area	Shikellamy	Union City Area	York Suburban
Panther Valley	Penn - Delco	Shippensburg Area	Unionville – Chadds Ford	Philipsburg-Osceola Area

Appendix B (Continued)

Colonial	Penn Hills	Slippery Rock Area	Uniontown Area	Upper Perkioman
Portage Area	Penn Manor	Somerset Area	Upper Darby	Quaker Valley
Punxsutawney Area	Pennsbury	Wallingford-Swarthmore	Upper Moreland Township	Upper Merion Area
Pottsville Area	Perkioman Valley	South Middleton	Warren County	
South Allegheny	Peters Township	South Park	Warwick	
South Western	Seneca Valley	South Williamsport Area	Upper Saint Clair	
Pottstown	Phoenixville Area	Southern Lehigh	Valley View	
Pottsville Area	Pine Grove Area	Southeast Delco	Pittston Area	
Plum Borough				

Appendix C

List of Rural School Districts in Pennsylvania

Albert Gallatin Area		Jim Thorpe Area		Southeastern Greene
Allegheny-Clarion Valley	Chestnut Ridge	Juniata County	Northern Tioga	
Annville-Cleona	Clarion-Limestone Area	Juniata Valley	Northern York County	South Side Area
Apollo-Ridge	Claysburg-Kimmel	Keystone	Northwest Area	Southern Columbia Area
Austin Area	Clearfield Area	Keystone Central	Northwestern Lehigh	Southern Fulton
Avella Area	Commodore Perry	Lackawanna Trail	Octorara Area	Southern Huntingdon County
Avon Grove	Conemaugh Township Area	Lake-Lehman	Oley Valley	Southern Tioga
Avonworth	Conemaugh Valley	Lakeland	Oswaygo Valley	Southern York County
Bald Eagle Area	Conneaut	Lakeview	Otto-Eldred	Southmoreland
Bangor Area	Coudersport Area	Laurel	Owen J Roberts	Spring Grove Area
Bentworth	Cranberry Area	Ligonier Valley	Palisades	Tuscarora
Benton Area	Cumberland Valley	Line Mountain	Palmerton Area	Sullivan County
Berlin Brothers Valley	Deer Lakes	Marion Center Area	Penncrest	Susquehanna Community
Bermudian Springs	Derry Township	Mars Area	Pennridge	Susquenita
Bethlehem-Center	Dover Area	Mid Valley	Penns Manor Area	Tri-Valley
Big Spring	Eastern Lebanon County	Midd-West	Penns Valley Area	Troy Area
Blackhawk	East Stroudsburg Area	Middletown Area	Pequea Valley	Tulpehocken Area
Blairsville-Saltsburg	Eastern York	Millville Area	Pleasant Valley	Turkeyfoot Valley Area
Blue Ridge	Elk Lake	Mount Union Area	Pocono Mountain	Tussey Mountain
Bradford Area	Everett Area	New Castle Area	Port Allegany	Twin Valley
Brandywine Heights Area	Fairfield Area	Newport	Purchase Line	Union
	Fairview	Northern Cambria	Redbank Valley	United
			Reynolds	Upper Adams

Appendix C (Continued)

Brockway Area	Karns City Area	Mohawk Area	Rochester Area	Upper Dauphin Area
Brookville Area	Fannett-Metal	Montrose Area	Rockwood Area	Valley Grove
Burgettstown Area	Forbes Road	Moshannon Valley	Saint Marys Area	Wallenpaupack Area
Cameron County	Fort LeBoeuf	Mount Pleasant Area	Shade-Central City	Weatherly Area
Canton Area	North Schuylkill	Neshannock Township	Shanksville-Stonycreek	Wellsboro Area
Carmichaels Area	North Star	Moniteau	Smethport Area	West Branch Area
Crestwood	Franklin Area	North Clarion County	South Butler County	Williamsburg Community
Halifax Area	Frazier	North Pocono	South Eastern	Wyalusing Area
Harbor Creek	Freeport Area	Riverside Beaver County	West Greene	Western Beaver
Harmony Area	Galeton Area	Northeast Bradford	West Middlesex Area	Western Wayne
Saucon Valley	General McLane	Northern Bedford County	West Perry	Williams Valley
Jamestown Area	Glendale	Northern Lebanon	Jefferson-Morgan	
Greenwood	Solanco			

Appendix D
Urban School Districts Special Education Attendance Data

Urban Districts	2004 Attendance ADA/ADM	2005 Attendance ADA/ADM	2007 Attendance ADA/ADM
Allentown City	834.088/913.282	1695.176/1834.972	1367.3/1481.4
Altoona Area	1020.295/1084.174	1195.276/1263.71	1100.2/1160.6
Bethlehem Area	1050.053/1118.042	1433.623/1510.254	1274.2/1347.5
Erie City	1701.985/1838.358	1246.775/1336.634	1493.2/1615.5
Greater Johnstown	412.817/444.599	252.988/265.402	341.0/367.9
Harrisburg City	1140.332/1241.919	872.942/974.556	1026.9/1130.7
Lancaster	1885.507/2089.069	1649.986/1793.076	1375.8/1500.3
Lebanon	91.432/100.497	425.238/456.535	524.1/556.9
Philadelphia City	7825.45/7875.86	7751.52/8918.38	8159.5/9281.6
Pittsburgh	1752.142/1924.635	1484.722/1616.281	1410.4/1532.9
Reading	930.179/1016.465	1968.031/2135.493	1909.6/2073.1
Scranton	753.5/912.034	814.761/914.36	595.0/635.8
State College Area	593.476/621.679	305.41/318.596	396.6/416.4
Wilkes-Barre	340.174/372.354	171.488/179.996	327.0/348.2
Williamsport Area	619.651/672.442	810.137/866.069	833.5/898.3
York	992.071/1074.512	920.269/1020.185	981.2/1087.9

Appendix E

Rural School District Special Education Attendance Data

School District	2004 ADA/ADM	2005 ADA/ADM	2007 ADA/ADM
Albert Gallatin Area	327.405/380.493	495.076/542.821	479.9/520.1
Allegheny-Clarion Valley	52.308/55.819	44.227/46.638	42.2/44.5
Annville-Cleona	87.225/90.317	99.415/103.701	74.6/77.3
Apollo-Ridge	123.765/131.826	97.914/105./3.48	139.7/146.6
Austin Area	10.3/11.398	0.00/0.00	1.6/1.9
Avella Area	59.059/62.644	70.138/74.146	57.0/61.6
Avon Grove	508.80/541.078	396.31/416.434	465.7/490.9
Avonworth	107.909/113.608	114.994/120.167	110.8/116.0
Pine-Richland	162.825/172.65	264.481/277.552	223.1/232.4
Bald Eagle Area	130.498/138.204	55.916/58.798	63.8/67.6
Bangor Area	364.957/385.285	232.689/245.852	292.4/309.8
Bentworth	68.95/75.75	119.512/128.33	105.0/113.2
Benton Area	42.845/44.655	55.064/57.311	43.8/46.0
Berlin Brothers Valley	83.391/87.657	103.077/108.84	107.7/113.5
Bermudian Springs	56.68/66.86	68.135/72.227	72.5/77.8
Bethlehem-Center	130..78//141..723	119.548/391.767	121.7/133.7
Big Spring	390.893/410.067	343.559/359.009	348.1/363.7
Blackhawk	121.792/127.972	77.473/81.744	80.1/84.8
Blairsville-Saltsburg	151.01/161.166	188.475/203.206	197.3/212.2
Blue Ridge	86.349/91.983	153.282/161.838	96.6/102.1
Bradford Area	281.849/302.39	260.021/274.642	299.4/316.9
Brandywine Heights Area	220.366/231.10	227.675/235.822	271.9/293.6
Brockway Area	113.852/118.205	97.00/101.40	83.8/87.6
Brookville Area	96.533/101.361	132.174/138.356	119.1/125.5
Burgettstown Area	51.383/59.239	142.244/150.974	140.1/150.3
Burrell	166.404/177.643	146.157/155.532	180.2/190.3
Cambria Heights	138.598/144.618	121.986/127.017	131.8/138.2
Cameron County	0.00/0.00	73.049/76.477	34.4/36.4
Canton Area	35.611/37.377	70.644/74.265	77.2/81.2
Carmichaels Area	104.046/112.402	105.489/113.167	106.4/114.2
Crestwood	159.564/168.838	123.661/130.988	136.0/146.6
Chestnut Ridge	155.496/164.808	117.614/124.229	154.9/164.7
Clarion-Limestone Area	71.589/76.385	90.413/95.415	95.5/101.6
Claysburg-Kimmel	52.112/55.55	78.292/95.415	45.1/49.0
Clearfield Area	271.566/287.108	295.018/303.456	261.9/279.5
Commodore Perry	49.307/51.275	59.097/61.633	32.4/33.8
Conemaugh Township Area	75.696/80.21	72.131/76.239	70.3/73.9
Conemaugh Valley	63.311/65.925	40.856/42.921	42.7/45.2
Conneaut	247.084/261.147	160.654/169.486	188.6/199.0
Coudersport Area	80.235/85.054	58.75/85.054	59.3/63.6

Appendix E (Continued)

Cranberry Area	118.662/124.814	101.258/107.264	110.7/116.6
Cumberland Valley	590.421/618.425	673.432//702.987	592.4/620.2
Deer Lakes	170.519/182.064	186.742/197.289	213.3/226.5
Derry Township	204.309/215.346	311.384/332.927	288.3/309.3
Dover Area	242.286/256.593	132.972/139.887	207.8/220.1
Forest Area	47.012/50.245	35.118/37.534	40.0/42.9
Eastern Lebanon County	143.026/150.082	167.931/175.886	224.3/232.7
East Stroudsburg Area	763.721/823.24	852.902/920.716	839.7/909.1
Eastern York	41.377/44.196	78.077/81.736	45.3/48.0
Elk Lake	168.622/181.85	137.417/146.178	137.9/146.1
Everett Area	118.06/123.998	109.665/116.264	97.3/103.5
Fairfield Area	57.196/60.151	289.975/307.472	52.5/55.2
Fairview	114.40/120.174	99.096/103.341	152.9/158.5
Karns City Area	119.382/125.736	90.626/95.843	87.1/92.8
Fannett-Metal	64.975/69.715	52.579/55.434	38.0/40.2
Forbes Road	17.782/18.351	163.466/170.733	13.2/14.0
Forest Hills	163.694/172.932	172.508/182.315	176.1/186.2
Fort Cherry	58.153/62.077	51.936/54.455	75.5/80.3
Fort LeBoeuf	242.215/256.556	229.786/243.403	233.0/248.3
North Schuylkill	130.001/140.116	155.512/166.759	158.1/169.9
North Star	105.918/112.33	147.493/157.469	144.2/153.1
Franklin Area	287.508/314.102	316.81/337.686	296.1/316.9
Frazier	23.076/25.147	77.64/84.002	18.5/19.9
Freeport Area	157.246/165.671	120.511/127.43	123.6/130.4
Galeton Area	0.00/0.00	0.00/0.00	0.0/0.0
General McLane	176.936/184.838	206.384/216.772	190.9/199.7
Glendale	60.703/64.745	56.105/54.454	40.9/44.0
Greenwood	78.122/83.027	64.667/68.343	74.0/78.0
Halifax Area	87.225/92.641	113.374/119.161	2.0/2.0
Harbor Creek	108.091/113.249	164.311/170.795	139.4/145.2
Harmony Area	46.888/50.06	42.788/45.395	38.9/40.9
Saucon Valley	0.00/0.00	224.412/234.632	170.6/177.6
Jamestown Area	40.572/42.413	65.097/67.928	34.1/35.8
Jefferson-Morgan	44.77/48.56	20.49/21.605	38.8/41.9
Jim Thorpe Area	57.522/62.399	151.422/160.979	134.6/145.6
Juniata County	106.411/114.101	138.922/146.536	146.8/155.6
Juniata Valley	57.944/60.627	52.847/54.956	54.4/56.7
Keystone	102.238/108.954	103.604/109.496	95.3/101.1
Keystone Central	467.358/498.223	449.072/477.328	473.6/504.4
Lackawanna Trail	134.624/142.264	116.96/122.328	124.0/131.5
Lake-Lehman	94.039/101.464	59.818/62.914	58.3/62.0
Lakeland	35.552/38.166	98.072/103.349	26.3/28.1
Lakeview	164.813/173.745	164.508/173.107	172.2/181.3
Homer Center	101.528/106.988	79.145/83.255	84.7/88.5
Laurel	93.55/98.945	87.94/92.34	104.1/109.7
Ligonier Valley	101.821/108.961	121.222/128.64	72.1/76.4
Line Mountain	81.05/86.42	83.533/88.125	75.6/79.6
Marion Center Area	164.525/175.626	103.591/109.557	122.9/131.1

Appendix E (Continued)

Mars Area	158.466/166.374	114.00/118.786	123.2/128.6
Central Fulton	88.475/93.083	87.194/93.216	87.6/93.7
McGuffey	212.712/227.194	242.263/259.077	183.9/196.0
Meyersdale Area	84.915/90.162	75.122/79.55	81.1/86.3
Mid Valley	92.805/99.447	79.327/84.371	67.2/71.1
Midd-West	198.444/208.308	242.439/257.363	238.6/253.0
Middletown Area	250.214/265.643	265.012/276.495	280.3/298.1
Millville Area	61.629/64.979	74.202/77.596	67.0/70.1
Mohawk Area	112.298/120.445	96.117/101.828	106.4/114.0
Montrose Area	107.89/113.05	198.574/207.96	216.0/227.6
Moshannon Valley	36.834/39.372	25.881/27.486	26.0/28.3
Mount Carmel Area	56.221/60.624	90.461/97.579	93.9/100.2
Mountain View	51.5/54.274	79.05/84.894	102.0/109.3
Mount Pleasant Area	122.799/131.784	122.674/131.784	175.5/188.3
Neshannock Township	0.00/0.00	0.00/0.00	0.0/0.0
Moniteau	118.449/125.88	98.042/103.24	103.3/109.7
North Clarion County	27.376/28.388	39.393/41.657	37.1/39.1
North Pocono	225.724/243.552	294.654/314.67	320.9/344.3
Riverside Beaver County	167.408/180.399	172.816/185.638	177.9/189.6
Northeast Bradford	69.095/72.512	74.288/78.705	59.6/63.2
Northern Bedford County	66.084/70.544	70.658/74.748	70.9/75.0
Northern Lebanon	161.849/170.317	186.135/198.28	180.8/192.5
Northern Potter	27.131/28.666	12.891/13.983	27.9/29.7
Northern Tioga	155.353/164.351	148.36/155.788	159.6/167.8
Northern York County	187.118/197.496	243.783/255.948	235.1/248.3
Northwest Area	135.179/143.945	53.876/57.321	74.4/78.7
Northwestern Lehigh	211.155/222.185	250.963/264.539	229.6/241.0
Octorara Area	7.435/8.006	139.757/149.188	190.5/202.2
Oley Valley	58.617/62.774	121.66/127.179	128.0/133.9
Oswaygo Valley	26.213/28.00	25.77/26.734	26.2/28.0
Otto-Eldred	37.36/39.159	32.261/33.74	23.0/24.4
Owen J Roberts	293.673/317.256	473.115/499.139	316.0/330.5
Palisades	162.428/172.051	231.188/241.118	219.3/229.0
Palmerton Area	169.448/177.64	174.056/183.622	133.4/141.1
Penncrest	289.148/302.985	223.057/230.808	377.1/394.3
Pennridge	616.978/646.837	713.413/747.76	681.7/718.0
Penns Manor Area	51.627/54.897	80.582/84.812	81.7/86.3
Penns Valley Area	115.632/120.694	145.14/151.889	140.1/146.8
Pequea Valley	108.789/115.466	95.69/101.06	118.8/125.2
Pleasant Valley	517.772/550.176	359.325/383.353	228.4/245.0
Pocono Mountain	834.116/898.927	1025.966/1094.874	1031.2/1105.4
Port Allegany	55.41/59.592	72.904/77.725	62.6/65.5
Purchase Line	127.713/137.133	123.968/130.837	106.6/113.9
Redbank Valley	91.045/94.858	117.177/122.358	102.1/106.9
Reynolds	139.431/149.517	69.632/74.31	79.1/85.4
Rochester Area	91.34/97.663	113.005/119.666	127.9/136.8
Rockwood Area	48.482/51.438	52.809/55.877	60.8/64.0

Appendix E (Continued)

Saint Marys Area	126.44/134.504	213.468//226.854	177.0/188.2
Salisbury-Elk Lick	34.731/36.335	23.62/24.92	22.4/23.8
Yough	118.551/123.926	117.173/128.437	116.1/125.4
Shade-Central City	31.9/34.055	35.682/37.48	56.7/59.5
Shanksville-Stonycreek	29.933/31.14	32.877/34.455	35.1/36.3
Smethport Area	35.593/37.915	55.91/61.179	665.7/71.3
Solanco	175.316/185.405	250.661/265.82	276.9/292.9
South Butler County	1007.80/1072.46	70.652/74.289	96.7/103.2
South Eastern	238.533/255.312	317.473/335.842	323.8/342.5
Southeastern Greene	43.39/48.829	24.093/26.871	27.2/30.2
South Side Area	124.125/132.158	111.83/120.461	138.2/147.6
Southern Colombia Area	144.916/152.762	174.14/190.46	128.9/135.2
Southern Fulton	55.508/58.938	57.557/60.414	56.8/59.6
Southern Huntingdon County	63.647/67.251	49.549/52.524	49.9/53.5
Southern Tioga	48.736/51.309	16.773/18.187	32.6/34.9
Southern York County	301.028/317.352	336.624/351.645	373.3/388.9
Southmoreland	153.72/165.582	150.34/160.197	145.8/154.6
Spring Grove Area	310.722/329.137	312.866/327.656	538.7/565.7
Tuscarora	222.343/234.505	209.123/221.152	191.3/204.2
Sullivan County	32.262/33.776	30.045/31.672	47.0/49.4
Susquehanna Community	91.833/96.555	86.916/91.638	67.9/71.7
Susquenita	185.02/197.62	230.778/244.11	226.9/240.8
Tri-Valley	85.049/89.452	74.489/78.045	72.1/75.6
Troy Area	187.317/198.92	176.961/186.475	187.8/199.1
Tulpehocken Area	110.04/110.321	138.506/140.085	143.0/143.5
Turkeyfoot Valley Area	22.413/24.32	8.514/9.00	10.3/11.0
Tussey Mountain	23.613/25.415	7.827/8.269	14.3/15.0
Twin Valley	243.40/246.028	141.418/151.099	151.8/161.0
Union	49.935/52.48	30.873/32.745	41.6/44.4
United	99.293/104.615	98.419/98.939	100.7/107.1
Upper Adams	174.129/183.582	196.051/207.356	169.2/177.9
Upper Dauphin Area	117.305/123.181	77.139/82.179	124.7/133.1
Valley Grove	84.155/88.145	81.627/85.943	105.0/111.0
Wallenpaupack Area	394.633/419.642	449.776/483.285	431.4/460.7
Warrior Run	160.433/171.016	155.039/163.961	156.3/167.0
Wattsburg Area	132.938/141.717	147.124/155.048	233.6/249.2
Weatherly Area	61.154/66.471	81.18/86.254	73.4/78.8
Wellsboro Area	145.588/153.49	166.714/175.574	155.9/164.7
West Branch Area	95.567/102.661	0.00	61.5/66.2
West Greene	102.624/111.258	255.684/272.255	111.3/120.8
West Middlesex Area	58.241/61.095	87.333/92.288	79.8/84.4
West Perry	374.096/395.22	393.771/417.345	349.8/371.7
Western Beaver	46.389/48.811	68.04/77.616	49.9/53.2
Western Wayne	210.293/225.743	232.239/249.785	237.5/254.1

Appendix E (Continued)

Williams Valley	87.258/92.218	88.834/93.577	81.0/85.3
Williamsburg Community	46.975/48.804	64.34/66.28	53.9/56.1
Wyalusing Area	42.641/45.077	67.043/71.038	55.3/58.1

Appendix F
Suburban School Districts Special Education Attendance Data

School District	2003 ADA/ADM	2005 ADA/ADM	2007 ADA/AMA
Abington Heights	223.764/240.294	285.006/304.243	243.3/259.8
Abington	590.375/626.686	590.799/628.32	589.2/626.4
Aliquippa	135.666/147.00	105.367/113.273	145.8/160.4
Allegheny Valley	40.747/42.855	68.422/72.845	35.7/37.7
Wissahickon	436.638/456.431	531.987/553.655	497.9/518.0
Ambridge Area	310.143/332.475	254.583/272.417	217.2/234.8
Antietam	59.585/62.954	92.879/97.817	75.9/79.2
Armstrong	533.942/569.99	771.223/815.491	755.9/802.3
Athens Area	336.40/359.477	306.58/324.484	320.9/341.6
Baldwin-Whitehall	392.142/416.53	347.172/366.357	323.3/340.7
Beaver	76.687/81.372	88.122/91.730	115.1/120.1
Bedford Area	231.179/262.631	223.962/237.569	223.3/267.0
Belle Vernon Area	276.389/297.279	238.603/256.789	229.2/246.4
Bellefonte Area	351.903/400.051	317.216/337.196	334.1/354.5
Bellwood-Antis	82.064/86.123	69.079/72.611	82.7/87.1
Bensalem Township	286.899/307.401	458.297/488.103	409.3/435.6
Berwick Area	433.521/460.937	457.394/484.233	441.1/480.0
Bethel Park	398.17/421.104	542.578/569.049	481.6/502.7
Big Beaver Falls	160.632/173.169	147.736/158.267	152.9/164.9
Blacklick Valley	44.884/46.988	46.611/48.790	62.6/65.8
Bloomsburg Area	137.693/145.398	177.573/185.001	143.2/151.2
Blue Mountain	273.738/289.906	331.343/350.434	308.9/324.8
Boyertown Area	579.169/606.523	741.722/777.639	737.5/771.6
Brownsville Area	152.146/173.067	114.964/126.844	124.0/138.0
Bryn Athyn	Did not report data	Did not report data	Did not report data
Brentwood Area	92.397/98.791	59.277/62.79	73.3/77.0
Bristol Borough	241.73/259.80	152.763/161.028	195.7/210.4
Bristol Township	663.486/709.381	764.085/818.898	701.4/747.6
Butler Area	907.165/1364.133	651.39/698.226	647.5/696.5
California Area	73.225/75.14	56.68/64.165	76.9/80.9
Camp Hill	74.301/78.967	80.548/83.881	52.0/53.8
Canon-McMillan	315.443/334.439	377.745/396.796	355.3/380.2
Carbondale Area	46.594/51.905	24.988/26.733	33.5/35.7
Carlisle Area	534.126/560.644	319.231/339.244	362.3/380.8
Carlynton	63.067/67.869	98.034/104.725	44.4/47.0
Catasauqua Area	109.338/116.982	162.787/168.972	184.4/194.8
Centennial	574.769/604.450	694.612/729.787	590.2/619.9
Center Area	83.208/88.829	127.114/134.552	86.7/92.0
Central Bucks	1092.469/1229.258	1520.969/1667.093	1244.7/1314.7
Central Cambria	182.351/192.697	173.721/183.187	189.3/199.1
Central Columbia	240.663/252.108	182.907/192.077	193.8/203.7
Central Dauphin	1037.833/1094.813	980.644/1035.647	1025.9/1086.0
Central Greene	280.14/306.834	348.784/374.00	316.4/342.2

Appendix F (Continued)

Central York	261.293/272.585	185.706/195.099	216.1/226.8
Chambersburg Area	965.004/1021.194	950.598/1048.432	996.3/1064.2
Charleroi	154.259/163.894	162.028/175.574	150.2/161.4
Chartiers Valley	140.784/149.589	208.443/219.363	133.0/140.7
Chartiers-Houston	84.77/90.651	80.239/84.700	155.9/166.1
Cheltenham Township	263.461/277.673	334.268/359.93	371.2/388.4
Chester-Upland	583.705/611.703	433.164/492.278	768.5/861.7
Chichester	489.514/526.059	628.697/669.293	612.3/653.6
Clairton City	140.768/155.091	77.506/86.761	83.8/91.6
Clarion Area	49.389/52.484	30.308/32.172	44.9/47.0
Coatesville Area	432.466/471.666	485.46/533.999	372.9/406.2
Cocalico	234.716/246.15	367.492/385.674	347.8/365.2
Columbia Borough	151.072/160.867	126.567/133.364	150.1/158.8
Conestoga Valley	277.531/288.415	0.00/0.00	0.00/0.00
Conewago Valley	228.10/241.931	123.466/130.354	200.9/212.7
Connellsville Area	509..574/566.59	672.538/728.450	535.0/583.7
Conrad Weiser Area	206.056/215.769	245.949/256.218	249.0/260.0
Cornell	71.743/77.669	91.369/96.721	91.3/98.5
Cornwall-Lebanon	168.445/178.746	350.987/369.061	253.7/270.1
Corry Area	235.816/247.903	344.219/364.755	346.1/367.2
Council Rock	612.247/643.648	1110.956/1165.303	976.7/1082.3
Crawford Central	409.612/437.281	373.839/391.558	481.7/509.0
Curwensville Area	118.61/124.467	105.236/106.517	99.1/104.9
Dallas	126.107/134.054	126.613/134.501	125.7/133.5
Dallastown Area	131.144/136.00	0.00/0.00	130.8/136.0
Daniel Boone Area	224.80/230.614	355.235/372.334	345.9/361.9
Danville Area	224.379/235.813	241.538/254.627	222.3/237.2
Delaware Valley	299.166/320.533	472.154/500.622	362.4/384.7
Derry Area	27.744/29.718	35.691/37.568	21.5/22.8
Donegal	300.428/319.653	260.59/276.825	286.9/304.2
Downingtown	820.37/864.804	637.452/646.227	668.7/703.6
Dubois Area	478.039/507.647	518.254/549.364	521.5/552.9
Dunmore	19.066/21.761	22.105/23.738	36.7/38.9
Duquesne City	66.395/73.77	39.0/41.0	44.4/49.5
East Allegheny	84.946/90.803	73.412/77.663	86.6/90.8
East Lycoming	80.319/84.541	59.954/63.03	70.8/74.0
East Penn	439.68/482.088	563.84/594.861	1112.7/1178.9
East Pennsboro	299.05/313.287	283.037/298.743	271.8/286.2
Eastern Lancaster County	154.195/162.563	268.017/279.678	156.5/164.0
Easton Area	355.104/376.40	748.321/790.596	735.0/780.4
Elizabeth Forward	337.493/361.545	354.749/376.938	340.7/357.4
Elizabethtown Area	476.249/500.099	349.10/367.782	342.4/363.7
Ellwood City	173.439/182.217	146.729/156.039	114.0/122.7
Ephrata Area	332.836/348.149	332.386/346.458	334.8/351.7
Exeter Township	381.339/400.929	424.279/446.381	398.2/425.1
Farrell Area	110.364/115.797	106.30/111.578	95.7/101.2
Ferndale Area	63.608/66.697	83.102/87.083	54.1/56.6
Fleetwood Area	202.971/212.510	204.492/213.761	185.3/193.4
Forest City Regional	60.383/64.060	40.929/44.411	50.5/54.1
Fox Chapel Area	341.416/361.081	430.478/458.44	428.2/456.1

Appendix F (Continued)

Franklin Regional	172.113/180.863	287.580/300.269	253.5/264.7
Freedom Area	138.65/146.952	151.617/162.167	147.3/157.8
Garnet Valley	459.192/479.663	468.129/486.718	551.6/572.8
Gateway	638.046/679.704	607.000/640.092	500.6/540.2
Gettysburg Area	170.423/185.396	183.376/193.908	201.5/213.6
Girard	197.050/208.658	220.557/233.975	204.9/216.6
Governor Mifflin	437.139/455.804	331.089/350.216	367.3/385.7
Great Valley	415.104/434.038	428.795/449.337	466.4/488.0
Greensburg Salem	54.996/60.506	185.676/196.743	190.7/201.3
Greater Latrobe	184.351/196.943	214.276/229.130	206.0/200.5
Greencastle-Antrim	149.84/158.077	175.161/184.158	227.2/240.3
Greenville Area	111.406/117.616	119.706/126.422	135.8/142.4
Grove City	236.761/247.106	243.453/252.579	180.7/229.8
Hamburg Area	154.768/163.378	150.339/157.967	150.1/159.0
Hampton Township	234.400/244.988	250.298/259.849	246.9/257.3
Hanover Area	195.234/207.868	226.047/242.894	219.3/237.1
Hanover Public	181.502/194.721	148.723/157.368	129.8/137.3
Hatboro-Horsham	377.893/396.541	425.021/443.395	439.8/463.7
Havorford Township	553.59/583.28	716.708/760.444	509.7/533.7
Hazelton Area	446.528/473.654	341.229/372.141	472.5/516.0
Hempfield Area	510.319/537.190	482.857/509.865	652.0/686.4
Hempfield	473.067/503.727	782.964/818.368	760.6/793.0
Hermitage	188.341/200.764	98.947/106.183	137.0/146.2
Highlands	233.873/249.477	278.187/293.721	271.6/286.1
Hollidaysburg Area	381.579/408.007	403.124/424.902	386.5/407.7
Hopewell Area	221.103/233.296	256.136/273.80	216.6/231.0
Huntingdon Area	249.155/261.456	232.041/241.061	268.6/282.0
Indiana Area	301.298/318.136	94.857/101.346	37.5/40.4
Interboro	439.393/464.987	324.111/343.765	323.6/343.2
Iroquois	87.944/93.092	74.556/78.163	115.1/121.3
Jeannette City	148.581/159.435	84.055/90.544	112.5/121.2
Jenkintown	44.915/53.616	57.192/60.200	30.3/31.6
Jersey Shore Area	347.039/366.918	291.812/305.574	342.9/359.9
Johnsonburg Area	63.524/66.597	71.822/74.887	64.4/68.8
Kane Area	81.054/85.164	92.447/96.378	101.1/106.5
Kennett Consolidated	243.328/262.207	395.058/451.331	224.6/238.0
Keystone Oaks	197.724/212.061	220.290/232.924	183.7/195.9
Kiski Area	231.208/247.252	208.065/223.429	227.9/244.8
Kutztown Area	168.44/176.31	226.800/236.587	242.0/252.7
Lampeter-Strasburg	247.398/259.796	281.742/295.953	307.6/322.6
Laurel Highlands	239.32/262.652	271.642/297.584	990.9/1073.3
Leechburg Area	87.641/91.741	96.278/100.057	94.9/100.0
Lehighton Area	209.567/221.038	217.490/229.722	220.1/233.3
Lewisburg Area	58.881/62.562	78.660/82.862	84.7/88.9
Penn Cambria	151.767/161.643	154.787/163.893	170.2/179.9
Littlestown Area	121.419/128.016	21.699/23.000	184.7/196.3
Lower Dauphin	423.725/446.007	419.825/445.537	412.7/435.9
Lower Merion	404.517/442.845	758.640/793.941	775.6/812.1
Lower Moreland Township	110.314/115.184	128.611/133.690	118.2/122.4

Appendix F (Continued)

Loyalsock Twp.	95.295/100.625	98.470/103.509	99.2/103.1
Mahanoy Area	106.695/114.539	119.203/129.558	90.2/98.0
Manheim Central	178.398/185.644	396.726/419.233	149.1/155.7
Manheim Township	312.962/330.353	430.495/452.695	421.8/443.5
Marple Newtown	375.137/398.831	317.845/333.309	102.7/108.4
McKeesport Area	537.596/592.191	425.555/461.703	474.1/516.3
Mechanicburg Area	234.519/246.138	286.841/300.994	253.1/265.8
Mercer Area	143.365/150.449	172.572/181.167	205.8/216.7
Midland Borough	23.494/26.603	34.143/36.254	46.3/49.0
Mifflin County	592.048/627.773	585.699/617.670	578.6/613.8
Millcreek Township	439.819/464.500	732.609/753.958	678.9/720.7
Millersburg Area	25.677/27.166	9.535/9.972	22.3/23.1
Milton Area	151.547/163.310	106.311/113.437	141.7/152.5
Minersville Area	47.47/51.17	38.861/41.344	51.8/55.0
Monaca	75.802/80.171	58.767/62.645	70.3/74.4
Monessen City	82.319/89.609	54.828/61.634	75.8/84.2
Montgomery Area	78.051/83.829	72.959/78.645	74.3/78.6
Montour	222.165/235.694	314.009/333.646	248.2/264.3
Montoursville Area	135.946/141.884	154.878/163.617	151.0/158.7
Moon Area	364.330/384.906	237.867/253.203	252.4/269.2
Morrisville Borough	20.689/21.960	25.413/27.022	29.2/30.8
Mount Union Area	108.229/114.285	137.695/143.656	87.3/92.2
Mt. Lebanon	411.810/428.756	569.366/594.272	535.9/560.2
Muhlenberg	215.078/225.133	335.191/351.017	271.5/284.2
Muncy	90.779/97.302	65.358/69.039	72.7/77.0
Greater Nanticoke Area	109.788/120.022	203.999/218.858	120.1/129.1
Nazareth Area	392.97/410.407	326.411/341.547	270.8/284.9
Neshaminy	865.996/909.713	849.238/894.537	883.7/928.8
Woodland Hills	250.86/278.22	599.612/653.668	595.6/646.1
New Brighton Area	76.879/82.743	133.934/142.128	122.7/129.9
New Castle Area	399.478/515.594	348.783/379.067	417.3/458.8
New Kensington - Arnold	212.06/221.408	202.942/217.450	190.5/202.8
New Hope - Solebury	30.341/32.058	0.00/0.00	83.4/101.3
Newport	80.027/85.086	100.719/106.875	97.5/104.0
Norristown Area	711.466/761.739	919.446/979.698	652.1/691.2
North Allegheny	654.69/684.768	683.198/712.551	719.4/751.0
North East	93.125/97.872	92.031/99.258	100.7/108.9
North Hills	269.718/287.327	554.319/584.416	473.9/498.7
North Penn	1370.723/1436.741	2127.208/2162.868	1379.7/1446.0
Northampton Area	502.116/530.722	585.326/616.125	550.4/582.7
Northern Lehigh	157.168/164.821	208.311/219.092	117.2/123.7
Northern Cambria	63.667/67.493	130.479/136.791	99.8/105.0
Northeastern York	121.37/130.307	276.505/291.318	243.7/258.5
Northgate	73.621/77.436	67.071/70.693	78.7/83.6
Northwestern	191.141/205.282	177.318/189.698	192.9/206.0
Norwin	225.19/238.16	274.727/289.501	254.0/267.7
Oil City Area	390.879/415.172	328.418/346.655	367.8/389.5
Old Forge	56.016/59.449	19.544/21.455	25.5/27.9
Oxford Area	535.883/583.963	312.807/330.90	261.9/278.3

Appendix F (Continued)

Palmyra Area	36.439/46.047	319.381/333.994	236.3/251.4
Panther Valley	49.936/96.379	56.532/60.428	75.31/80.40
Parkland	649.33/684.073	837.774/881.71	708.4/743.3
Pen Argyl Area	147.408/156.82	146.855/151.685	151.1/162.2
Penn - Delco	31.699/34.000	99.589/105.286	20.7/22.0
Penn Hills	597.12/647.41	321.527/345.604	404.5/434.7
Penn Manor	366.921/383.733	483.669/504.414	511.1/533.0
Penn - Trafford	190.268/204.612	182.129/192.694	186.7/197.9
Pennsbury	886.52/960.08	665.51/670.521	909.8/960.5
Perkioman Valley	235.597/248.235	346.483/360.987	328.7/342.9
Peters Township	205.065/215.256	147.321/154.133	224.5/234.1
Philipsburg-Osceola Area	99.323/107.073	235.518/249.071	110.1/117.0
Phoenixville Area	204.104/215.541	227.273/241.016	223.4/236.4
Pine Grove Area	170.37/179.797	131.309/138.462	121.1/127.1
Pittston Area	127.26/139.99	107.673/119.544	140.3/153.7
Plum Borough	488.388/512.432	328.129/344.234	467.8/481.2
Colonial	273.6/288.5	0.00/0.00	327.0/342.8
Portage Area	84.566/90.233	77.33/81.623	54.7/57.2
Pottsgrove	244.556/259.915	260.862/277.429	274.4/290.1
Pottstown	393..626/423.014	373.604/393.728	354.0/375.8
Pottsville Area	142.214/152.88	170.069/184.814	186.9/203.7
Punxsutawney Area	316.605/334.123	317.268/336.175	345.4/364.6
Quaker Valley	156.13/166.379	197.628/207.657	171.0/181.2
Ridgeway Area	86.669/91.418	100.229/106.26	102.6/108.6
Ridley	594.117/632.813	803.27/849.11	840.9/887.4
Ringgold	193.347/208.614	326.204/347.356	201.7/218.7
Riverview	61.043/64.250	41.334/43.625	45.6/47.7
Quakertown Community	299.408/316.974	369.287/389.248	344.5/363.8
Radnor Twp.	370.167/384.683	384.925/400.500	378.8/394.7
Red Lion Area	358.301/424.668	407.54/436.102	343.9/366.4
Richland	36.649/39.027	91.356/96.60	85.3/88.7
Rose Tree Media	276.165/287.843	295.597/308.073	292.3/308.1
South Fayette Township	110.755/117.587	109.723/115.233	105.6/111.4
Salisbury Township	187.037/227.489	212.566/220.757	214.1/224.5
Sayre Area	96.563/102.000	71.761/75.719	0.00/0.00
Schuylkill Haven Area	142.629/154.08	148.605/156.778	150.1/159.9
Schuylkill Valley	127.817/132.778	215.352/223.382	209.8/218.6
Selinsgrove Area	207.865/218.995	103.937/109.785	112.7/119.4
Shaler Area	410.891/492.842	862.962/914.308	766.2/819.4
Shamokin Area	57.18/59.233	114.29/120.58	141.4/149.9
Sharon City	175.582/185.467	252.189/264.334	228.6/241.2
Sharpsville Area	98.722/104.242	99.347/104.173	104.0/109.6
Shenandoah Valley	34.592/37.769	43.07/46.489	67.7/77.2
Shenango Area	91.17/96.34	106.71/112.22	97.2/103.2
Shikellamy	121.96/129.98	222.434/264.334	203.6/217.4
Shippensburg Area	299.84/317.874	309.113/326.53	288.1/306.0
Slippery Rock Area	153.308/162.591	205.986/217.689	247.8/262.4
South Middleton	200.545/209.638	276.139/288.894	179.2/188.2
Southern Lehigh	167.10/176.284	140.724/149.385	260.8/276.9
Southeast Delco	456.384/490.188	305.835/333.436	433.1/469.2
Seneca Valley	764.908/807.91	520.388/548.599	546.0/576.8

Appendix F (Continued)

Somerset Area	270.233/290.207	295.808/315.847	314.4/339.0
Souderton Area	569.705/603.024	637.276/672.06	601.7/634.6
South Allegheny	115.348/122.767	112.181/119.744	127.3/135.8
South Western	189.549/201.91	238.276/251.325	215.9/229.3
Spring Cove	196.51/211.055	187.796/197.709	215.1/225.7
Spring-Ford Area	261.588/279.407	753.868/793.587	659.7/693.0
Springfield	254.158/269.301	434.474/454.69	414.8/434.7
Springfield Township	104.601/109.039	434.31/450.756	334.7/352.9
Saint Clair Area	94.06/99.322	67.136/72.351	103.5/113.2
Steel Valley	181.008/199.328	212.13/230.085	0.00/0.00
Steelton-Highspire	110.675/118.837	137.799/148.374	141.8/148.6
Sto-Rox	229.785/254.656	112.803/123.361	228.1/247.0
Stroudsburg Area	361.837/386.659	476.794/510.617	448.4/481.6
Susquehanna Township	400.169/427.203	327.005/343.65	316.0/332.3
Tamaqua Area	116.912/125.463	140.789/151.976	171.1/183.6
Tunkhannock Area	79.926/83.00	228.336/244.705	188.8/201.3
Tyrone Area	200.814/211.532	238.363/251.323	202.3/212.8
Union Area	56.305/59.671	94.179/99.912	80.6/86.7
Union City Area	142.724/154.367	126.338/133.441	134.9/144.3
Unionville – Chadds Ford	126.811/132.572	334.264/348.78	144.1/150.9
Uniontown Area	221.469/250.414	378.397/413.214	393.8/430.5
Upper Darby	1519.145/1623.935	1231.639/1313.014	1214.6/1319.8
Upper Dublin	335.984/353.24	446.683/460.781	374.3/388.0
Upper Moreland Township	297.387/309.221	250.913/284.379	157.3/165.6
Upper Merion Area	502.612/524.704	508.443/530.385	471.3/490.4
Upper Perkioman	225.21/237.35	272.029/284.379	272.1/284.0
Upper Saint Clair	273.946/289.737	380.062/395.768	343.5/358.4
Valley View	214.074/231.246	213.69/226.51	217.3/228.8
Wallingford-Swarthmore	153.354/161.058	370.641/388.662	395.8/412.9
Warren County	634.49/672.664	439.557/466.248	548.0/581.2
Warwick	508.58/532.455	513.191/537.171	522.6/545.6
Wayne Highlands	279.868/298.146	180..955/191.975	240.1/254.0
Washington	192.378/209.294	183.929/204.38	137.5/147.7
Waynesboro Area	45.751/47.101	171.93/182.969	177.0/189.7
West Allegheny	265.54/284.032	276.364/290.239	282.6/296.4
West Chester Area	570.44/594.91	823.78/862.78	1037.3/1089.4
West Jefferson Hills	134.685/144.872	110.581/119.229	112.5/120.9
Wyoming Valley West	418.248/458.633	427.064/456.012	428.3/470.5
West York Area	154.51/162.907	261.52/272.393	215.55/227.9
Mifflinburg Area	165.093/174.479	216.09/226.95	201.2/213.9
Westmont Hilltop	139.024/146.598	103.595/108.471	113.2/117.9
Whitehall-Coplay	17.953/18.945	511.522/541.458	129.1/135.4
Wilkinsburg Borough	109.908/123.646	186.853/203.271	155.6/169.6
William Penn	700.749/772.777	623.12/680.036	620.0/681.7
Wilmington Area	86.03/90.532	190.626/202.286	189.8/203.0
Wilson Area	199.28/209.787	203.442/209.787	199.1/208.0
Wilson	508.92/532.161	625.748/657.397	584.5/611.8
Windber Area	112.561/118.28	126.272/132.512	126.1/132.7
Wyoming Area	94.232/100.402	108.174/117.562	94.4/102.1

Appendix F (Continued)

Wyomissing Area	77.931/81.724	142.88/150.14	117.6/124.0
York Suburban	197.016/206.110	172.37/179.534	202.9/211.7
West Mifflin Area	251.131/270.626	299.657/320.384	304.1/324.9
South Park	2.716/3.045	146.125/155.371	325.4/348.6
South Williamsport Area	120.107/125.517	73.325/76.767	117.8/134.5
West Shore	679.588/723.257	838.505/890.256	872.0/930.1
Riverside	79.926/83.00	32.842/35.177	54.1/57.6
Titusville Area	306.333/327.522	279.182/293.409	288.4/306.9
Towanda Area	200.808/211.756	123.17/129.01	132.5/139.1
Tredyffrin-Easttown	456.994/479.537	488.734/511.202	485.8/506.8
Trinity Area	365.27/386.12	229.942/247.589	223.5/242.5