Closing the Achievement Gap Report 21st for entury

LEARNERS

Third Edition







West Virginia

2009-2010

Office of Assessment, Accountability and Research Division of Curriculum and Instructional Services West Virginia Department of Education







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Closing the Achievement Gap for 21st Century Learners in West Virginia



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Revisions Within the 3rd Edition

Closing the Achievement Gap (CAG) Report for 21st Century Learners in West Virginia



The <u>CAG Report (3rd edition)</u> provides:

- Revised booklet covers
- Updated assessment descriptions
- Updated impact assessment data and findings
- Revised WVDE initiatives/program information

Specific impact assessment data and findings provided:

- WESTEST 2 data 2009 provided impact assessment data for first year implementation no comparisons with previous years
- **WESTEST** data 2004-2008 (archived in Appendix A)
- NAEP 2009 Mathematics assessment data—provided data for 2003, 2005, 2007, and 2009 Mathematics, grades 4 and 8
- **ACT** and **SAT** data—updated data through 2008
- ACT Plan and ACT EXPLORE— updated data through 2007
- Career/Technical Education— updated data through 2009
- High Schools That Work (HSTW)—2004, 2006, and 2008 assessment data
- 21st Century Health Literacy Data (Fitness Gram and HEAP)— <u>FitnessGram</u> 2005-2006, 2006-2007, 2007-2008, and 2008-2009 assessment data provided; <u>HEAP</u> 2003, 2007, 2008 and 2009 assessment data provided
- Additional State Public School Subgroup Impact Data—provided updated data through 2009 for Advanced Placement (AP) enrollment, AP performance data, attendance rate, dropout rate, graduation rate, college-going rate and retention

Acknowledgements

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West Virginia Students' Artwork

Throughout the *Closing the Achievement Gap Report for 21st Century Learners in West Virginia (CAG)*, 3rd edition, the divider pages feature students' artwork from West Virginia. Each student's name, school and county information is presented along with his or her artwork. Student artwork was volunteered by representatives from two separate sources.

A portion of the student artwork was exhibited during *Youth Art Month Exhibition* at the West Virginia Cultural Center in March/April 2008. This program was produced in cooperation with the West Virginia Art Education Association and the West Virginia Department of Education in support of *Youth Art Month*.

The annual *Youth Art Month* was established to underscore the importance of including arts experiences in all students' education. The 2008 *Youth Art Month Exhibition* consisted of 62 pieces created by 59 students, grades K-12, from 16 West Virginia counties. Artwork in the annual exhibition was selected from a statewide competition. Additional information on *Youth Art Month* and a complete listing of the art competition winners can be found at http://www.wvculture.org/news.aspx?Agency=Division&Id=822.

The West Virginia Division of Culture and History, an agency of the West Virginia Department of Education and the Arts, brings together the state's past, present and future through programs and services in the areas of archives and history, the arts, historic preservation and museums. The Cultural Center is West Virginia's official showcase for the arts.

The editors of *Closing the Achievement Gap Report for 21st Century Learners in West Virginia (CAG)*, 3rd edition, would like to thank Emily Ritchey, 2008 *Youth Art Month* Exhibit Coordinator, West Virginia Division of Culture and History, and Carl O'Dell, 2008 2-D *Youth Art Month* Exhibit Coordinator, WV Art Education Association, for their permission and encouragement to use the artwork of these West Virginia students.

The second source of artwork showcased within the *Closing the Achievement Gap Report for 21st Century Learners in West Virginia*, 3rd edition, comes from the generous contribution of teachers and students from Richwood Middle School and Richwood High School in Nicholas County. The editors would especially like to thank teachers, Carl O'Dell and Rocco Milanese for sharing the work of their students with all of the educational stakeholders who will read the *CAG* report.

In addition, the editors would like to thank <u>all</u> of the talented students whose artwork appears on the divider sheets within this report; their excellent work reminds everyone of the importance of integrating cognitive, physical and emotional/artistic intelligences into all students' educational experiences.

Foreword

The "achievement gap" in education has been a key education—policy challenge and top priority for U.S. governors and other state policymakers since the 1980s. The West Virginia Department of Education is committed to closing the achievement gap among all student subgroups. In order to achieve this goal, it is essential to:

- disaggregate the data for the various racial and ethnic subgroups
- provide impact data to determine gains or losses
- determine successful programs and strategies for closing the achievement gaps
- develop findings based on the analyses of data
- offer recommendations for policies or programs
- implement a systems approach to professional development around scientifically research-based programs

The West Virginia Board of Education developed professional development goals based on a survey of needs with regard to student performance trend data, recommendations from the Regional Education Service Agencies, Office of Education Performance Audits, Center for Professional Development and West Virginia Department of Education. As we enter the 21st century, the Board encourages entities that offer professional development to look at a successful 21st century learning skills and technology tools approach that is school embedded, continuous and sustained within the local school system.

The Department established a *Framework for High Performing School Systems* which calls upon courageous local leadership to create student and school success. This framework addresses all of the elements that West Virginia educators believe to be necessary for effective and enduring educational reform.

This publication is the third *Closing the Achievement Gap Report for 21st Century Learners in West Virginia* prepared by the West Virginia Department of Education, Division of Curriculum and Instruction, Office of Assessment, Accountability and Research. It provides data and information to educators, parents, policymakers and the general public to determine the progress of West Virginia subgroup populations based on a variety of indicators. These indicators include state and national assessments, advanced placement enrollment, advanced placement performance, attendance rate, graduation rate, college going rate, retention rate, and Career/Technical Education (CTE) postsecondary placement data and initiatives in West Virginia public schools.

These public school indicators are important considerations for the educational community as educators consider ways to select successful initiatives which support closing the achievement gap and which bring all children to mastery and beyond. "Failure Is Not an Option" (Blankstein, 2004).

Dr. Steven L. Paine

Swan & Panie

State Superintendent of Schools

Executive Summary

The goal of the *Closing the Achievement Gap for 21st Century Learners in West Virginia (CAG)* report, 3rd edition, is to update West Virginia educators to the status and improvement of student achievement in West Virginia which may then be utilized as a basis for determining future educational decisions. In order to enhance the quality of performance, the following objectives were addressed: 1) to review the literature and research factors that impact student performance; 2) to determine the status and progress of subgroup performance; 3) to review programs and strategies being used to close the achievement gap between subgroups in West Virginia public school initiatives; 4) to generate findings and conclusions related to student performance; and 5) to offer recommendations for consideration as a result of the findings identified.

The report, *Closing the Achievement Gap for 21st Century Learners in West Virginia*, 3rd edition, addresses the background, literature, data and initiatives that are associated with student performance and the current concentrations on closing the achievement gap. The report is designed around the following seven sections:

Background

The background section addresses the history of the call for accountability from West Virginia to the federal level. It introduces the past and current federal and state legislation that drives the initiatives of student achievement and school improvement. This section reviews West Virginia Board of Education (BOE) policy, goals and legislation addressing student performance and discusses the emerging organizational structures that address 21st century learners.

Introduction

The introduction addresses the challenges of closing the achievement gap in student performance at different operational levels. This section notes the accountability structures established by the West Virginia BOE through policy and initiatives, the West Virginia Legislature through code, the West Virginia Department of Education (WVDE) through the design of the Framework for High Performing School Systems, http://wwde.state.wv.us/21stcenturydigitalresource/PDF%20Middle%20School%20Framework.pdf (elementary school framework), http://wwde.state.wv.us/21stcenturydigitalresource/PDF%20Middle%20School%20Framework.pdf (middle school framework) and http://wwde.state.wv.us/interactiveprofessionaldevelopment/Framework for High School%20Classrooms May 1 2007.pdf (high school framework), and the plan for implementing 21st century skills.

Identified Achievement Gap Groupings and Performance Factors Impacting the Achievement Gap

This section reviews the current literature associated with factors that contribute to poor student achievement and/or the achievement gap. This section also reviews the subgroups within West Virginia; their performance on international (as reported), national and state assessments;

their associated achievement gaps; performance factors such as school attendance and graduation rates; and other factors affecting performance which need to be improved by the collaborative efforts of national, state and local leaders through the Partnership for 21st Century Skills.

State Public Subgroup Impact Data (Assessment and Additional)

Data for national and state assessments, including the West Virginia Educational Standards Test 2 (WESTEST 2), National Assessment of Educational Progress (NAEP), ACT, ACT PLAN, ACT EXPLORE, Scholastic Aptitude Test (SAT), Career/Technical Education (CTE) ACT WorkKeys, Career/Technical Education (CTE) End-of-Course Exams and High Schools That Work (HSTW) assessments are provided, as well as summaries and findings. Additional subgroup impact data included for review are Advanced Placement, Attendance Rate, Dropout Rate, Graduation Rate, College Going Rate, Retention Rate and CTE Placement in Employment or Postsecondary Education.

Closing the Achievement Gap Initiatives in West Virginia

This section begins with a brief overview of <u>WVDE Action Steps To Address</u> <u>Implementation of 21st Century Instruction and Learning</u>. What then follows is a brief description of each program and/or strategy that the West Virginia Board of Education and the West Virginia Department of Education have developed and implemented in order to improve student achievement and to close the performance gap for all students.

Conclusions

Conclusions are not presented within a separate section of the report; instead, conclusions have been embedded within the <u>Identified Achievement Gap Groupings</u> section beginning on page 9. The conclusions drawn are based on State and National Public School Subgroup Impact Assessment Data, Additional Impact Data and the Closing the Achievement Gap Initiatives.

Recommendations

The recommendations are based on the conclusions drawn in this report from each exam or area in which trend data have been collected, as well as for the Closing the Achievement Gap Initiatives.

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Sierra Truman

Richwood High School Nicholas County

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Background

In 1994, Congress passed the Improving America's Schools Act (IASA, 1994) and broadened the accountability system under Chapter I (now renamed Title I). The companion law, Goals 2000: Educate America Act (2000), determined national educational goals and provided funds for state standards and assessment systems. All states were required to respond to the federal legislation within the legislatively mandated time frame; those who did not meet the time constraints were placed into a Compliance Agreement or on Time Line Waivers. This law was the first time that subgroup disaggregation became a requirement in the reporting of school, county and state performance (Cowan, 2004).

The reauthorization of the Elementary and Secondary Education Act (ESEA) of 1965 as the No Child Left Behind (NCLB) Act of 2001 required assessment in reading and mathematics in grades 3 to 8 and one grade at the high school level. While these required assessments focused the spotlight on the achievement of students too long marginalized—those with disabilities, those living with economic disadvantage and those with historically low expectations based on race—there remain unacceptable levels of students in these subgroups who continue to be left behind in the areas of reading and math (National Center for Learning Disabilities, 2007). The achievement gap in education is often reflected as a gap in academic achievement, or performance, between minority and disadvantaged students and their White peers (National Governors Association, Center for Best Practices, 2003b). NCLB requires states to set the same performance targets in grades 3 to 8 and one grade level in high school for all students in the identified subgroups. If any subgroup repeatedly fails to meet the performance targets, districts must provide public school choice and supplemental services to those students. [Note: Gender and migrant status are only reported in the West Virginia Report Card data and are not used to calculate Annual Yearly Progress (AYP).]

Additionally, states may not use disaggregated data to report achievement if the results would reveal personally identifiable information about an individual student. Most states have chosen an "n" of 10 students or less and West Virginia is one of the states with a federally approved "n" of 10 or less for the reporting of data.

To determine this information, states must apply the Federal Educational Rights to Privacy Act requirements (FERPA, 1974). Each state is required to implement appropriate strategies to protect the privacy of individual students when reporting achievement results and determining if schools and districts are making AYP on the basis of subgroup data. The West Virginia Board of Education (BOE; 2003) created, approved, and adopted Board Policy 4350, *Procedures for Collection, Maintenance and Disclosure of Student Data*, to address the federal FERPA requirement.

In 2003, the West Virginia BOE began work to establish the Board mission and strategic goals through a yearlong process. The Board developed a set of five strategic goals. These goals operationalize the Board's legal authority to establish policies and rules, to ensure general supervision and to provide general oversight and monitoring of a thorough and efficient educational system. The BOE has translated its strategic goals into a strategic plan via designing the plan based upon the goals; developing evidence for measuring progress in achieving each goal; establishing objectives to achieve the goals; and establishing timelines, activities and responsibilities to implement the plan. The five 2008-2009 strategic goals are as follows:

- 1. All students shall master or exceed grade level educational standards that incorporate national and international measures and that reflect 21st century skills and learning *
- 2. All students shall receive a seamless pre-kindergarten through twenty curriculum designed to promote citizen literacy and gainful employment and delivered with broad stakeholder involvement to promote lifelong learning in a global society. *
- 3. All students and school personnel shall develop and promote responsibility, citizenship, strong character and healthful living. *
- 4. All students shall be educated in school systems that provide equitable education opportunities delivered efficiently and effectively in a safe environment. *
- 5. All students shall be educated by highly qualified personnel.
- The changes incorporate the goals as noted in Vision 2020, Senate Bill 595.
- Updated August 2008

The BOE also established performance evidence indicators for monitoring/determining progress within each of the five strategic goals based on the following benchmarks:

- the percentage of students in each subgroup who score at or above mastery
- the number of students who achieve mastery or above on the writing assessment
- the approval of Pre-K comprehensive plans
- the number of students enrolled in Advanced Placement classes
- the number of students completing college credit courses
- the number of students attending college
- the number of adults receiving literacy and job training
- the number of students participating in health promotion initiatives
- the number of students enrolled in distance learning courses
- the number of teacher participants completing online professional development
- the number of classes taught by highly qualified teachers
- the number of National Board Certified Teachers and teachers with advanced degrees in their subject fields

The West Virginia BOE is committed to improving the educational proficiency of **all** students in West Virginia schools. These goals operationalize the Board's legal authority to establish policies and rules, to ensure general supervision and to provide general oversight and monitoring of a thorough and efficient educational system.

Schools and county school systems considered high performing, i.e., successful in bringing about learning for all, share many common characteristics. Among these characteristics are 1) a focus on developing instructional practices that are both consistent and pervasive within schools and 2) the design of a curriculum management system that aligns instruction, curriculum and assessment. These two broad research characteristics influenced revision and adoption of the 2004 West Virginia Board of Education Professional Development Goals.

The West Virginia Legislature required identification and adoption of annual professional

development goals from the West Virginia BOE in W. Va. Code §18-2-23a. The Board developed goals based on a needs assessment of student performance impact data recommendations from the Regional Education Service Agencies (RESAs), Office of Education Performance Audits (OEPA), Center for Professional Development and West Virginia Department of Education (WVDE).

The Board believes that through sustained, continuous and school-embedded professional development models, local school districts will be provided professional development support and technical assistance to implement the following professional development goals and objectives of the Master Plan:

- **GOAL 1:** To ensure that all West Virginia educators know and understand the six elements of 21st century teaching and learning.
- GOAL 2: To ensure that all West Virginia educators know how to access resources that will help them to develop 21st century teaching and learning skills.

The Board encourages the delivery of the Professional Development Plan by offering options that enhance the ability of county school systems to impact widespread change to improve the learning and lives of all West Virginia students. The Board further encourages entities that offer professional development to look at methods that are school embedded, continuous and sustained within the local school system.

The 2004 West Virginia Legislature created House Bill 4669 (W.Va. Code §18-2E-3g) which became state code and that mandates the development of a special demonstration professional development school project to improve academic achievement as per **Article 2E. High Quality Educational Programs**. Legislative finding number (5) states, "The achievement of all students can be dramatically improved when schools focus on factors within their control, such as the instructional day, curriculum and teaching practices." Additionally, the bill defined the powers and duties of the State Superintendent with respect to the demonstration project including:

- (1) To select for participation in the demonstration project three public elementary or middle schools with significant enrollments of disadvantaged, minority and under-achieving students in each county in which the number of African American students is five percent or more of the total second month enrollment;
- (2) To require cooperation from the county board of the county wherein a demonstration project school is located to facilitate program implementation and avoid any reallocation of resources for the schools that are disproportionate with those for other schools of the county of similar classification, accreditation status and federal Title I identification;
- (3) To require specialized training and knowledge of the needs, learning styles and strategies that will most effectively improve the performance of disadvantaged, minority and under-achieving students in demonstration project schools...;

and six additional powers/duties, including, "independent evaluation of the demonstration project, its various programs and their effectiveness on improving student academic achievement" (W.Va. Code §18-2E-3g).

In November 2005, West Virginia became the second state in the nation to enter into the Partnership for 21st Century Skills (http://www.21stcenturyskills.org/). The Partnership initiatives strive to implement those critical elements that support strategies, processes, programs and activities to ensure West Virginia students have the knowledge and skills needed to succeed in the 21st century world.

The 21st century learning six key elements include: (1) focus on and mastery of core subjects and 21st century themes; (2) emphasis on 21st century content (global awareness, financial, economic and business literacy); (3) 21st century context (making content relevant to students' lives, bringing the world into the classroom, taking students out into the world and creating opportunities for interaction with others); (4) using 21st century technology tools to gain information and communication technology (ICT) literacy; (5) 21st century balanced assessment system; and (6) 21st century learning skills (critical thinking, problem solving, creating and innovating, self-direction, adaptability, ethical behavior, social and personal accountability and leadership).

West Virginia, like many other states, has focused on improvement of student achievement and meeting NCLB requirements. West Virginia's work with Partnership for 21st Century Skills has focused on enhancing the knowledge students learn in school with the knowledge and skills they will need in 21st century communities.

Under the leadership of the West Virginia State Superintendent, West Virginia BOE and West Virginia Legislature, the stage has been set for all students to reach mastery and beyond and to exceed the requirements of NCLB. Overall, goals have been set; infrastructures have been designed; legislation has been enacted; policies have been revised or developed; programs have been devised; new programs have been implemented; and professional development has been planned and delivered to accelerate the implementation of this broad sweeping reform initiative in West Virginia.

West Virginia has worked hard to create a world-class educational system for our young people. Future West Virginia graduates of 21st century schools will be the best prepared generation in our history. To ensure every child's success as citizens and workers in the 21st century, the West Virginia Department of Education and the West Virginia BOE developed the state's 21st century learning plan **Global 21: Students deserve it. The world demands it.** At its core is the mission to develop all students into self-directed, motivated learners who demonstrate the skills and knowledge that are fundamental to becoming successful adults in the digital world.

Introduction



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Introduction

Student achievement and/or school achievement and the factors that are related to achievement in West Virginia schools have been major challenges for educational administrators and teachers over the past thirty years. The recurring theme and pressing challenge from the citizenry of West Virginia is how the school system can best provide a thorough and efficient education to all of the students who pass through the system (W.Va. Code §18-1-4; W.Va. Constitution, Article XII, §2).

As a result of this challenge, the West Virginia Department of Education (WVDE) has placed deliberate thought, extensive research and costly resources into fulfilling a court-mandated endeavor to create and implement a master plan of high-quality educational standards throughout the West Virginia school system (1982). This master plan was completed in 1983 as a result of Pauley v. Kelly in 1979 (162 W.Va. 672, 255 S.E. 2d 859), that included a state call for standards, assessment, accountability and funding (Lewis & Hennen, 1991). An accountability office was mandated and funded by the legislature (W. Va. Code §18-2E-5). The new accountability process was monitored by the accountability office, which became the Office of Education Performance Audits (OEPA), and which is managed by a director who reports directly to the West Virginia Board of Education (BOE).

In 1983, a national call for accountability gave rise to a United States Department of Education study, *A Nation at Risk*, which discussed problems in student performance and called for improved student achievement (National Commission on Excellence in Education, 1983). "The Education Commission of the States (1998) determined that accountability systems collect, evaluate and use data about students and schools to hold educators and others responsible for results" (p. 19). As the data were collected, legislators, state boards of education members, educators, newspaper reporters, political activists, parents and other stakeholders became keenly interested in how schools produce, determine, monitor and report school achievement that is funded with their tax dollars (National Association of State Boards of Education, 1997).

In attempts to determine the factors related to student achievement, studies were conducted from the early 1960s to the late 1980s. These studies suggested that socioeconomic status was one of the most powerful predictors of student achievement (Coleman et al., 1966; Hanushek, 1989; Jencks et al., 1972; McClellend, 1965; Mosteller & Moynihan, 1972). In contrast, the effective schools research of the 1970s and 1980s provided evidence that student achievement was not solely predetermined by the family and home variables of a child. This research indicated that school inputs made a difference in student learning and achievement and that schools could successfully teach all children. This research confirmed empirical evidence linking student achievement to 1) instructional leadership, 2) a clear and focused mission, 3) a safe and orderly environment, 4) a climate of high expectations, 5) frequent monitoring of student progress, 6) positive home-school relations, and 7) opportunities to learn and student time on task (Effective Schools Products, Ltd., 2001). Given this body of research, the WVDE designed a school improvement initiative, the Framework for 21st Century School Systems, 2004-2014, built around the effective schools research and correlates; it also included strategies for instruction, curriculum, school effectiveness and student/parent support http://wvde.state.wv.us/frameworks/Framework County.pdf.

In 2005, the National Center for Research on Evaluation, Standards and Student Testing (CRESST) supported educational accountability with regard to subgroup performance, "The accountability system attempts to assure adequate attention to these groups of students by requiring the separate reporting of results for economically disadvantaged students, students with disabilities, limited English proficient students and by race/ethnicity" (Linn, p. 7). Such disaggregated reporting of results provides a mechanism for monitoring the achievement of lower performing groups and narrowing those achievement gaps (Linn, 2005). The strongest evidence of states' intent to implement accountability systems and close the achievement gap can be seen in the Southern Regional Education Board (SREB) "Goals for Education" theme. SREB promotes continuing improvement and meeting standards, particularly when monitored by good accountability systems. By 2000, "every SREB state had taken action aimed at holding schools accountable" (SREB, 2004, 2008), and this included West Virginia's early action in 1982.

One of the highest profile measures of rigorous educational standards for school success is student achievement as measured nationwide for the purpose of accountability with a statistically defensible and readily available norm-referenced assessment and/or criterion-referenced assessment (Bidwell & Kasarda, 1975; Madaus, Airasian, & Kelleghan, 1980; Popham & Stanley, (n.d.)). In West Virginia, these assessments yield achievement data by subgroups which are regularly measured and reported to the educational community. Student performance is aggregated by subgroup into school, county and state achievement results for 1) reporting purposes (West Virginia BOE Policy 2320; W.Va. Code §18-2E-8b; W.Va. Code §18-2E-4; NCLB, 2001) in the West Virginia Report Card data, and 2) accountability purposes used to determine school, county and state status (West Virginia BOE Policy 2320; NCLB, 2001) in the accountability reports.

Accountability and reporting of student performance are the major reasons student achievement has found its way to the forefront of the educational reform stage. The most provocative and compelling questions that today's educational administrators must answer are "What are the factors that are related to student achievement in our schools?" and "How do schools close and eliminate the achievement gap for all students?" (Armor, Conry-Oseguera, Cox, King, McDonnell, Pascal, Pauly, & Zellman, 1976; Becker, 1987; Bossert, Dwyer, Rowan, & Lee, 1982; Caldas, 1987; Carnegie Council on Adolescent Development, 1989; Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966; Edmonds, 1979; Jencks, Smith, Acland, Bane, Cohen, Ginstis, Heyes, & Michelson, 1972; McClellend, 1965; Mosteller & Moynihan, 1972; National Association of Secondary School Principals, 1996; Thernstrom & Thernstrom, 2003).

As in most school districts across the country, student achievement in West Virginia is enhanced through the development and teaching of rigorous state curriculum standards (West Virginia Board of Education Policy 2510; 2520.1; 2520.2; 2520.3; 2520.4.). In West Virginia, those standards are called 21st Century Content Standards and Objectives (CSOs). The CSOs are measured by statewide assessments in terms of performance levels: **Distinguished**, **Above Mastery**, **Mastery**, **Partial Mastery** and **Novice**. The West Virginia Alternate Assessment is defined by the last four performance levels: **Above Mastery**, **Mastery**, **Partial Mastery** and **Novice**. These accountability assessments, called the West Virginia Educational Standards Test 2 (WESTEST 2) http://westest.k12.wv.us/, are aligned to the state standards/performance level descriptors and the results are annually reported by

subgroup for school, county and state in the West Virginia Report Card (W.Va. Code §18-2E-4) and Accountability Reports (NCLB Act 2001; West Virginia State Board Policy 2320). WESTEST 2 is administered annually to all students in grades 3 through 11 in reading/language arts, mathematics, science and social studies. The WESTEST 2 data focuses on the results for reading/language arts, mathematics, social studies, and science.

To address the gap between the knowledge and skills most students learn in schools today and what they need to know to be successful in 21st century communities and workplaces, the Partnership for 21st Century Skills http://www.21stcenturyskills.org/ was formed in 2002 by interested stakeholders, including the U.S. Department of Education, Apple Computer, Inc., Cisco Systems, Inc., Dell Computer Corporation, Microsoft Corporation, National Education Association (NEA) and others. This unique organization of public and private leaders in education partnered with West Virginia and other states to assist schools in fully addressing the needs of the 21st century learner. West Virginia become the second state in the nation to join the Partnership for 21st Century Skills and to develop a plan for addressing nine essential areas to:

- embrace a powerful vision of public education that includes 21st century skills
- align leadership, management and resources with educational goals
- use the MILE Guide for 21st Century Skills to assess where schools are currently
- develop priorities for 21st century skills
- construct a professional development plan for 21st century skills
- provide students with equitable access to a 21st century education
- develop a balanced assessment system to measure student progress in 21st century skills
- collaborate with outside partners
- plan collectively and strategically for the future

For additional information on how West Virginia is addressing 21st century skills within its educational system, refer to Section Closing the Achievement Gap Initiatives in West Virginia, WVDE Action Steps to Address Implementation of 21st Century Instruction and Learning, starting on page 177 of this report, and also Section Recommendations, starting on page 227.

Identified Achievement Gap Groupings



Zach Dotson

Richwood Middle School
Nicholas County

Important Note for

Identified Achievement Gap Groupings Section

Please note that <u>within this section of the CAG report</u>, the standardized test results (i.e., PIRLS, NAEP, and WESTEST 2) that examine/compare subgroup achievement are presented based on 2006-2007 data. <u>Specific subgroup achievement comparison data will be updated in December 2010</u>.

Additional educational attainment factors (graduation rate, college-going rate, ACT/college readiness, school attendance rate, dropout rate, etc.) will also be updated in December 2010 within this section.

Identified Achievement Gap Groupings

The "achievement gap" in education is a condition of race and class often discussed as a gap in academic achievement, or performance, between minority and disadvantaged students and their White peers (National Governors Association, 2003b). The term is most frequently used to describe the performance gap between African-American and Hispanic students and their non-Hispanic White peers or the similar academic disparity between students from low-income families and those from more affluent families. The achievement gap shows up in grades, standardized test scores, course selection, high school dropout rates, college completion rates, other academic areas and in diminished job opportunities and lifetime earnings potential. The median lifetime income for someone between the ages of 24 and 64 who does not earn a high school diploma is about \$1 million. If that same person obtains his or her high school diploma, the median income increases to \$1.2 million, and if that person gets some junior college or college education and/or training after high school, then the median income raises to approximately \$1.5 million (Olson, 2004).

The achievement gap has been a key education-policy challenge and top priority for U. S. governors and other state policymakers since the mid-1980s. The No Child Left Behind Act (NCLB) requires states to set the same performance targets for all children (including economically disadvantaged students, students with disabilities, limited English proficient and major racial and ethnic groups), and if any student subgroup fails to meet those performance targets, districts must provide public school choice and supplemental services to those students. Many schools struggle to meet this requirement and to close existing achievement gaps.

Within this report, information on each identified achievement gap subgroup will be presented in the following format:

- ♦ Subgroup population information (if available)
- Research findings related to that subgroup
- ◆ Standardized test results that examine/measure subgroup achievement
 - PIRLS (international and national data if provided by subgroup)
 - NAEP (national and state data)
 - WESTEST (state data)
- Additional educational attainment factors related to that subgroup
 - Graduation rate
 - College-going rate
 - ACT/college readiness

- Advanced Placement exams
- Advanced Placement courses
- School attendance rate
- Dropout rate
- Conclusions
- Specific West Virginia initiatives that address the achievement gap for each subgroup

Black-White Subgroup

According to the U. S. Census Bureau, in 2006, the Black population grew to 40.2 million or 12.8% of the total population (http://www.census.gov/Press-Release/www/releases/archives/population/010048.html). The Black population increased by 1.3 percent, or 522,000, between 2005 and 2006. In contrast, the Black population in West Virginia was only 3.3% or roughly 60,000. Of that total WV population, 14,689 were K-12 students in the 2007-2008 school year (http://wveis.k12.wv.us/nclb/pub/enroll/State ET2007.htm).

Historically, in research studies examining students' performance at kindergarten entry, a performance gap of between two-thirds and one full standard deviation exists between the scores of White and Black or Hispanic students in various assessments of cognitive ability in areas such as reading and mathematics (Fryer & Levitt, 2004a; Fryer & Levitt, 2004b; Brooks-Gunn, Klebanov, Duncan & Lee, 2003; Phillips, 2000; Phillips et. al., 1998; Jones, Burton & Davenport, 1982; Coleman et. al., 1966), which approximately represents the difference in performance between the average 4th grader and the average 8th grader (Fryer & Levitt, 2004a). In addition, regardless of the assessments used or the population studied, differences in socioeconomic status (SES) account for about half a standard deviation in the difference in performance within Black, Hispanic and White test scores (Duncan & Magnuson, 2005). Researchers have persisted in investigating the etiology of this achievement gap by studying factors such as socioeconomic status, family structure, neighborhood characteristics, quality of schools, etc., but these studies have failed to identify the exact cause of a persistent achievement gap.

Roland G. Fryer and Steven D. Levitt (2005), support the need for early intervention in grades K-2 in order to limit the educational gap between Black, Hispanic and White students that increases by third grade. The researchers examined a data set from the *Early Childhood Longitudinal Study* (*ECLS-K*), which included a nationally representative survey of over 20,000 children who had entered kindergarten in 1998. Approximately 1,000 schools were included within the survey with an average of 20 children per school. Standardized tests were administered to all of the children in the fall and spring of kindergarten (1998-1999) and first grade (1999-2000) and the spring of third grade (2001-2002). At the beginning of kindergarten, the questions were orally administered since the assumption was that the children did not know how to read. Fryer and Levitt limited their analysis to math and reading scores.

White students on average scored .307 standard deviations above the mean on the math

exam in the fall of kindergarten while Black students scored .356 standard deviations below the mean on that test, yielding a Black—White gap of .663 standard deviations. By the spring of third grade, that gap had increased to .882 standard deviations in math. In reading, the Black—White gap was .400 standard deviations in the fall of kindergarten, but that gap increased to .771 standard deviations by the end of third grade. Besides test score variables, the researchers also examined a *composite measure of socioeconomic status* including components such as birth weight, parental education level, parental occupation status, household income, gender, child's age at enrollment in kindergarten, mother's age at first birth, WIC participation (government nutrition program) and number of children's books in the home. These variables were utilized within regression models to determine the amount of variance accounted for by each factor (Fryer & Levitt, 2005).

As might be expected, the researchers found that children who were older at enrollment in kindergarten, those with higher birth weights and those whose mothers were older at the time of first birth scored higher on tests although the benefit of entering school at a later age decreased steadily over time. Children who were on WIC consistently scored lower on the tests. Overall, socioeconomic status and the number of children's books in the home were important predictors of test scores at each grade level. The number of books in the home was strongly positively associated with high kindergarten test scores in math. Evaluated at the mean, a one standard deviation increase in the number of books (from 72 to 137) was associated with an increase of .143 in math and .115 in reading. This same finding was supported within the results of the Progress in International Reading Literacy Study 2006 (PIRLS), Executive Report (November, 2007, www.pirls.org). The PIRLS is a large-scale study conducted by the International Association for the Evaluation of Educational Achievement (IEA) and is slated to measure children's reading literacy achievement every five years. *PIRLS* reported that the presence of children's books in the home showed a strong positive relationship with reading achievement. The average reading achievement difference between students from homes with many children's books (more than 100) and those from homes with few children's books (10 or fewer) was 91 score points or almost one standard deviation.

After controlling for other factors, Fryer and Levitt (2005) were able to account for roughly 83% of test score variance). The researchers determined that Black students score only slightly lower in math than White students at kindergarten entry, but their performance trajectories after school entry presented a different picture. Blacks scored .099 standard deviations below Whites in the fall of kindergarten. This gap increased to .279 standard deviations by the spring of first grade and .382 by the spring of third grade indicating that the Black—White achievement score gap grows by approximately .30 percentiles between the fall of kindergarten and spring of third grade. This suggested that the social and economic variables that account for this achievement gap at school entry are less effective at explaining the Black—White gap after school entry (the same controls accounted for only a little over 50% of variance in test scores by the spring of third grade).

Fryer and Levitt (2005) hypothesized that some children's learning trajectories may develop along parallel lines with some subgroups requiring additional time for mastery of content, especially as students must learn increasingly abstract concepts. Within their

analyses, the researchers noted that Black students seemed to lag behind White students on virtually all types of questions except those basic questions that are mastered by nearly all students within a given grade level. While Fryer and Levitt attempted to test several theories regarding the etiology of the Black—White achievement gap, they found no conclusive evidence to support any specific cause.

One commonly accepted method of measuring/examining the Black-White achievement gap is to compare academic performance among Black and White students on standardized assessments.

<u>International Assessment Comparison</u>

Recently (2001 and 2006), governors, state policymakers, researchers, educators and other stakeholders could examine the literacy performance of U. S. fourth graders compared with international peers' performance by examining the results of the *Progress in International Reading Literacy Study 2006 (PIRLS)*. The 2006 study results (www.pirls.org) were released in November 2007, and included a total of 5,190 U. S. students, as well as students from 44 other jurisdictions (countries) worldwide. The *PIRLS* study examined fourth-grade reading literacy across three dimensions, i.e., (1) processes of comprehension; (2) purposes of reading including reading for literary experience and reading to acquire and use information; and (3) reading behaviors and attitudes (this information gathered through background questionnaires).

Analyses of data attempted to address how the reading literacy of U. S. fourth-grade students compared with the reading literacy of fourth-grade students internationally; how these U. S. fourth-grade students' literacy varied by student background characteristics, school and classroom characteristics and home reading environment; and how the reading literacy of U. S. fourth-grade students had changed since the 2001 *PIRLS* study. The scores (combined reading literacy scale) are reported on a scale from 0-1000 with the scale average fixed at 500 and a standard deviation of 100. In 2006:

- The average score for **all** U. S. students was 540.
- The Russian Federation had the highest score (565).
- Hong Kong, SAR had the second highest score (564).
- There was no statistically significant difference between U. S. average scores in 2006 (540) and in 2001 (542).
- Average scores for **White** (non-Hispanic) students (560) in the U. S. were higher than the scores for **Black** students (503) in the U. S.

National Assessment Comparison

One assessment that educators look to for indication of progress in closing performance

gaps is the National Assessment of Educational Progress (NAEP). NAEP is a required assessment in reading and mathematics under No Child Left Behind (2001), W. Va. State Code §18-2E-2 and West Virginia Board of Education Policy 2340. The NAEP assessment is administered every two years to a sample of approximately 2,500 to 3,000 fourth and eighth grade students chosen at random from state schools that correspond with state demographics. NAEP assessments are based on content frameworks and specifications developed by the National Assessment Governing Board (NAGB), and it is a national measure of what students know and can do in specific areas such as reading and mathematics.

2007 NAEP Reading—Grade 4

- A significant achievement gap continued to persist between the WV Black subgroup and the WV White subgroup.
- The WV Black subgroup had 46% (roughly 5 out of every 10 students) scoring within the At or Above Basic level while the WV White subgroup had 63% (6 out of 10 students) scoring at that same performance level.

2007 NAEP Reading—Grade 8

- The WV Black subgroup showed an increase of 8% in students performing At or Above Basic between 2005 and 2007.
- An achievement gap continued to persist between the WV Black subgroup and the WV White subgroup.
- The WV Black subgroup had 52% (5 out of every 10 students) scoring At or
 Above Basic while the WV White subgroup had 69% (7 out of 10 students).

2007 NAEP Mathematics—Grade 4

- The WV **Black** subgroup consistently had a higher percentage of students scoring **At or Above Basic** than the National **Black** subgroup in 2003 (62% to 54%), 2005 (69% to 60%) and 2007 (64% to 63%).
- The WV Black subgroup showed a 5% decrease in students performing At or Above Basic between 2005 and 2007.
- In 2007, the WV **Black** subgroup had 64% (6 out of 10 students) performing **At or Above Basic** while the WV **White** subgroup had 82% (8 out of 10).

2007 NAEP Mathematics—Grade 8

- The WV **Black** subgroup performed below the National **Black** subgroup in percentage of students scoring **At or Above Basic** in 2005 (36% to 41%) and 2007 (31% to 47%).
- The WV Black subgroup increased 6% in students scoring At or Above Basic between 2005 and 2007.

- A significant achievement gap persisted between the WV **Black** subgroup and the WV **White** subgroup.
- The WV Black subgroup had 31% (3 out of every 10 students) performing At or Above Basic while the WV White subgroup had 63% (6 out of 10).

State Assessment Comparison

The West Virginia Educational Standards Test (WESTEST) is used to examine/measure achievement gaps between subgroups of students. WESTEST is a required assessment in grades 3-8 and 10 under No Child Left Behind (2001), W.Va. State Code §18-2E-2 and West Virginia State Board Policy 2340. It is administered each year and results are reported by the federally required subgroups.

- The Black subgroup increased 6.8% in the percentage of students scoring At
 or Above Mastery between 2004 and 2007 on the WESTEST Reading/
 Language Arts test, but they continued to perform below their White subgroup
 peers.
- 2004-2007, the Black subgroup increased 11.8% in the percentage of students scoring At or Above Mastery in Mathematics while the White subgroup increased only 7.6%.
- As of 2007, an achievement gap continued to persist for the Black subgroup across all content areas.
 - <u>RLA</u>—7 out of 10 **Black** students were **At or Above Mastery** in 2007 while 8 out of 10 **White** students performed at that level.
 - <u>Mathematics</u>—6 out of 10 **Black** students were **At or Above Mastery** while 8 out of 10 **White** students performed at that level.
 - <u>Social Studies</u>—6 out of 10 **Black** students were **At or Above Mastery** while 8 out of 10 **White** students performed at that level.
 - <u>Science</u>—7 out of 10 **Black** students were **At or Above Mastery** while 9 out of 10 **White** students performed at that level.

Another way to examine/measure the achievement gap is to compare the highest level of educational attainment for subgroups of students. Historically, African-American and Hispanic high school students are more likely to drop out of school in every state. Of high school graduates, college matriculation rates for African-American and Hispanic students remain below the rates of White high school graduates. Additionally, Black and Hispanic young adults are only half as likely to earn a college degree as White students. In West Virginia, there is a gap between the percentage of **Black** subgroup students who graduate high school and their **White** subgroup peers.

- In 2007, approximately 82% of Black students graduated high school while 85% of White students graduated.
- The percentage of Black students graduating increased 1.15% from 2006 to 2007.

College enrollment rate has more than doubled in the last 30 years with more than 14 million students nationwide now participating in some form of postsecondary education (National Governors Association, 2003d). Despite this positive trend, White adults in their late 20s are twice as likely to have earned a bachelor's degree as African American adults of the same age. These differences in college enrollment and graduation mirror differences in the high school courses taken and student academic preparation for college success. Over the last five years, 2003-2007, the percent of students meeting college readiness benchmarks on the ACT have increased slightly. For example, in 2003, 67% of all students tested in English curriculum content met college readiness benchmark standards on the ACT, but that percentage increased to 69% in 2007 (www.act.org).

The West Virginia Department of Education does not collect the data concerning the number or percentage of students attending college or the college retention rate. The Higher Education Policy Commission does collect College Going Rate data by WV high school and county, but the HEPC does not aggregate this data by subgroup (J. Reed, personal communication, January 14, 2008).

Research shows that most future jobs within the United States will require some level of college study or career training after high school graduation. Currently, about half of all the students who enroll in college actually earn a terminal degree or certificate. At a national and state level, this college readiness issue has become a major concern as ACT Inc. estimates that 60-70% of its test takers are not well-prepared for college study in language arts, mathematics or both fields (Spence, 2007). Even many students who are not required to take remedial courses are still not well-prepared to handle college-level work.

To date, few states apply one set of readiness standards across all of postsecondary education. Instead, individual postsecondary institutions or systems often set their own college readiness or placement standards (http://www.insidehighered.com/views/2007/03/22/spence). Therefore, one of the most effective means to evaluate college readiness (recognized and accepted nationally) would be score results from the ACT. The ACT consists of four curriculumbased, standardized tests: English, mathematics, reading and science. Performance on these tests has a direct relationship to a student's educational achievement and readiness for college. The ACT is not part of the West Virginia Measures of Academic Progress (WV-MAP) state assessment system. Instead, it is part of a private national assessment system that provides college admission testing opportunities. Only the ACT reports College Readiness Benchmark Scores. A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses. Please note that students self-report

ethnicity information to ACT so subgroups of students (actual numbers) may not exactly match information from the West Virginia Education Information System (WVEIS). Looking at the graduating class of 2007:

English---Benchmark score 18

- National **Black** subgroup had 37% of students meeting this benchmark.
- WV **Black** subgroup had 42% of students meeting this benchmark (344 students tested).
- National **White** subgroup had 78% of students meeting this benchmark.
- WV **White** subgroup had 73% of students meeting this benchmark (9,825 students tested in 2007).

Mathematics---Benchmark score 22

- National **Black** subgroup had 12% of students meeting this benchmark.
- WV **Black** subgroup had 11% meeting this benchmark.
- National White subgroup had 49% of students meeting this benchmark.
- WV **White** subgroup had 30% meeting this benchmark.

Reading---Benchmark score 21

- National **Black** subgroup had 21% of students meeting this benchmark.
- WV **Black** subgroup had 25% of students meeting this benchmark.
- National **White** subgroup had 60% of students meeting this benchmark.
- WV **White** subgroup had 51% of students meeting this benchmark.

Science---Benchmark score 24

- National **Black** subgroup had 5% of students meeting this benchmark.
- WV **Black** subgroup had 6% of students meeting this benchmark.
- National **White** subgroup had 33% of students meeting this benchmark.
- WV **White** subgroup had 23% of students meeting this benchmark.

These ACT results would indicate that a significant achievement gap in college readiness exists between the WV **Black** and WV **White** subgroups.

 According to the College Board in its 4th Annual Advanced Placement Report to the Nation (February, 2008), of the estimated 2.8 million students who graduated from U. S. public schools in 2007, almost 426,000 (15.2%) earned an AP Exam grade of at least a 3 on one or more AP Exams. This number increased from 14.7% in 2006 and 11.7% in 2002 (http://professionals.collegeboard.com/profdownload/ap-report-to-the-nation-2008.pdf). While the number of students nationally earning an AP Exam grade of 3 or above on one or more AP Exams increased in 2007, the numbers were not quite as positive for West Virginia students.

- In 2007, a total of 64 **Black** subgroup students scored a 3 or above on Advanced Placement Exams.
- The number of **Black** subgroup students scoring a 3 or above on AP Exams increased by 36 students from 2006 to 2007.
- In 2007, a total of 4,612 **White** subgroup students scored a 3 or above on AP Exams.
- The number of **White** subgroup students scoring a 3 or above on AP Exams increased by 652 from 2006 to 2007.

In addition, a performance gap exists in the number of West Virginia students by subgroup enrolled in Advanced Placement classes.

- In 2007, a total of 13,762 students were enrolled in Advanced Placement courses.
- The **White** subgroup had 12,707 students (92% of total number enrolled) enrolled in AP courses.
- The Black subgroup had 278 students (2% of total number enrolled) enrolled in AP courses.
- Between 2006 and 2007, the number of **Black** students enrolled in Advanced Placement courses increased by 55.
- During the same time period, the number of White students enrolled in AP classes increased by 848 students

Perhaps the most interesting information concerning enrollment within Advanced Placement courses in West Virginia is that the 12,707 **White** subgroup students enrolled in AP courses in 2007 represented only 5% of the total number of **White** students (262,171 enrolled in 2007-2008) in K-12 educational institutions. The 278 **Black** subgroup students enrolled in AP courses represented 2% of the total **Black** K-12 enrollment (14,689 students).

Both the WV **Black** and **White** subgroups had high rates of school attendance. In 2007, the **Black** subgroup had a 96.79% attendance rate while the **White** subgroup had a 97.21% rate—a difference of 0.42%. The **Black** subgroup made small, but consistent, increases in attendance rate for each year 2004-2007.

The West Virginia high school dropout rate appears to be much below the national level (2005 data) for all subgroups. The WV **Black** subgroup dropout rate in 2005 was

3.85% while the national **Black** rate was 10.4%. The WV **White** subgroup dropout rate in 2005 was 3.01% compared with the national **White** rate of 6%. In 2007, the **Black** subgroup dropout rate was 2.79 (a decrease of 1.06% from 2005) while the **White** dropout rate was 2.37%.

According to the National Governors Association (2003b), in order to close the Black—White achievement gap, many state policymakers across the nation are addressing four key areas:

Early childhood care and education

Improving teacher quality

Early intervention for helping students into and through college

Extra learning opportunities (ELOs)—(after school programs)

Conclusions

- In measuring/examining academic performance between Black and White students
 on standardized assessments either internationally, nationally, or by state, it is clear
 that persistent, often significant, achievement gaps still exist between Black and
 White subgroups.
- On the 2006 Progress in International Reading Literacy Study (PIRLS, 2007), a significant gap persisted between the U. S. Black subgroup and the U. S. White subgroup with the White subgroup scoring one-half standard deviation above the Black subgroup on the PIRLS assessment.
- On the National Assessment of Educational Progress (NAEP, 2007), the WV Black subgroup continued to have persistent performance gaps At or Above Basic level in both 4th and 8th grades in reading and mathematics. For example, in 2007, three out of every ten Black students performed At or Above Basic level in 8th grade mathematics while six out of every ten White students performed at that level.
- As of 2007, an achievement gap continued for the Black subgroup across all content areas on the West Virginia Educational Standards Test (WESTEST).
- In examining levels of educational attainment for students in West Virginia, it is
 evident that the Black subgroup made some increases over the last four or five
 years.
- Despite these consistent gains in **Black** subgroup areas of educational attainment, there remains a persistent, often significant, achievement gap between the **Black** and **White** subgroups within these areas.

Specific West Virginia Initiatives That Address the Black-White Achievement Gap

West Virginia is moving forward in key areas that can assist in closing the Black-White achievement gap. State initiatives in areas such as early childhood care and education, improving teacher quality, enhancing learning through instruction in and use of 21st century learning skills and tools, early intervention for helping students into and through college and providing extra learning opportunities (ELOs) are geared toward increasing student performance and success. For additional information on each of the programs listed below, please see the Closing the Achievement Gap Initiatives in West Virginia section of this report beginning on page 177.

Revised Content Standards and Objectives (CSOs)

Increased graduation requirements in West Virginia schools

Statewide use of classroom, benchmark and summative assessments

Project-Based Learning

Universal Pre-K

Even Start

Reading First

West Virginia Quality Enhancement for Language and Literacy (QELL) Project

Special Education Reading Project (SERP)

West Virginia Phonemic Awareness Collaborative Statewide (PALS) Project

Response to Intervention (RTI)

E-Learning for Educators

Enhancing Education through Technology (EETT)

West Virginia Virtual School (WVVS)

21st Century Community Learning Centers Program

Recommendations

General recommendations addressing this area are presented in Section **Recommendations**, beginning on <u>page 227</u>.

Economically Disadvantaged (ED) Subgroup

The federal poverty threshold/level (FPL) for a family of four in the United States in 2008 is \$21,200 and in 2007 it was \$20,650 for a family of four, \$17,170 for a family of three, and \$13,690 for a family of two. According to the National Center for Children in Poverty (NCCP, 2007), a family with children is defined as **poor** if the family income is at or below the federal poverty threshold (as defined by the U. S. Census Bureau), and families with children are defined as **low-income** if the family income is less than twice the federal poverty threshold (https://nccp.org/tools/demographics/definitions.php).

Research suggests that, on average, families require an income equal to about two times the federal poverty level in order to meet their basic needs. Thus, a family of four in 2008 would require approximately \$42,400 in order to meet basic living expenses. In September 2007, the NCCP indicated that there are more than 24 million children under age six in the United States and 43% (10.5 million) live in *low-income* families, while another 20% (5.0 million) live in *poor* families.

After a decade of decline, the proportion of young children (below six years of age) in the United States living in *low-income* families is again rising, a trend that began in 2000. Between the years 2000-2006, the number of children of all ages who were **poor** increased by 11%. During that same time period, the number of children under age six who were **poor** increased by 18%. In 2006, West Virginia had 385,841 children and, of that total, 46% (175,613 children) were living in *low-income* families; the national percentage of all children living in *low-income* households was 39% (NCCP, 2007). That same year, 20% (78,074 children) of West Virginia children lived in poor families; the national average was 17%. Among young children in West Virginia in 2006, there were 118,149 children and 49% (57,566 children) were living in *low-income* families (National 43%) and 24% (28,668) were living in **poor** (National 20%) families (NCCP, 2007). This Economically Disadvantaged subgroup of students is particularly susceptible to multiple risk factors including any combination of the following: single parent, living in poverty, parents with limited English proficiency, parents with less than a high school education and parents with no paid employment. In West Virginia, the exposure to multiple risk factors among children under age six is fairly significant. Fully, 35%, 41,352 children, of the total 118,149 have exposure to one or two risks and 10% have exposure to three or more risk factors.

Who are the **poor** children in the United States? Black, Latino and American Indian children are disproportionately **poor**, but White children still make up the largest group of poor children in the U. S. Black children comprise 33% of all children living in poor families; 27% of Latino children live in poor families; 10% of White children live in poor families; 24% of children of immigrants are poor; 16% of children of native-born parents are poor; the official poverty rates are highest for young children (under age six); 20% of children under six live in poor households; 16% of households with young children experience food insecurity; and 41% of families renting their homes spend up to one-third of their total income on rent.

Brain science and developmental research both show that the quality of children's earliest relationships and experiences set the stage for school success, health and future workforce productivity. These early experiences shape the hard wiring of the brain and that hard wiring impacts how children approach life in general, how they learn, how they manage their emotions and how they relate to others (NCCP User Guide, 2007). Valerie Lee and David Burkam (2002) reported, "Disadvantaged children start kindergarten with significantly lower cognitive skills than their more advantaged counterparts" (p. 1). Prior to entering kindergarten, "the average cognitive scores of children in the highest SES group are 60% above the scores of the lowest SES group" (p. 1). In looking at associations between family poverty and children's long-term cognitive development, achievement and behavior, researchers (Ram & Hou, 2003; Bradley & Corwyn, 2002; Duncan, Yeung, Brooks-Gunn & Smith, 1998; Brooks-Gunn & Duncan, 1997) note that family income is strongly related to children's cognitive development and overall educational attainment. These associations have been documented in children as young as 1 or 2 years of age (Fryer & Levitt, 2006; Duncan & Brooks-Gunn, 2000, 1997; Brooks-Gunn, Duncan & Maritato, 1997), and these associations only become stronger when children enter school (Lee & Burkham, 2002). Gaps in cognitive development and performance tend to increase in the early school years and then persist throughout the later grades (Fryer & Levitt, 2004a, 2005; Murnane, Bub, Willett & McCartney, 2005). Poor children are more likely to drop out before completing high school, have higher rates of delinquency, higher rates of teenage pregnancy, and are less likely to attend college or to successfully complete if they attend college (Perez-Johnson & Maynard, 2007).

Caldwell & Ginther (1996) found that students from low SES backgrounds constitute the largest group of at-risk individuals for not graduating from high school. They suggest that the lack of academic achievement is the best predictor of dropping out of school. Children in families with incomes less than one-half the poverty threshold were found to score 6 to 13 points lower on a variety of standardized assessments compared to their more affluent peers (Duncan, Yeung, Brooks-Gunn & Smith, 1998). Regardless of the assessments used or the population studied, differences in socioeconomic status (SES) accounted for about half a standard deviation in the difference in performance within Black, Hispanic and White test scores (Duncan & Magnuson, 2005).

Numerous research studies indicate that while poverty seems to affect all children in their academic achievement and cognitive abilities, children are hardest hit by family economic conditions during their earliest years of life (Ram & Hou 2003; Bradley & Corwyn, 2002; Lindjord, 2002). Research shows that children who experience poverty and deprivation in their early years are subject to adverse long-term effects of poverty.

Preschool literacy-related activities (such as reading aloud to young children) can lessen initial inequalities for economically disadvantaged students, but these activities are often linked to parental education, participation and availability. Nationally, 26% of children under age six living in low-income families (2.7 million) live with parents who have less than a high school education; 36% (3.8 million) live with parents who have only a high school diploma;

and 38% (4 million) live with parents who have some college education. In West Virginia, looking at all young children under age six regardless of income level, 9% live with parents who have less than a high school education; 36% live with parents who have only a high school diploma; and 55% live with parents who have some college or more.

One consideration, as West Virginia increases the rigor of its Content Standards and Objectives (CSOs) and incorporates 21st century learning skills into its classrooms, is that research in neuroscience and reading indicates that acquiring vocabulary before entering schools and as students learn to read plays a major role in student achievement. Children who come from backgrounds of poverty are at a tremendous disadvantage. "By the time they actually enter kindergarten, they're lagging in skill development and their vocabularies are dwarfed by the vocabularies of children of middleclass and upper-middleclass homes who've been surrounded by language in very different ways" (Children of the Code, www.childrenofthecode.org, Wendorf, 2004). By the time children from middle-income families with well-educated parents are in third grade, they know about 12,000 words. In contrast, third grade children from low-income families with undereducated parents who do not talk to them much have vocabularies of approximately 4,000 words (Snow, 2005).

Highlighting the importance of parents' role in early childhood achievement is research conducted by the Joseph Rowntree Foundation (2007) in England, which suggests that a primary cause of childhood poverty is a lack of opportunities among parents with low skills and low qualifications. Such parents are less likely to work, and if they do work, they are more likely to earn low wages. In the United States, 54% (5.6 million) of children under age 6 in low-income families have at least one parent who works full-time, year round, while in West Virginia, low-income children with a parent employed full time in 2006 was 48%. The task of balancing the economic demands of raising a family and the need to find time to devote to children is very difficult for people in low-paying jobs with limited power to negotiate working arrangements. In addition, research shows that someone who has grown up in poverty is usually disadvantaged well into adulthood. There is a correlation between poverty and success in mid-life. Controlling for qualifications, people in their 30s who experienced financial hardship/poverty when growing up are less likely to be doing well in the labor market (Blanden and Gibbons, 2006). It appears that the relationship between poverty and low achievement in school is part of a larger cycle in which family poverty is passed on from one generation to the next.

The Rowntree Foundation study (2007), also showed that British children were more likely to have low educational achievement if they received free school meals and lived in poor urban areas. These researchers found that being on free school meals was a stronger predictor of low achievement for White pupils than for other ethnic groups. Also, when White children were under-achievers early in their schooling, they continued to persist in under achieving. These results suggest that when White children live in poverty and face other disadvantages, they are less likely than other ethnic groups to overcome the negative effects. This particular finding mirrors a similar finding from Fryer and Levitt (2005) in which the researchers found that children who were on WIC (a U. S. federal grant program providing supplemental

nutrition to women, infants and children through the age of five) consistently scored lower on all assessments administered within the program studied.

Inequalities appear to develop for the Economically Disadvantaged subgroup earlier than school age, and it appears that school quality is consistently inferior for economically disadvantaged children than it is for their economically advantaged peers. For example, research has shown that the largest variance in student reading achievement on assessments such as the NAEP may be explained by variables related to teacher characteristics (e.g., quality of pre-service education and training, professional development and training, etc.), even after controlling for variables such as student poverty levels and language background (Darling-Hammond, 2000). Also, children in high-poverty schools are likely to have less qualified, less knowledgeable teachers (Pearson, 2001). As a general rule, we might conclude that children who enter school with limited literacy experiences may be more sensitive to the quality of their instruction than children who enter school with more and varied literacy experiences (Foorman, B. R., Francis, D. J., Fletcher, J. M. Schatschneider, C., & Mehta, P., 1998). In addition, many classroom teachers and special education teachers reported feeling unprepared to teach reading, especially to children attending high-poverty schools (Moats & Lyon, 1996). Educators, overall, are a highly educated group and are highly skilled in reading, spelling and writing; however, teachers' personal skill levels do not ensure that they feel competent in teaching children those skills. For example, McCutchen et al. (2002) found no relationship between a teacher's knowledge of children's literature and that teacher's ability to instruct comprehension or writing activities with struggling beginning readers.

Given factors that contribute to inferior school quality for low-income children, one study from Northern Ireland (Horgan, 2007), points to boys as young as nine or ten years becoming very disenchanted with school and starting to disengage in school activities. The evidence suggests that the interaction of educational disadvantage faced by children growing up in poverty, the difficulties faced by teachers in low-income disadvantaged schools, and the differences in ways that boys and girls are socialized, lead to boys feeling failed by the educational system. The Horgan study also found that children were highly aware of their social position and the limitations that it placed upon them. A separate study (Sutton, L., Smith, N., Dearden, C., & Middleton, S., 2007) with children aged eight to 13, found that more economically advantaged children described a much richer set of experiences in school, while economically disadvantaged children described issues related to discipline and detention. Teacher behavior itself can impact student achievement through interpersonal interactions with students. Teachers tend to perceive low-income/poor students less positively (e.g., having less maturity and self-regulatory skills) and to have lower achievement expectations for those students than for their higher-income peers largely on the basis of non-cognitive factors such as speech patterns and dress (McLoyd, 1998).

Both the Horgan (2007) and the Sutton (2007) studies asked children directly about their attitudes toward school. These researchers found that the belief in the importance of education was equally strong among students from economically advantaged and disadvantaged backgrounds. Thus, negative attitudes toward education/school were not based on these children feeling that education does not matter in their lives; instead, negative

attitudes were based on the children's lack of confidence in their own abilities to thrive within the educational system.

Given the preponderance of research in the area of childhood poverty and its effects on educational attainment and future life success, national and state leaders and educators must also consider the research on effective schools and the effects of inputs on student achievement. Research has shown that there are seven correlates apparent in all effective schools, including high expectations for student success, frequent monitoring of student progress utilizing a variety of assessment tools, use of assessment data to improve individual student performance and the overall instructional program and extensive opportunities for student learning (Edmonds, 1979). Recognition and application of these seven correlates of school effectiveness must be made since it appears that educational attainment is the only key to mediating poverty risks across the life span.

One commonly accepted method of measuring/examining achievement gaps among subgroups is to compare students' academic performance on standardized assessments.

International Assessment Comparison

Recently (2001 and 2006), governors, state policymakers, researchers, educators and other stakeholders could examine the literacy performance of U. S. fourth graders compared with international peers' performance by examining the results of the *Progress in International Reading Literacy Study (PIRLS*, 2007). The 2006 study results (www.pirls.org) were released in November 2007, and included a total of 5,190 U. S. students, as well as students from 44 other jurisdictions (countries) worldwide. The *PIRLS* study examined fourth-grade reading literacy across three dimensions, i.e., (1) processes of comprehension; (2) purposes of reading including reading for literary experience and reading to acquire and use information; and (3) reading behaviors and attitudes (this information gathered through background questionnaires).

Analyses of data attempted to address how the reading literacy of U. S. fourth-grade students compared with the reading literacy of fourth-grade students internationally; how these U. S. fourth-grade students' literacy varied by student background characteristics, school and classroom characteristics and home reading environment; and how the reading literacy of U. S. fourth-grade students had changed since the 2001 *PIRLS* study. The scores (combined reading literacy scale) are reported on a scale from 0-1000 with the scale average fixed at 500 and a standard deviation of 100. In 2006:

- The average score for **all** U. S. students was 540, which was above the mean of 500 scale score points.
- The U. S. scored below 17 jurisdictions/countries worldwide.
- Internationally, the reading achievement of students in schools with few disadvantaged students (no more than 10%) was much higher (56 scale score points or more than half a standard deviation) than for students with a high percentage of disadvantaged classmates (more than 50% low SES).

- According to school principals, in PIRLS 2006, about two-fifths of students (39%), on average across countries, were in schools with few students (no more than 10%) from disadvantaged homes.
- On average, 18% of students were in schools with a high percentage (50% or more) of disadvantaged classmates.

National Assessment Comparison

One assessment that educators look to for indication of progress in closing performance gaps is the National Assessment of Educational Progress (NAEP). NAEP is a required assessment in reading and mathematics under No Child Left Behind (2001), W. Va. State Code §18-2E-2 and West Virginia Board of Education Policy 2340. The NAEP assessment is administered every two years to a sample of approximately 2,500 to 3,000 fourth and eighth grade students chosen at random from state schools that correspond with state demographics. NAEP assessments are based on content frameworks and specifications developed by the National Assessment Governing Board (NAGB), and it is a national measure of what students know and can do in specific areas such as reading and mathematics.

2007 NAEP Reading—Grade 4

- The WV Economically Disadvantaged (ED) subgroup consistently had a higher percentage of students scoring At or Above Basic than the National ED subgroup in 2003 (57% to 44%), 2005 (51% to 46%) and 2007 (53% to 50%).
- The WV ED subgroup showed a 2% increase in students performing At or Above Basic between 2005 and 2007.
- An achievement gap continued to persist between the WV ED subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV ED subgroup had 53% (roughly 5 out of every 10 students) scoring within the At or Above Basic level while the WV All subgroup had 63% (6 out of 10 students) scoring at that same performance level.

2007 NAEP Reading—Grade 8

- The WV Economically Disadvantaged (ED) subgroup had a higher percentage of students scoring At or Above Basic than the National ED subgroup in 2003 (63% to 56%) and in 2007 (59% to 58%).
- The WV ED subgroup showed an increase of 3% in students performing At or Above Basic between 2005 and 2007.

- An achievement gap continued to persist between the WV ED subgroup and the WV AII subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV **ED** subgroup had 59% (6 out of every 10 students) scoring **At or Above Basic** while the WV **All** subgroup had 68% (7 out of 10 students).

2007 NAEP Mathematics—Grade 4

- The WV Economically Disadvantaged (ED) subgroup consistently had a higher percentage of students scoring At or Above Basic than the National ED subgroup in 2003 (68% to 62%), 2005 (69% to 67%) and 2007 (73% to 70%).
- The WV ED subgroup showed a 4% increase in students performing At or Above Basic between 2005 and 2007.
- An achievement gap continued to persist between the WV ED subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.
- In 2007, the WV **ED** subgroup had 73% (7 out of 10 students) performing **At** or **Above Basic** while the WV **All** subgroup had 81% (8 out of 10).

2007 NAEP Mathematics—Grade 8

- The WV Economically Disadvantaged (ED) subgroup performed above the National ED subgroup in percentage of students scoring At or Above Basic in 2003 (51% to 47%), but the WV ED subgroup scored below the National ED subgroup in percentage of students scoring At or Above Basic in 2005 (46% to 51%) and 2007 (49% to 55%).
- The WV **ED** subgroup increased 3% in students scoring **At or Above Basic** between 2005 and 2007.
- An achievement gap continued to persist between the WV ED subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV **ED** subgroup had 49% (5 out of every 10 students) performing **At or Above Basic** while the WV **All** subgroup had 61% (6 out of 10).

State Assessment Comparison

The West Virginia Educational Standards Test (WESTEST) is used to examine/measure achievement gaps between subgroups of students. WESTEST is a required assessment in

grades 3-8 and 10 under No Child Left Behind (2001), W.Va. State Code §18-2E-2 and West Virginia State Board Policy 2340. It is administered each year and results are reported by the federally required subgroups.

- The Economically Disadvantaged (ED) subgroup increased 4.4% in the
 percentage of students scoring At or Above Mastery between 2004 and 2007
 on the WESTEST Reading/Language Arts test, but they continued to perform
 below their All subgroup peers.
- In 2007, the percentage of ED students performing At or Above Mastery on the WESTEST Reading/Language Arts test was 72.8% (roughly 7 out of every 10 students) while the percentage of All subgroup students was 80.8% (8 out of every 10 students).
- 2004-2007, the ED subgroup increased 9.9% in the percentage of students scoring At or Above Mastery in Mathematics while the All subgroup increased only 8.7%.
- As of 2007, an achievement gap continued to persist for the ED subgroup across all content areas.
 - **RLA**—7 out of 10 **ED** students were **At or Above Mastery** in 2007 while 8 out of 10 **All** students performed at that level.
 - <u>Mathematics</u>—7 out of 10 **ED** students were **At or Above Mastery** while 8 out of 10 **All** students performed at that level.
 - <u>Social Studies</u>—7 out of 10 ED students were **At or Above Mastery** while almost 8 out of 10 **All** students performed at that level.
 - <u>Science</u>—8 out of 10 **ED** students were **At or Above Mastery** while approximately 9 out of 10 **All** students performed at that level.

Another way to examine/measure the achievement gap is to compare the highest level of educational attainment for subgroups of students. Research has indicated that economically disadvantaged students are more likely to drop out of high school before graduating, have higher rates of juvenile delinquency, higher rates of teenage pregnancy, and are less likely to attend college or to successfully complete if they attend college (Perez-Johnson & Maynard, 2007). Caldwell & Ginther (1996) found that students from low SES backgrounds constitute the largest group of at-risk individuals for not graduating from high school. The strongest predictors that a student is likely to drop out are family characteristics such as: socioeconomic status, family structure, family stress (e.g., death, divorce, family moves) and the mother's age. Of those characteristics, low socioeconomic status has been shown to bear the strongest relationship to students' tendency to drop out (McKeon, NEA Research, 2006 http://www.nea.org/achievement/talkingdropout.html).

• In 2007, approximately 74% of WV **Economically Disadvantaged (ED)** students graduated high school while 85% of **All** students graduated.

The percentage of WV ED students graduating increased 0.16% from 2006 to 2007.

College enrollment rate has more than doubled in the last 30 years with more than 14 million students nationwide now participating in some form of postsecondary education (National Governors Association, 2003). College-going rate is up for low-income students, but they still haven't reached the college going rate of higher income students in the mid-1970s (The Education Trust, 2007). In 2004, only 50% of low-income students attended college while 79% of high income students attended college (U.S. Department of Education, The Condition of Education 2006, Table 29-1). College-going rate and degree attainment are up for all groups, but the gaps between groups are now larger than 30 years ago.

According to the Organisation for Economic Co-Operation and Development (OECD, 2007), in terms of college degree attainment (bachelor and associate degrees), in 2005, the United States ranked third (38% of adults ages 25-64) out of 30 industrialized nations (www.oecd.org/edu/eag2007). However, in 2005, the United States was ninth out of 30 countries in the percentage of younger (ages 25-34) workers with an associate degree or higher (www.oecd.org/edu/eag2007). Even more sobering was that in 2005, the United States was one of only two countries that had no increase in college attainment among younger (ages 25-34) workers. Currently in the United States, low-income students earn bachelors' degrees at one-eighth the rate of their more advantaged counterparts (9% vs. 75% by age 24).

These differences in college enrollment and graduation rates mirror differences in the high school courses taken and student academic preparation for college success. Over the last five years, 2003-2007, the percent of students meeting college readiness benchmarks on the ACT have increased slightly. For example, in 2003, 67% of all students tested in English curriculum content met college readiness benchmark standards on the ACT, but that percentage increased to 69% in 2007 (www.act.org). The West Virginia Department of Education does not collect the data concerning the number or percentage of students attending college or the college retention rate. The Higher Education Policy Commission (HEPC) does collect College Going Rate data by WV high school and county, but the HEPC does not aggregate this data by subgroup (J. Reed, personal communication, January 14, 2008).

Research shows that most future jobs within the United States will require some level of college study or career training after high school graduation. Currently, about half of all the students who enroll in college actually earn a terminal degree or certificate. At a national and state level, this college readiness issue has become a major concern as ACT Inc. estimates that 60-70% of its test takers are not well-prepared for college study in language arts, mathematics, or both fields (Spence, 2007). Even many students who are not required to take remedial courses are still not well-prepared to handle college-level work. Statistics show that 40% of students in four-year colleges and 53% overall take remedial courses in college and the more remedial study that students need, the lower their chances become of graduating from college (Association of American Colleges and Universities, 2002).

To date, few states apply one set of readiness standards across all of postsecondary education. Instead, individual postsecondary institutions or systems often set their own college readiness or placement standards (http://www.insidehighered.com/views/2007/03/22/spence).

Therefore, one of the most effective means to evaluate college readiness (recognized and accepted nationally) would be score results from the ACT; however, ACT does not report results for the **Economically Disadvantaged** subgroup.

According to the College Board in its *4th Annual Advanced Placement Report to the Nation* (2008), of the estimated 2.8 million students who graduated from U. S. public schools in 2007, almost 426,000 (15.2%) earned an AP Exam grade of at least a 3 on one or more AP Exams. This number increased from 14.7% in 2006 and 11.7% in 2002 (www.apcentral.collegeboard.com). In West Virginia, data was not provided on the number of economically disadvantaged students who were enrolled in Advanced Placement classes or the number of students within that subgroup who scored a 3 or above on Advanced Placement exams.

Both the WV **Economically Disadvantaged (ED)** and **All** subgroups had high rates of school attendance. In 2007, the **ED** subgroup had a 96.43% attendance rate while the **All** subgroup had a 97.20% rate—a difference of 0.77%. The **ED** subgroup had a decrease in attendance rate of -0.11% from 2006 to 2007.

The national status dropout rate (the percentage of 16- to 24-year-olds who are not enrolled in school and have received neither a diploma nor an equivalency credential) declined from 14 percent in 1977 to 9 percent in 2006 (USDE, Digest of Education Statistics, 2007). The West Virginia high school dropout rate appears to be much below the national level (2005 data) for all subgroups. The WV **ED** subgroup dropout rate in 2006 was 4.65% while the 2006 **All** subgroup dropout rate was 2.34% (a difference of 2.31%). In 2007, the **ED** dropout rate decreased 0.54 to 4.11% while the **All** dropout rate increased slightly to 2.39% (a difference of 1.72%).

According to the National Governors Association (2003), in order to close the Economically Disadvantaged achievement gap, many state policymakers across the nation are addressing four key areas:

Early childhood care and education

Improving teacher quality

Early intervention for helping students into and through college

Extra learning opportunities (ELOs)—(after school programs)

Conclusions

- In measuring/examining academic performance between Economically
 Disadvantaged (ED) and All students on standardized assessments either internationally, nationally or by state, it is clear that persistent, often significant, achievement
 gaps still exist between ED and All subgroups.
- On the *Progress in International Reading Literacy Study 2006* (*PIRLS*, 2007), a significant gap persisted between scores of students who were economically disadvantaged and scores of their more affluent peers (56 scale score points or more than half a standard deviation).

- On the National Assessment of Educational Progress (NAEP, 2007), the WV ED subgroup continued to have persistent performance gaps At or Above Basic level in both 4th and 8th grades in reading and mathematics.
- As of 2007, an achievement gap continued for the ED subgroup across all content areas on the West Virginia Educational Standards Test (WESTEST).
- In examining levels of educational attainment for students in West Virginia, there
 remain persistent gaps for ED students in areas such as dropout rate, attendance,
 number of students within this subgroup taking Advanced Placement exams, etc.
- While the WVDE does not provide college going rate or college graduation rate data for
 this subgroup, it is likely that a gap exists between the WV ED subgroup and the WV
 All subgroup in the percentage of students attending college and the percentage
 graduating. This may be surmised based upon national information that only 9% of low
 SES students graduate from college while 75% of their high SES peers graduate.

WV Initiatives That Address the Economically Disadvantaged Achievement Gap

West Virginia is moving forward in key areas that can assist in closing the **Economically Disadvantaged** achievement gap. State initiatives in areas such as early childhood care and education, improving teacher quality, enhancing learning through instruction in and use of 21st century learning skills and tools, early intervention for helping students into and through college, and providing extra learning opportunities (ELOs) are geared toward increasing student performance and success. For additional information on each of the programs listed below, please see the **Closing the Achievement Gap Initiatives in West Virginia** section of this report beginning on page 177.

Revised Content Standards and Objectives (CSOs)

Increased graduation requirements in West Virginia schools

Statewide use of classroom, benchmark and summative assessments

Project-Based Learning

Universal Pre-K

Even Start

Reading First

West Virginia Quality Enhancement for Language and Literacy (QELL) Project

Special Education Reading Project (SERP)

West Virginia Phonemic Awareness Collaborative Statewide (PALS) Project

Response to Intervention (RTI)

E-Learning for Educators

Enhancing Education through Technology (EETT)

West Virginia Virtual School (WVVS)

21st Century Community Learning Centers Program

Recommendations

General recommendations addressing this area are presented in Section **Recommendations**, beginning on page 227.

Students with Disabilities (SWD) Subgroup

During the 2005-2006 school year, there were roughly 6.8 million children (ages 6-21) in the United States receiving special education services under Part B of the Individuals with Disabilities Education Act (National Center for Education Statistics, 2007). Of those students, roughly 67% had specific learning disabilities or speech or language impairments. Of those students with specific learning disabilities, approximately 80% struggled with reading. Fewer than 12% had disabilities associated with significant cognitive impairments, such as mental retardation or traumatic brain injury. According to the West Virginia Department of Education, Office of Special Programs, Extended & Early Learning, Special Education Data Report http://wweis.k12.wv.us/nclb/OSEcf/Public/replist1.cfm, West Virginia had 18.34% of its total number of students enrolled (281,735) in the 2007-2008 school year with Individualized Education Programs (IEPs)—this number includes Gifted and Exceptional Gifted students. The percentage of WV Students with Disabilities was 16.99%.

WV Students with Disabilities (Ages 3-21) Percent of Total Student Enrollment 2007-2008 State		
Autism	952	0.34%
Behavior Disorders	1,864	0.66%
Blind and Partially Sighted	259	0.09%
Deaf and Hard of Hearing	478	0.17%
Deaf-Blindness	24	0.01%
Mental Impairments	7,983	2.83%
Orthopedic Impairments	157	0.06%
Other Health Impairments	4,845	1.72%
Preschool Special Needs	2,231	0.79%
Specific Learning Disabilities	14,136	5.02%
Speech/Language Impairments	14,796	5.25%
Traumatic Brain Injury	130	0.05%
TOTAL	47,855	16.99%

Adapted from http://wveis.k12.wv.us/nclb/OSEcf/Public/replist1.cfm

Approximately 5% of all public school students are identified as having a learning disability (Lyon, 1996) and, in West Virginia, the WVDE has reported 5.02% of all enrolled school children in 2007-2008 have been identified as having specific learning disabilities. This classification includes disorders in any of seven specific areas, including (1) receptive language (listening), (2) expressive language (speaking), (3) basic reading skills, (4) reading comprehension, (5) written expression, (6) mathematics calculation, and (7) mathematical reasoning. These separate types of learning disabilities often co-occur and may also include social skill deficits and emotional or behavioral disorders (Lyon, 1996). Lerner (1989), in an analysis of public school referral data, determined that approximately 80% of children who had been identified as having learning disabilities had their primary difficulties in learning to read. This finding was further supported by Sally Shaywitz and colleagues (1994), as the researchers determined that

nearly all children who score below the 25th percentile on standardized reading tests can meet the criteria for having a reading disorder. Reading difficulties in young children tend to reflect a persistent deficit rather than a developmental lag. Children with delays in understanding phonological concepts in first grade are not likely to catch up with their peers without explicit and systematic instruction. Additional longitudinal studies (Francis, Shaywitz, Steubing, et al., 1994; Lyon, Gray, Kavanagh & Krasnegor, 1993; Lyon, 1994, 1995; Shaywitz, Escobar, Shaywitz, et al., 1992; Shaywitz, 1996) show that reading disabilities, and learning disabilities in general, reflect a persistent deficit that continues into adulthood. Of children who are reading disabled in the third grade, approximately 74% continue to read significantly below grade level in the ninth grade.

In a recent analysis by VanGetson and Thurlow (2007), the researchers examined several areas surrounding the reporting of states' assessment data (2004-2005) including performance gaps for **Students with Disabilities** (**SWD**) and their general education peers on statewide accountability assessments. In general, VanGetson and Thurlow found that the reading scores for **SWD**s was much lower than the performance of general education students. In elementary grades, the difference in percent of students proficient in reading ranged from 11 to 49 percentage points; in middle school grades, the percent of students proficient ranged from 23 to 58 percentage points; and at the high school level from 20 to 59 percentage points. Perhaps not surprisingly, the gaps between students with disabilities and those without disabilities tended to increase with grade level. Performance gaps in mathematics for students with and without disabilities tended to be similar to the findings in reading. In general, at the elementary level across states, the difference in percent proficient ranged from 10 to 45 percentage points; the middle school level from 12 to 51 percentage points; and at the high school level from 17 to 60 percentage points.

One commonly accepted method of measuring/examining achievement gaps among subgroups is to compare students' academic performance on standardized assessments.

National Assessment Comparison

One assessment that educators look to for indication of progress in closing performance gaps is the National Assessment of Educational Progress (NAEP). NAEP is a required assessment in reading and mathematics under No Child Left Behind (2001), W. Va. State Code §18-2E-2 and West Virginia Board of Education Policy 2340. The NAEP assessment is administered every two years to a sample of approximately 2,500 to 3,000 fourth and eighth grade students chosen at random from state schools that correspond with state demographics. NAEP assessments are based on content frameworks and specifications developed by the National Assessment Governing Board (NAGB), and it is a national measure of what students know and can do in specific areas such as reading and mathematics.

2007 NAEP Reading—Grade 4

 The WV Students with Disabilities (SWD) subgroup had a higher percentage of students scoring At or Above Basic than the National SWD subgroup

- In 2003 (34% to 29%) and in 2005 (35% to 33%), but the WV **SWD** sub-group had a lower percentage of students scoring **At or Above Basic** than the National **SWD** subgroup in 2007 (28% to 36%).
- The WV SWD subgroup showed a 7.0% decrease in students performing At or Above Basic between 2005 and 2007.
- An achievement gap continued to persist between the WV SWD subgroup and the WV AII subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV SWD subgroup had 28% (roughly 3 out of every 10 students) scoring within the At or Above Basic level while the WV All subgroup had 63% (6 out of 10 students) scoring at that same performance level.

2007 NAEP Reading—Grade 8

- The WV Students with Disabilities (SWD) subgroup had a consistently lower percentage of students scoring At or Above Basic than the National SWD subgroup in 2003 (29% to 32%), 2005 (27% to 33%), and in 2007 (21% to 34%).
- The WV **SWD** subgroup showed a decrease of 6.0% in students performing **At or Above Basic** between 2005 and 2007.
- An achievement gap continued to persist between the WV SWD subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV SWD subgroup had 21% (2 out of every 10 students) scoring At or
 Above Basic while the WV All subgroup had 68% (7 out of 10 students).

2007 NAEP Mathematics—Grade 4

- The WV Students with Disabilities (SWD) subgroup had a lower percentage of students scoring At or Above Basic than the National SWD subgroup in 2003 (39% to 50%) and in 2005 (52% to 56%), but the WV SWD subgroup had a higher percentage of students scoring At or Above Basic than the National SWD subgroup in 2007 (61% to 60%).
- The WV SWD subgroup showed a 9.0% increase in students performing At or
 Above Basic between 2005 and 2007.
- An achievement gap continued to persist between the WV SWD subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.

• In 2007, the WV **SWD** subgroup had 61% (6 out of 10 students) performing **At or Above Basic** while the WV **All** subgroup had 81% (8 out of 10).

2007 NAEP Mathematics—Grade 8

- The WV **Students with Disabilities (SWD)** subgroup consistently performed below the National **SWD** subgroup in percentage of students scoring **At or Above Basic** in 2003 (14% to 29%), 2005 (17% to 31%) and 2007 (21% to 33%).
- The WV **SWD** subgroup increased 4.0% in students scoring **At or Above Basic** between 2005 and 2007.
- An achievement gap continued to persist between the WV SWD subgroup and the WV All subgroup in the percentage of students scoring At or Above Basic in 2007.
- The WV **SWD** subgroup had 21% (2 out of every 10 students) performing **At or Above Basic** while the WV **All** subgroup had 61% (6 out of 10).

State Assessment Comparison

The West Virginia Educational Standards Test (WESTEST) is used to examine/ measure achievement gaps between subgroups of students. WESTEST is a required assessment in grades 3-8 and 10 under No Child Left Behind (2001), W.Va. State Code §18-2E-2 and West Virginia State Board Policy 2340. It is administered each year and results are reported by the federally required subgroups.

- The Students with Disabilities (SWD) subgroup increased 7.0% in the
 percentage of students scoring At or Above Mastery between 2004 and
 2007 on the WESTEST Reading/Language Arts test, but they continued to
 perform below their All subgroup peers.
- In 2007, the percentage of SWD students performing At or Above
 Mastery was 39.9% (roughly 4 out of every 10 students) while the
 percentage of All subgroup students was 80.8% (8 out of every 10
 students).
- 2004-2007, the SWD subgroup increased 12.03% in the percentage of students scoring At or Above Mastery in Mathematics while the All subgroup increased only 8.7%.

- As of 2007, an achievement gap continued to persist for the SWD subgroup across all content areas.
 - **RLA**—4 out of 10 **SWD** students were **At or Above Mastery** in 2007 while 8 out of 10 **All** students performed at that level.
 - <u>Mathematics</u>—4 out of 10 **SWD** students were **At or Above Mastery** while 8 out of 10 **All** students performed at that level.
 - <u>Social Studies</u>—5 out of 10 **SWD** students were **At or Above**<u>Mastery</u> while almost 8 out of 10 **All** students performed at that level.
 - <u>Science</u>—6 out of 10 **SWD** students were **At or Above Mastery** while approximately 9 out of 10 **All** students performed at that level.

Another way to examine/measure the achievement gap is to compare the highest level of educational attainment for subgroups of students. Research by Wagner and Blackorby (1996), reported results from the USDE *National Longitudinal Transition Study of Special Education Students* (*NLTS*). Please note that the United States Department of Education, Institute of Education Sciences, National Center for Special Education Research is currently involved in the *National Longitudinal Transition Study-2* (*NLTS2*), which began in the 2000-2001 school year and which will continue for nine years and five waves of data collection. Please refer to the NLTS2 Web site for additional information regarding this study and the series of reports which will be generated from the collected data, http://www.nlts2.org.

According to Wagner and Blackorby (1996), since 1987, the *NLTS* study has defined much of what is known about the experiences of students with disabilities nationally while they were in secondary school and for up to five years afterward. The *NLTS* included a nationally representative sample of more than 8,000 youth with disabilities from more than 300 school districts across the U. S. All sample participants were special education students between the ages of 15—21 in the 1985-86 school year. Data were collected about them (school records, parent telephone interviews, student telephone interviews and surveys of principals and teachers) in 1987 and again in 1990. Over 55% of these secondary-level students had specific learning disabilities, 24% had cognitive disabilities and 10% had emotional disabilities.

The *NLTS* results reported in Chart 1 on page 38 are weighted findings which can be considered representative of students with disabilities nationally.

Chart 1: NLTS Study Findings		
Post High School Goal	The majority of high school students with disabilities had a post secondary goal of entering the work force upon leaving schoolmore than 56% of 12 th graders with disabilities wanted to find competitive employment.	
Outcome	After being out of school three to five years, 57% of students with disabilities were working in competitive employment and the majority (43%) were working full time. Over one-third (36%) were not working and 17% were not looking for work.	
Outcome	In comparison, 69% of general education students were working after being out of high school for three to five years.	
Post High School Goal	More than one-fourth of 12 th graders with disabilities (28%) had a goal of postsecondary vocational training.	
Post High School Goal	Only among students with speech or sensory impairments, did one-third or more have college attendance as a postsecondary goal.	
H. S. Curriculum	Throughout four years of high school, only 12% of students with disabilities had taken any advanced mathematics classes (algebra, geometry, trigonometry or calculus).	
H. S. Curriculum	Only 18% of students with disabilities had taken a foreign language at any time in high school.	
H. S. Curriculum	In addition to their academic courses, nearly all (99%) students with disabilities who stayed in school for four grade levels took some type of vocational education courses.	
Drop Out Information	30% of students with disabilities who left secondary school dropped out; an additional 8% dropped out before reaching high school.	
Drop Out Information	During four grade levels of high school, 64% of students with disabilities failed at least one course.	
Drop Out Information	Within the <i>NLTS</i> analyses, <u>course failure</u> was found to be the <u>strongest predictor that students would drop out of school</u> .	
College Going	After being out of school for three to five years, only 27% of non-graduating students with disabilities had enrolled in postsecondary school.	
College Going	Only 37% of students with disabilities who had graduated from high school had enrolled in postsecondary schools compared with 78% of general education students.	
Demographics/Risk Factors	Secondary students with disabilities were significantly more likely to be poor, African American, or from single-parent households than their general education peers.	
Demographics/Risk Factors	Household income was strongly associated with how students with disabilities fared in their early post high school years.	
Demographics/Risk Factors	This relationship of poverty and lower post high school outcomes was consistent across all disability types and it was statistically significant for students with mild or sensory impairments.	

Current West Virginia data shows that a performance gap exists for the **Students** with **Disabilities** (**SWD**) subgroup and the **All** subgroup in graduation rate.

- In 2007, approximately 73% of WV **Students with Disabilities (SWD)** subgroup graduated high school while 85% of **All** subgroup students graduated.
- The percentage of WV SWD subgroup graduating increased 0.50% from 2006 to 2007.

In addition, a small performance gap exists between the **SWD** subgroup and the **All** subgroup in attendance rate.

- In 2007, the **SWD** subgroup had an attendance rate of 96.8% while the **All** subgroup had an attendance rate of 97.2%.
- The attendance rate for SWD decreased 0.05% between 2006 and 2007.

The national status dropout rate (the percentage of 16- to 24-year-olds who are not enrolled in school and have received neither a diploma nor an equivalency credential) declined from 14 percent in 1977 to 9 percent in 2006 (Digest of Education Statistics, 2007). Each year nearly one-third of public high school students fail to graduate from high school (Bridgeland, Dilulio & Morrison, 2006). Based on calculations per school day (180 days of school, seven hours per day), one high school student drops out every nine seconds (Monrad, September 2007). The dropout rate for students with emotional/behavioral disabilities is approximately double that of their general education peers (http://www.betterhighschools.org/docs/NHSC_DropoutFactSheet.pdf). In West Virginia, the high school dropout rate appears to be much below the national level (2005 data) for all subgroups. The WV SWD subgroup dropout rate in 2006 was 5.29% while the 2006 All subgroup dropout rate was 2.34% (a difference of 2.95%).

Despite alarming national statistics, one of the most positive areas for West Virginia **SWD** was in the area of dropout rate.

- The **SWD** dropout rate in 2007 (0.53%) was much lower than the **All** dropout rate (2.39%).
- The **SWD** dropout rate decreased 4.76% from 2006 to 2007.
- The All dropout rate increased 0.05% from 2006 to 2007.

College enrollment rate has more than doubled in the last 30 years with more than 14 million students nationwide now participating in some form of postsecondary education (National Governors Association, 2003). Access to college has clearly increased with 75% of high school graduates going on to college and 90% of high school seniors indicating that they expect to attend college (Association of American Colleges and Universities, 2002). With the arrival of the 21st century came an increase in the quantity and quality of information available to students; a shift from remembering facts to finding and evaluating information; changing classroom structures due to online learning opportunities and

project-based learning; an emphasis on creative problem solving, team work and adaptability; an increased awareness of global connectedness; and the creation of newlycreated jobs using technology and information. These new pressures on public schools and colleges/universities increased students' awareness of the importance of pursuing a college degree. In addition, college graduates tend to earn approximately 80%, or \$1,000,000, more than high school graduates over a lifetime (Association of American Colleges and Universities, 2002). While college-going rate is up for students with disabilities, they still have not reached the college going rate of their general education peers. Students with disabilities were less likely to be enrolled in public four-year institutions, about as likely to be enrolled in private, not-for-profit four-year institutions, and were more likely to be enrolled in public two-year colleges. Based on data from the USDE National Education Longitudinal Study of 1988, Third Follow-Up Survey 1994 (NELS: 1988/1994), looking at a representative sample of eighth graders in 1988, found that students with disabilities among those who graduated from high school were less likely to enroll in postsecondary education. By 1994, about two years after finishing high school, approximately 63% of students with disabilities had enrolled in some form of postsecondary education compared with about 72% of students without disabilities. Among those who enrolled, 45% enrolled in two-year institutions.

In terms of college degree attainment (bachelor and associate degrees), in 2005, the United States ranked third (38% of adults ages 25-64) out of 30 industrialized nations (www.oecd.org/edu/eag2007). However, in 2005, the United States was ninth out of 30 countries in the percentage of younger (ages 25-34) workers with an associate degree or higher (www.oecd.org/edu/eag2007). Even more sobering was that in 2005, the United States was one of only two countries that had no increase in college attainment among younger (ages 25-34) workers. A survey of undergraduates who enrolled in postsecondary education for the first time in 1989-1990 and who were again surveyed in 1994 (USDE, BPS: 1990/1994), indicated that students who reported any disabilities were less likely than their peers without disabilities to have remained in college or to have earned a degree within five years. As of 1994, 53% of students with disabilities had earned a degree or vocational certificate or were still enrolled in college compared with 64% of general education peers. Among those students, 16% earned a bachelor's degree; 6% earned an associate's degree; and 19% earned a vocational certificate.

These differences in college enrollment and graduation rates mirror differences in the high school courses taken and student academic preparation for college success. Over the last five years, 2003-2007, the percent of students meeting college readiness benchmarks on the ACT have increased slightly. For example, in 2003, 67% of all students tested in English curriculum content met college readiness benchmark standards on the ACT, but that percentage increased to 69% in 2007 (www.act.org). The West Virginia Department of Education does not collect the data concerning the number or percentage of students attending college or the college retention rate. The Higher Education Policy Commission does collect College Going Rate data by WV high school and county, but the HEPC does not aggregate this data by subgroup (J. Reed, personal communication, January 14, 2008).

Research shows that most future jobs within the United States will require some level of college study or career training after high school graduation. Currently, about half of all the students who enroll in college actually earn a terminal degree or certificate. At a national and state level, this college readiness issue has become a major concern as ACT Inc. estimates that 60-70% of its test takers are not well-prepared for college study in language arts, mathematics, or both fields (Spence, 2007). Even many students who are not required to take remedial courses are still not well-prepared to handle college-level work. Statistics show that 40% of students in four-year colleges and 53% overall take remedial courses in college and the more remedial study that students need, the lower their chances become of graduating from college (Association of American Colleges and Universities, 2002).

To date, few states apply one set of readiness standards across all of postsecondary education. Instead, individual postsecondary institutions or systems often set their own college readiness or placement standards (http://www.insidehighered.com/views/2007/03/22/spence). Therefore, one of the most effective means to evaluate college readiness (recognized and accepted nationally) would be score results from the ACT; however, ACT does not report results for the **Students with Disabilities** subgroup.

According to the College Board in its 2008 Advanced Placement Report to the Nation, of the estimated 2.8 million students who graduated from U. S. public schools in 2007, almost 426,000 (15.2%) earned an AP Exam grade of at least a 3 on one or more AP Exams. This number increased from 14.7% in 2006 and 11.7% in 2002 (www.apcentral.collegeboard.com). In West Virginia, data was not provided on the number of **Students with Disabilities** who were enrolled in Advanced Placement classes or the number of students within that subgroup who scored a 3 or above on Advanced Placement exams.

According to the National Governors Association (2003), in order to close the **Students with Disabilities** achievement gap, many state policymakers across the nation are addressing four key areas:

Early childhood care and education

Improving teacher quality

Early intervention for helping students into and through college

Extra learning opportunities (ELOs)—(after school programs)

Conclusions

In measuring/examining academic performance between Students with
 Disabilities (SWD) and All students on standardized assessments either
 nationally, or by state, it is clear that persistent, often significant, achievement gaps
 still exist between SWD and All subgroups.

- On the National Assessment of Educational Progress (NAEP, 2007), the WV SWD subgroup continued to have persistent performance gaps At or Above Basic level in both 4th and 8th grades in reading and mathematics.
- As of 2007, an achievement gap continued for the SWD subgroup across all content areas on the West Virginia Educational Standards Test (WESTEST).
- In examining levels of educational attainment for students in West Virginia, there
 remain persistent gaps for the SWD subgroup in areas such as attendance and
 number of students within this subgroup taking Advanced Placement courses and
 exams, etc.
- While the WVDE does not provide college going rate or college graduation rate data for this subgroup, it is likely that a gap exists between the WV SWD subgroup and the WV All subgroup in the percentage of students attending college and the percentage graduating.

WV Initiatives That Address the Students with Disabilities Achievement Gap

West Virginia is moving forward in key areas that can assist in closing the **Students with Disabilities** achievement gap. State initiatives in areas such as early childhood care and education, improving teacher quality, enhancing learning through instruction in and use of 21st century learning skills and tools, early intervention for helping students into and through college and providing extra learning opportunities (ELOs) are geared toward increasing student performance and success. For additional information on each of the programs listed below, please see the **Closing the Achievement Gap Initiatives in West Virginia** section of this report beginning on page 177.

Revised Content Standards and Objectives (CSOs)

Increased graduation requirements in West Virginia schools

Statewide use of classroom, benchmark and summative assessments

Project-Based Learning

Universal Pre-K

Even Start

Reading First

West Virginia Quality Enhancement for Language and Literacy (QELL) Project

Special Education Reading Project (SERP)

West Virginia Phonemic Awareness Collaborative Statewide (PALS) Project

Response to Intervention (RTI)

E-Learning for Educators

Enhancing Education through Technology (EETT)

West Virginia Virtual School (WVVS)

21st Century Community Learning Centers Program.

Recommendations

General recommendations addressing this area are presented in Section **Recommendations**, beginning on page 227.

Performance Factors Impacting the Achievement Gap



Katie Cunningham

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Performance Factors Impacting the Achievement Gap

Preschool

Early childhood development directly impacts the achievement gap. Research conducted by the National Center for Education Statistics (NCES) found that racial/ethnic disparities pre-dated entrance to school. In fact, in research studies examining students' performance at kindergarten entry, a performance gap of between two-thirds and one full standard deviation existed between the scores of White and Black or Hispanic students in various assessments of cognitive ability in areas such as reading and mathematics (Fryer & Levitt, 2004a; Fryer & Levitt, 2004b; Brooks-Gunn, Klebanov, Duncan & Lee, 2003; Phillips, 2000; Phillips et. al., 1998; Jones, Burton & Davenport, 1982; Coleman et. al., 1966), which approximately represents the difference in performance between the average 4th grader and the average 8th grader (Fryer & Levitt, 2004a). In addition, regardless of the assessments used or the population studied, differences in socioeconomic status (SES) accounted for about half a standard deviation in the difference in performance within Black, Hispanic and White test scores (Duncan & Magnuson, 2005).

There are clearly intellect-shaping factors in the lives of children before they enter school. David Armor and colleagues (1976) examined the influences of cultural and environmental influences on racial variations in cognitive development. His study was the most comprehensive study of child development undertaken to that date within the United States. The findings indicated that 1) low birth weight babies lagged behind others in intellectual development, 2) being born to a mother under the age of 18 had a strong negative impact on cognitive skills, and 3) children in single parent households were at greater risk of behavioral and psychological problems (Thernstrom & Thernstrom, 2003).

In support of Armor's findings, Roland G. Fryer and Steven Levitt (2005) examined a data set from the Early Childhood Longitudinal Study (ECLS-K), which included a nationally representative survey of over 20,000 children who had entered kindergarten in 1998. They found that children who were 1) older at enrollment in kindergarten, 2) had higher birth weights, and 3) those whose mothers were older at the time of first birth scored higher on tests. Perhaps surprisingly, Fryer and Levitt (2005) also found that children who participated in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), a federal grant program serving low-income, nutritionally-at-risk populations, consistently scored lower on standardized tests. Overall, socioeconomic status and the number of children's books in the home were important predictors of test scores at each grade level. The number of books in the home was strongly positively associated with high kindergarten test scores in math. Evaluated at the mean, a one standard deviation increase in the number of books (from 72 to 137) was associated with an increase of .143 in math and .115 in reading. This same finding was further supported within the results of the Progress in International Reading Literacy Study 2006 (PIRLS) Executive Report (November, 2007, www.pirls.org). PIRLS reported that the presence of children's books in the home showed a strong positive relationship with reading achievement. The average reading achievement difference between students from homes with many children's books (more than 100) and those from homes with few children's books (10 or fewer) was 91 score points or almost one standard deviation.

Brain science and developmental research both show that the quality of children's earliest relationships and experiences set the stage for school success, health and future workforce productivity. These early experiences shape the hard wiring of the brain and that hard wiring impacts how children approach life in general, how they learn, how they manage their emotions and how they relate to others (NCCP User Guide, 2007).

Thus, the importance of a high quality preschool becomes one of the most effective means of closing the achievement gap. Studies have found that about half the gap in Black-White scores at the 12th grade could be attributed to differences already present in the first grade. Several longitudinal research studies have provided evidence that children who have attended high-quality preschool programs are better prepared academically and score higher on achievement tests. These same students also have lower retention rates, higher graduation rates, and increased job placement rates (Kober, 2001).

Teacher Quality

Not only subgroup membership affects the achievement gap, but other in-school factors do as well. Teacher quality, including preparedness, expectations and professional development, directly impacts the effectiveness of classroom instruction and the success of students. Some current issues with teacher preparation programs include 1) colleges of education that are incompatible with the ever-changing needs of the 21st century K-12 schools and their digitally-savvy students; 2) situations in which greater importance is placed on pedagogy than content, causing the foundation of a teacher's knowledge to become less significant; and 3) traditional teacher preparation programs that create a barrier for individuals who are changing careers, thus excluding many knowledgeable, highly-qualified people from entering the field of education.

"The effectiveness of teachers has long-term consequences for students" (Laine, 2004, p. 1). Studies show that minority students are less likely than their peers to be taught by veteran, experienced and highly-qualified teachers. This appears to be one of the most critical variables underlying the achievement gap. "Minority students are substantially more likely than White students to be taught by teachers without college majors in the subjects they are teaching. Schools with high-poverty and high-minority enrollments have teachers with fewer years of experience, on average, than other schools, and also have higher rates of turnover" (Kober, 2001, p. 22). Kober goes on to report that teachers in districts with higher percentages of Blacks and Hispanics tend to have lower teacher certification exam scores than their colleagues in other districts. This is extremely significant since a correlation has been found between higher teacher certification exam scores and higher student achievement scores.

Research has shown that the largest variance in student reading achievement on assessments such as the NAEP may be explained by variables related to teacher characteristics (e.g., quality of pre-service education and training, professional development training, etc.), even after controlling for variables such as student poverty levels and language background (Darling-Hammond, 2000). Also, children in high-poverty schools are likely to have less qualified, less knowledgeable teachers (Pearson, 2001). As a general rule, we might conclude that children who enter school with limited literacy experiences may be more

sensitive to the quality of their instruction than children who enter school with more and varied literacy experiences (Foorman, B. R., Francis, D. J., Fletcher, J. M. Schatschneider, C., & Mehta, P., 1998). In addition, many classroom teachers and special education teachers reported feeling unprepared to teach reading, especially to children attending high-poverty schools (Moats & Lyon, 1996). Educators, overall, are a highly educated group and are highly skilled in reading, spelling and writing; however, teachers' personal skill levels do not ensure that they feel competent in teaching children those skills. For example, McCutchen et al. (2002) found no relationship between a teacher's knowledge of children's literature and that teacher's ability to instruct comprehension or writing activities with struggling beginning readers.

While few researchers have been able to adequately measure "racial stereotype bias," a Harris poll (Spring 2001) found that 80 percent of teachers in schools with an enrollment of at least two-thirds minority believed that all children could learn, as compared with 82 percent of those in schools with few minority students (Thernstrom & Thernstrom, 2003, p. 196). The Harris Poll also reported finding a greater level of pessimism in high-minority schools than in low-minority schools. With little scientific evidence as support, the theory assumes that negative perceptions of teachers influence the self-image of students who work and/or achieve accordingly.

Culturally Responsive Schools

A large body of research has focused on the administration and teaching practices of schools that support large concentrations of economically disadvantaged and minority students who do not perform as well as their White and higher-economicallyadvantaged peers. The National Center for Education Statistics (NCES) reported that the percentage of minority students enrolled in U.S. public schools in school year 2007-2008 was 44.1 percent (based on race/ethnicity figures reported nationwide for 98.4 percent of the total student membership; Noel & Sable, 2009), and that the percentage of public school teachers in all U.S. public schools reported in 2003-2004 was 16.9 percent, http://nces.ed.gov/surveys/ sass/tables/sass 2004 18.asp. This disparity between the percentage of public school minority students and percentage of public school minority teachers may have a direct impact on students' learning and performance. According to the Northwest Regional Educational Laboratory (NWREL, 2001), although schools are often designed to provide a uniform education to all students, the absence of a familiar connection between the ethnic minority child's home culture and the school may interfere with the child's ability to function capably in the educational setting. Compounding the difficulties children may already experience are cultural disparities in values, social interaction and linguistic and cognitive styles (www.nwrel.org/cfc/frc/beyus10.html).

The issue of contrasting value systems must be looked at prior to addressing the needs of the students. The United States is an individualistic society, but many of the recent immigrants, especially those from rural backgrounds, follow more collective value systems (success of the group). To develop culturally responsive schools and instructional practices, the values and cultural knowledge of the students must be validated. The educational

approach must be comprehensive, multidimensional, transformative and emancipatory (Gay, 2000). Researchers acknowledge that there is no definitive answer on how to create a culturally-responsive system, but generally agree that 1) data initially lay the groundwork to identify need and ultimately show effect; 2) instruction must be the focus; 3) a connection should be forged between the students and the adults in the building; and 4) everyone must believe that all students can and will learn (Education Trust, 2005b). The challenge is to identify and then find a way to close the cultural gaps that have such profound influences on learning at all grade levels.

Anna Habash, a policy analyst for the Education Trust (October 2008), states that by 2020, the nation's African-American population is expected to increase by 10 percent and the Latino population by 33 percent. Yet, in 2008, more than one in three students from these fastest growing subgroups did not graduate from high school on time (p. 1). The implications for the ethnic minority and economically disadvantaged students are grave when one considers the current frameworks around which schools are structured. With greater significance being placed on educational outcomes, and with the leadership of the National Governors Association (NGA), states are reporting their graduation rates according to new, consistent, and more accurate calculations, (NGA, 2008). These efforts will likely assist state leaders in raising graduation rates for all students.

Effective Schools Correlates

Beginning in the 1970s, a new line of thought surfaced in the literature with regard to the factors related to student and school achievement. This thinking not only seriously considered home background variables, but also allowed for the school's internal workings as factors that influenced student achievement (Cuban, 1984). Furthermore, the most current school organizational and effective schools research proved that school factors were positively related to student achievement. The effective schools correlates are as follows:

- Clear visions, communication, knowledge of quality instruction, supervision of instructional practices, and purposeful leadership are some of the characteristics associated with instructional leadership and student achievement (Blum, Butler, & Olson,1987; Hallinger Murphy, 1987; Levine & Lezotte, 1990; Neufeld & Freeman, 1992; Sammons, Hillman, & Mortimore, 1995).
- 2. Effective schools have a clear and focused mission which the staff shares and understands in terms of the commitment to the school's goals which promotes student achievement (Blum, Butler, & Olson, 1987; Edmonds, 1979).
- 3. A safe and orderly environment is necessary to enhance learning. Effective schools are orderly, purposeful and free from the threat of physical harm; they engage students in both the teaching and learning processes, as well as provide the social aspects of a safe learning environment thereby increasing student achievement (Edmonds, 1979; Levine & Lezotte, 1990; Mayer, Mullens, Moore, & Ralph, 2000; Neufeld & Freeman, 1992; Sammons, Hillman, & Mortimore, 1995).

- 4. A climate of high expectations is the school's drive for academic excellence. There are several studies that positively relate high expectations to student achievement, i.e. 90/90/90 schools and Comer Process (SDP) (Bryk, Lee, & Holland, 1993; Hoy & Sabo, 1998; Hoy et al, 1991; Shouse & Brinson, 1995).
- 5. Frequently monitored student performance is one of the best methods to gain the largest and most lasting gains in student performance (Black & Wiliam, 1998; Bloom, 1976; Flockton & Crooks, 1998; Kumar, 1991; Marzano, 2003; Scheerens & Bosker, 1997; Walberg, 1999).
- Positive home-school relations make a difference in student success, improve student learning, foster a culturally responsive learning environment, and positively impact student achievement and staffing considerations which result in engaging Latino families (Henderson & Mapp, 2002; Mattingly, Prislin, Mackenzie, Rodriguez, & Kayzar, 2002; Chrispeels & Rivero, 2001).
- 7. In effective schools, the opportunity to learn and student time on task are part of the teacher's allocation of instructional time in essential curricular areas. Students are actively engaged in whole class or large groups and teacher directed planned learning activities which positively relate to improved student achievement (Brewer & Stacz, 1996; Burstein, 1993; Marzano, 2001).

Socioeconomic status is still currently presented as one of the leading indicators of academic achievement. However, it is somewhat encouraging to see that school factors are garnering greater respect for having a positive correlation to achievement; this is not always perceptible with socioeconomic status (Bryk et al., 1993; Hoy et al., 1991; Hoy & Sabo, 1998; Hoy & Tarter, 1997; Shouse & Brinson, 1995).

In West Virginia, the educational administrative community is aware of the impact of socioeconomic status upon student achievement. Because the administrators are held accountable for school achievement (W.Va. Code §18-3A-2b; West Virginia Board of Education Policy 2320), they are especially interested in embedding the factors within their schools that can improve student achievement, and, consequently, school achievement. The effective schools correlates of 1) instructional leadership, 2) clear and focused mission, 3) safe and orderly environment, 4) climate of high expectations, 5) frequent monitoring of student progress, 6) positive home-school relations, and (7) opportunity to learn and student time on task (Effective Schools Products, Ltd., 2001) are the elements that impact student learning (Blum, Butler, & Olson, 1987; Edmonds, 1979; Hallinger & Murphy, 1987; Levine & Lezotte, 1990; Marzano, 1998; Neufeld & Freeman, 1992; Sammons, 1999; Sammons, Hillman, & Mortimore, 1995; Scheerens & Bosker, 1997). This body of research creates a clear message, that "the extent to which the Correlates are in place in a school has a dramatic, positive effect on student achievement" (Effective Schools Products, Ltd., 2001, p. 3).

Statewide Accountability System Transition



Statewide Accountability System Change

With the advent of the 21st century, the West Virginia Department of Education (WVDE) realized an urgent need to make changes within its accountability system, to create a system that at once was aligned and connected across all core components. The WVDE understood that it must implement and sustain a high-quality global system of education that was current, engaging, relevant and exciting to 21st century students. The development of West Virginia's 21st century learning plan-**Global 21**-provided this systemic approach to helping our children learn by providing rigorous instruction presented at a variety of depths of knowledge (DOKs), integration of technology tools, and balanced assessments that facilitate and invigorate student inquiry and learning.

To meet the goals of **Global 21**, West Virginia began the lengthy and vigorous process of developing new state content standards and objectives (CSOs) to include increased rigor and a variety of DOK levels. To measure student achievement of these content standards, the WVDE Office of Assessment, Accountability and Research undertook the tremendous responsibility and goal of developing a new statewide accountability assessment, **WESTEST 2**, which would align to the new state CSOs and would accurately measure student achievement in grades 3-11 in reading/language arts, mathematics, social studies and science. The first operational **WESTEST 2** assessment was administered in school year 2008-2009.

In addition, the WVDE diligently worked with local school districts to provide a 21st century system-wide approach to assessment within the state. The Department funded and provided a network of high-quality support tools including techSteps, Acuity, Writing Roadmap 2.0, INTEL, Thinkfinity, Teacher Leadership Institutes, Special Education Teachers Leadership Academies, Principal Leadership Institutes, county team conferences, and others to assist local school districts in implementing the goals of **Global 21**. Further, the WVDE recognized that teachers, principals, and other leaders required high-quality, sustained professional development that involved emerging strategies/knowledge in areas such as instruction, technology and assessments, and the Department has worked to provide an array of these types of professional development opportunities for educators.

Context of Accountability Transition

A review of West Virginia's content standards (prior to July 2008) by national experts revealed that the state's CSOs lacked the rigor necessary to meet the challenges of NAEP, TIMMS, and other national/international assessments. This finding was not acceptable for a state that desired its students to be globally competitive and lifelong learners. By early 2005, the state was poised for major changes within its accountability system.

In 2005, West Virginia became the second state in the nation to implement the Partnership for 21st Century Skills (P21) model. P21 is an advocacy organization that includes members from the business community, education leaders, and policymakers, and this implementation and support further strengthened West Virginia's efforts in developing new state content standards.

In July 2008, the new CSOs became effective for use in every West Virginia classroom, and the revisions to these content standards and objectives significantly broadened the scope of the state's curriculum. More recent reviews of state CSOs by local and national experts have revealed our state curriculum as meeting world-class status.

State Public School Subgroup Impact Assessment Data



Luke Austin Gossert

C. W. Shipley Elementary School

Jefferson County

State Public School Subgroup Impact Assessment Data Criterion

The tables and charts in this section provide trend data and summaries by student performance levels and subgroups for the assessment areas. A description of each assessment precedes the tables and figures that report the statistical information. The following assessment categories and corresponding tables, charts, and findings begin on page 56.

West Virginia Educational Standards Test 2 (WESTEST 2)

WESTEST 2 data charts address WESTEST 2 performance and do not include the West Virginia Alternate Assessment student performance results. WESTEST 2 includes the regular, breach, Braille, and large-print test forms. WESTEST 2 data are reported for all students assessed, regardless of attendance patterns. The data analyses contained in the *Closing the Achievement Gap Report (CAG) for 21st Century Learners in West Virginia* (3rd edition) were completed in August 2009. [Note: WESTEST 2 is part of the statewide assessment system, West Virginia Measures of Academic Progress (WV–MAP).]

National Assessment of Educational Progress (NAEP) — WV and National

NAEP data charts address NAEP aggregate student performance by grade level and content area. NAEP data are reported for all of the students in the sample: NAEP sample sizes run from 2,500 to 3,000 students per grade level and content area (see Tables 5-12 and Figures 5-12B). [Note: The National Assessment of Educational Progress (NAEP) is a required assessment in Reading and Mathematics under No Child Left Behind (2001), W.Va. State Code §18-2E-2, and West Virginia Board of Education Policy 2340.]

ACT

The ACT measures academic development that relies largely on the students' abilities to apply the content knowledge and reasoning skills acquired in their coursework to high-level tasks. These tasks often require the integration of proficiencies and skills from various high school courses. [Note: ACT is not a part of the statewide assessment system, West Virginia Measures of Academic Progress (WV-MAP).]

ACT PLAN

PLAN is a norm-referenced assessment that generates measures of English, mathematics, reading, and science skills for 10th grade students. Information about students' educational career plans, interests, high school course work plans, and self-identified needs for assistance are also gathered and reported. The purpose of this assessment is to provide career awareness and exploration activities; additionally, it is used by 10th graders to revise their individualized plans for the 11th and 12th grades. [Note: PLAN is part of the statewide assessment system, West Virginia Measures of Academic Progress (WV-MAP).]

ACT EXPLORE

EXPLORE is a norm-referenced assessment that generates measures of English, mathematics, reading, and science skills for 8th grade students. In addition, information about students' educational career plans, interests, high school course work plans, and self-identified needs for assistance are gathered and reported. Assessment results assist students, parents, and educators in decision-making about educational career plans, interests, and high school course work plans. [Note: EXPLORE is part of the statewide assessment system, West Virginia Measures of Academic Progress (WV-MAP).]

Scholastic Aptitude Test (SAT)

The SAT Reasoning Test is a measure of the critical thinking skills (verbal and mathematics) needed for academic success in college. The SAT assesses the ability to analyze and solve problems. The SAT is typically taken by high school juniors and seniors. It is administered seven times a year in the United States, Puerto Rico, and United States Territories, and six times a year overseas. [Note: The SAT is not a part of the statewide assessment system, West Virginia Measures of Academic Progress (WV-MAP).]

Career/Technical Education (CTE) Assessments

The West Virginia Career and Technical Education prepares students for the workforce and further education through educational programs and training offered at career and technical education sites throughout the state. The federal Carl D. Perkins Vocational and Technical Act of 1998 requires states to assess and report career/technical student progress related to a number of core indicators of performance. The core indicators that are relevant measures of student achievement in terms of assessment tools used by West Virginia are ACT WorkKeys and End-of-Course exams.

High Schools That Work (HSTW) Assessments

High Schools That Work (HSTW) is a national program designed to improve the way all high school students are prepared for work and further education. The assessment data included in this report are from the 2004, 2006, and 2008 High Schools That Work student assessments in reading, mathematics, and science.

Organization of Assessment Data

The identified assessment measures and corresponding data are presented in the following manner:

- description of each assessment measure
- table that reports statistical information for each assessment measure
- summary of results based on analysis of solid data
- tables/figures depicting summary results
- findings noted

West Virginia Educational Standards Test 2 (WESTEST 2)



Shawna Lathey

Wahama High School Mason County

WESTEST 2

The West Virginia Educational Standards Test 2 (WESTEST 2) is a required assessment under No Child Left Behind (2001), W.Va. State Code §18-2E-1a, and West Virginia State Board Policy 2340. The assessment is administered annually to all students in grades 3-11 and results are reported by the federally-required subgroups.

WESTEST 2 is a custom-designed summative assessment for West Virginia students. Student scores are based on test questions aligned to the West Virginia 21st Century Content Standards and Objectives (CSOs). The assessment results provide information about a student's academic strengths, as well as areas that need improvement. Annual reports are provided indicating performance levels in each of four content areas: (1) reading/language arts (RLA); (2) mathematics; (3) social studies; and (4) science. In addition, the RLA assessment includes an online writing component that is administered prior to the WESTEST 2 May testing dates. The Online Writing Assessment score is combined with the student's WESTEST 2 RLA score in order to determine student performance.

Students' WESTEST 2 scores are grouped by the level of understanding of the content curriculum, and scores are placed into five performance levels called Performance Level Descriptors. The five levels are **Distinguished** Performance Level, **Above Mastery** Performance Level, **Mastery** Performance Level, **Partial Mastery** Performance Level and **Novice** Performance Level. WESTEST 2 results are one indicator of how well students have mastered the CSOs in the four content areas tested.

The WESTEST 2 grade 11 scores in mathematics and reading/language arts are used to determine student mastery of academic knowledge and skills needed for success in entry-level, credit-bearing college mathematics and English courses. Students in grade 11 not meeting the West Virginia College Readiness Benchmark for mathematics will be expected to take a *Transition Mathematics for Seniors* class in 12th grade.

Reading/Language Arts Assessment (RLA):

The **RLA** assessment measures reading comprehension skills and writing skills and strategies in a high-interest, 21st century context. Passages and prompts emphasize 21st century skills, including real-world applications, critical thinking and problem solving. Students do not need to have specific content or technical knowledge to address the topics. The RLA assessment results in a combined score obtained from the results of the Online Writing Assessment and the multiple-choice format assessment.

Mathematics Assessment:

This assessment measures the topic areas of number and operations, algebra, geometry, measurement, and data analysis and probability. Calculators are permitted in all grades of the mathematics assessment.

Social Studies Assessment:

This assessment measures the ability to process content knowledge, apply social studies skills and demonstrate critical thinking and problem solving to reach valid conclusions in real-world situations. Students demonstrate conceptual understanding of content in the areas of citizenship, civics/government, economics, geography and history. This assessment also includes items emphasizing ethical behavior, global awareness, financial literacy, civic participation and health and wellness. Graphic organizers aid students in their analysis of information requiring the synthesis of complex concepts. Each assessment includes one Document-Based Question (DBQ), which is an item set that requires analysis and synthesis of information drawn from several sources in order to reach an informed conclusion.

Science Assessment:

This assessment uses multiple-choice and gridded-response items to measure conceptual understanding, scientific investigation, critical thinking and problem solving in the topic areas of the nature of science, content of science and the application of science in grades 3-8. Grade 9 test items are based on the physical science CSOs and measure the nature and application of science and content of science. Calculators are permitted for use in all grades of the science assessment.

In 2010, grades 10 and 11 test items are based on biology CSOs and measure the nature and application of science and content of science.

West Virginia Alternate Performance Task Assessment (APTA):

According to West Virginia Board of Education (BOE) Policy 2340: *West Virginia Measures of Academic Progress*, the West Virginia Alternate Performance Task Assessment (APTA) is an assessment specifically designed for a small number of students having significant cognitive disabilities whose performance cannot be adequately assessed through the general assessment instrument, West Virginia Educational Standards Test 2 (WESTEST 2), even with accommodations.

APTA is aligned to the Extended Academic Achievement Standards in the content areas of reading/language arts (RLA) and mathematics (APTA is administered to students in grades 3 -8 and 11 for both RLA and mathematics.) and the content area of science (administered to students in grades 4, 6, and 11). The results of this assessment are used to assist classroom instruction and to satisfy accountability requirements of NCLB for reading/language arts and mathematics. APTA results are not provided within the *Closing the Achievement Gap* (*CAG*) *Report for 21st Century Learners in West Virginia*.

APTA is administered individually to students, and the students and/or examiners record answers in the APTA test booklet. This assessment documents a student's efforts, achievement, and progress on instructional activities aligned to specific West Virginia Extended Academic Content Standards and linked to West Virginia 21st Century Content Standards and Objectives. The Extended Academic Standards are descriptions of what students should know and be able to do by grade level in a content area.

It should be noted that WESTEST 2 is a new assessment, and it was first administered to students in May 2009. The results for 2009 are provided, but these results cannot be compared with any prior testing year. Trend data is not currently available.

Note:

Abbreviations contained throughout tables and figures in the WESTEST 2 section include:

All West Virginia students

Nat. Am. Native American

ED Economically Disadvantaged (Low Socioeconomic Status)

SWD Students with Disabilities

LEP Limited English Proficient



WESTEST 2 was administered for the first time in May 2009.

The aggregated performance data for 2009 is provided and shows the (1) percentage of students in each performance level by subgroup, and (2) the percentage of students **At or Above Mastery** level by subgroup.

2009 WESTEST 2 performance results cannot be compared with any prior testing year and trend data is not yet available.

Results from WESTEST 2004—2008 can be found in Appendix A of this report.

2009 WESTEST 2 Reading/Language Arts (aggregate of performance for Grades 3-11): Shows the (1) percentage of students in each performance level by subgroup, and (2) percentage of students **At or Above Mastery** level by subgroup.

Table 1: 2009 WESTEST 2 Reading/Language Arts

	LEP	2.0		LEP	13.0		LEP	35.0		LEP	41.0		LEP	9.0		LEP	50.0
	Migrant	0.0		Migrant	0.0		Migrant	13.0		Migrant	33.0		Migrant	54.0		Migrant	13.0
	SWD	0.0		SWD	3.0		SWD	15.0		SWD	57.0		SWD	24.0	1	SWD	19.0
rades 3-11	ED	1.0	srades 3-11	ED	11.0	es 3-11	ED	36.0	srades 3-11	ED	44.0	s 3-11	ED	8.0	Grades 3-1	ED	48.0
ished for G	Asian	10.0	astery for G	Asian	35.0	ery for Grad	Asian	35.0	astery for (Asian	17.0	se for Grade	Asian	3.0	dastery for	Asian	80.0
at Distingu	Nat. Am.	3.0	t Above Ma	Nat. Am.	17.0	nt at Maste	Nat. Am.	34.0	t Partial M	Nat. Am.	39.0	ent at Novi d	Nat. Am.	6.0	or Above I	Nat. Am.	55.0
WESTEST 2 RLA Subgroup Impact Data Percent at Distinguished for Grades 3-11	Hispanic	1.0	WESTEST 2 RLA Subgroup Impact Data Percent at Above Mastery for Grades 3-11	Hispanic	15.0	RLA Subgroup Impact Data Percent at Mastery for Grades 3-11	Hispanic	39.0	WESTEST 2 RLA Subgroup Impact Data Percent at Partial Mastery for Grades 3-11	Hispanic	39.0	LA Subgroup Impact Data Percent at Novice for Grades 3-11	Hispanic	6.0	WESTEST 2 RLA Subgroup Impact Data Percent At or Above Mastery for Grades 3-11	Hispanic	55.0
p Impact Da	Black	1.0	Impact Da	Black	12.0	roup Impact	Black	36.0	Impact Da	Black	44.0	Jroup Impac	Black	7.0	impact Data	Black	49.0
LA Subgrou	White	2.0	-A Subgroup	White	18.0		White	39.0	A Subgroup	White	36.0		White	5.0	Subgroup 1	White	59.0
ESTEST 2 R	Male	2.0	STEST 2 RI	Male	14.0	WESTEST 2	Male	35.0	STEST 2 RL	Male	42.0	WESTEST 2 R	Male	8.0	TEST 2 RLA	Male	50.0
M	Female	3.0	WE	Female	22.0		Female	42.0	WE	Female	30.0		Female	3.0	WES	Female	0.79
	IIV	2.0		All	18.0		IIV	38.0		All	36.0		All	0.9		IIV	58.0
		2009			2009			2009			2009			2009			2009

2009 WESTEST 2 MATHEMATICS (aggregate of performance for Grades 3-11): Shows the (1) percentage of students in each performance level by subgroup, and (2) percentage of students **At or Above Mastery** level by subgroup.

Table 2: 2009 WESTEST 2 Mathematics

es 3-11	SWD Migrant LEP	1.0 0.0 8.0	les 3-11	SWD Migrant LEP	5.0 4.0 13.0	3-11	SWD Migrant LEP	21.0 13.0 35.0	les 3-11	SWD Migrant LEP	47.0 42.0 33.0	-11	SWD Migrant LEP	27.0 42.0 12.0	ades 3-11	SWD Migrant LEP	
tics Subgroup Impact Data Percent at Distinguished for Grades 3-11	an ED	0.0	cs Subgroup Impact Data Percent at Above Mastery for Grades 3-11	an ED	0.6 0.0	WESTEST 2 Mathematics Subgroup Impact Data Percent at Mastery for Grades 3-11	an ED	0.38.0	WESTEST 2 Mathematics Subgroup Impact Data Percent at Partial Mastery for Grades 3-11	an ED	.0 37.0	WESTEST 2 Mathematics Subgroup Impact Data Percent at Novice for Grades 3-11	an ED	0 14.0	WESTEST 2 Mathematics Subgroup Impact Data Percent At or Above Mastery for Grades 3-11	an ED	0.01
tinguis	Asian	24.0	ve Mas	Asian	24.0	Master	Asian	35.0	tial Mas	Asian	13.0	Novice	Asian	4.0	ove Ma	Asian	
cent at Dis	Nat. Am.	3.0	cent at Abc	Nat. Am.	15.0	Percent at	Nat. Am.	40.0	ent at Par t	Nat. Am.	34.0	Percent at	Nat. Am.	7.0	nt At or Al	Nat. Am.	0 02
act Data Per	Hispanic	3.0	ct Data Perc	Hispanic	11.0	npact Data	Hispanic	40.0	ct Data Perc	Hispanic	35.0	mpact Data	Hispanic	11.0	Data Perce	Hispanic	0.4
group Impa	Black	2.0	group Impa	Black	8.0	Subgroup Ir	Black	36.0	group Impac	Black	38.0	Subgroup I	Black	15.0	oup Impact	Black	16.0
matics Sub	White	4.0	matics Sub	White	13.0	thematics	White	42.0	natics Subg	White	30.0	ıthematics	White	10.0	atics Subgr	White	0 0 0
WESTEST 2 Mathemal	Male	5.0	WESTEST 2 Mathemati	Male	13.0	TEST 2 Ma	Male	40.0	T 2 Mather	Male	30.0	STEST 2 Ma	Male	11.0	2 Mathem	Male	002
WESTE	Female	4.0	WESTES	Female	13.0	WES	Female	43.0	WESTES	Female	30.0	WE	Female	10.0	WESTEST	Female	0 02
	All	4.0		All	13.0		All	42.0		All	30.0		All	11.0		All	0.05
		2009			2009			2009			2009			2009			0000

2009 WESTEST 2 Social Studies (aggregate of performance for Grades 3-11): Shows the (1) percentage of students in each performance level by subgroup, and (2) percentage of students **At or Above Mastery** level by subgroup.

Table 3: 2009 WESTEST 2 Social Studies

		WESTEST	2 Social S	tudies Sub	group Impa	ct Data Perc	WESTEST 2 Social Studies Subgroup Impact Data Percent at Distinguished for Grades 3-11	nguished	for Grades 3	-11		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
5006	4.0	3.0	4.0	4.0	1.0	3.0	3.0	13.0	2.0	1.0	4.0	3.0
		WESTEST	WESTEST 2 Social St u	: udies Subg	roup Impac	t Data Perce	udies Subgroup Impact Data Percent at Above Mastery for Grades 3-11	e Mastery	for Grades	3-11		
	ΙΙΥ	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	17.0	16.0	18.0	17.0	10.0	14.0	15.0	33.0	10.0	5.0	0.0	15.0
		WESTE	WESTEST 2 Socia	_	ubgroup Im	pact Data F	Studies Subgroup Impact Data Percent at Mastery for Grades 3-11	astery for	Grades 3-11			
	IIV	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	35.0	38.0	33.0	36.0	33.0	35.0	36.0	31.0	32.0	19.0	4.0	31.0
		WESTEST	WESTEST 2 Social Stu	udies Subg	roup Impad	t Data Perce	idies Subgroup Impact Data Percent at Partial Mastery for Grades 3-11	al Mastery	for Grades	3-11		
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	36.0	36.0	36.0	35.0	45.0	39.0	38.0	20.0	45.0	54.0	46.0	43.0
		WEST	WESTEST 2 Socia	_	Subgroup Ir	npact Data	Studies Subgroup Impact Data Percent at Novice for Grades 3-11	lovice for (rades 3-11			
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	0.8	7.0	0.6	8.0	11.0	8.0	0.8	3.0	11.0	20.0	46.0	8.0
		WESTEST 2 Social Stud	Social Stu	dies Subgro	oup Impact	Data Percen	lies Subgroup Impact Data Percent At or Above Mastery for Grades 3-11	ve Master	y for Grade:	s 3-11		
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	56.0	57.0	55.0	57.0	44.0	53.0	54.0	77.0	44.0	25.0	8.0	50.0

2009 WESTEST 2 Science (aggregate of performance for Grades 3-11): Shows the (1) percentage of students in each performance level by subgroup, and (2) percentage of students **At or Above Mastery** level by subgroup.

Table 4: 2009 WESTEST 2 Science

		WEST	EST 2 Scie	nce Subgro	up Impact D	ata Percent	WESTEST 2 Science Subgroup Impact Data Percent at Distinguished for Grades 3-11	uished for (srades 3-11			
	IIV	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0
		WESTI	WESTEST 2 Science		ıp Impact D	ata Percent	Subgroup Impact Data Percent at Above Mastery for Grades 3-11	lastery for	Grades 3-11			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	4.0	3.0	5.0	4.0	1.0	3.0	4.0	14.0	2.0	1.0	0.0	4.0
		W	ESTEST 2 S (cience Sub	group Impa	ct Data Perc	WESTEST 2 Science Subgroup Impact Data Percent at Mastery for Grades 3-11	ery for Grad	les 3-11			
	IIV	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	50.0	50.0	50.0	51.0	37.0	46.0	49.0	59.0	42.0	24.0	8.0	41.0
		WESTE	WESTEST 2 Science		p Impact Da	ata Percent	Subgroup Impact Data Percent at Partial Mastery for Grades 3-11	lastery for	Grades 3-11			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	38.0	40.0	36.0	37.0	50.0	43.0	37.0	22.0	47.0	55.0	38.0	45.0
		V	estest 2 s	cience Sub	group Impa	ıct Data Per	WESTEST 2 Science Subgroup Impact Data Percent at Novice for Grades 3-11	i ce for Grad	es 3-11			
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	8.0	7.0	8.0	7.0	11.0	8.0	10.0	4.0	10.0	19.0	54.0	9.0
		WESTES	T 2 Scienc	e Subgroup	Impact Dat	a Percent A	WESTEST 2 Science Subgroup Impact Data Percent At or Above Mastery for Grades 3-11	Mastery fo	r Grades 3-1	.1		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2009	54.0	54.0	55.0	55.0	38.0	49.0	53.0	75.0	44.0	26.0	8.0	45.0

National Assessment of Educational Progress (NAEP)



Christine Keplinger

Tyler Consolidated High School Tyler County

National Assessment of Educational Progress (NAEP)

The National Assessment of Educational Progress (NAEP) is a required assessment in Reading and Mathematics under No Child Left Behind (NCLB; 2001), W.Va. State Code §18-2E-2, and West Virginia Board of Education (BOE) Policy 2340. The state assessment is administered every two years to a sample of approximately 2,500 to 3,000 fourth- and eighth-grade students chosen at random from state schools that correspond with state demographics. NAEP, often referred to as *The Nation's Report Card*, is the only national measure of what students know and can do in various content areas.

The NAEP assessments are based on content frameworks and specifications developed by the National Assessment Governing Board (NAGB), a 26-member, independent governing body appointed by the United States Secretary of Education. "With input from teachers, curriculum specialists, administrators, parents, and the public, NAGB has developed subject frameworks that outline what students should know and be able to do for each subject and grade level tested. The NAEP frameworks serve as guidelines for the content assessed by the NAEP exams and the specifications documents provide a blueprint for the test developer" (School Matters, 2005, p. 4).

States, on the other hand, have content standards and assessments adopted by the state board of education that reflect an agreement within the state educational community on the content specific knowledge and skills the students should possess at specific grade levels. All states independently determine their content standards, assessments and proficiency levels. Therefore, proficiency levels on state exams cannot be compared from state-to-state. "However, state proficiency levels on NAEP can be compared across states since the same NAEP exams are administered in each state" (School Matters, 2005, p. 4).

NAEP assessment achievement level performance varies from WESTEST 2 achievement level performance for other reasons as well. The WESTEST 2 is a "high-stakes" exam because the test results are linked to academic, accountability and financial sanctions under NCLB. However, NAEP has no consequences attached to student performance. The assumption is that the "high-stakes" link to state test performance motivates students and school districts to take the WESTEST 2 preparation and performance very seriously. One would therefore expect to see higher achievement levels with WESTEST 2, an assessment tool used to calculate Adequate Yearly Progress (AYP), than to NAEP which is not used to calculate AYP.

Note:

Abbreviations and terminology contained throughout tables and figures in the NAEP section include:

All West Virginia participating students

Nat. Am. Native American

ED Economically Disadvantaged (Low Social Economic Status)

SWD Students with Disabilities LEP Limited English Proficient



Beginning in 2009, the National Center of Education Statistics (NCES) released a redesign of the NAEP Data Explorer. As part of the redesign, the ability to download data into Microsoft Excel increased the precision of the data available to states.

Starting with the 2009 data release, the reporting of NAEP data has changed from the nearest whole percent to the nearest tenth of a percent. NAEP 2009 Mathematics has been released and will be the first performance data within the Closing the Achievement Gap (CAG) report to reflect this increased precision; therefore, the Third Edition of CAG will present this more precise NAEP data within the Mathematics Grades 4 and 8 tables only.

As NAEP 2009 Reading and Science are released in 2010, the respective tables will be updated within the *CAG* report to reflect this change.

In addition, the cumulative achievement level reporting standard has also been changed from the percent **At or Above Basic** to the percent **At or Above Proficient**. Within the **CAG**, Third Edition, this change will be reflected within the Mathematics Grades 4 and 8 tables and in the Findings for that content. Changes will be made within other content areas as the NAEP data are released to states. As in the past, discrete achievement levels have been reported.

2003, 2005 and 2007 WV NAEP (Aggregate of all 4th Grade performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroups, 2) percentage of students **At or Above Basic** by subgroup, and 3) the change in performance from 2005 to 2007 by subgroup.

Table 5: 2003, 2005 and 2007 WV NAEP Reading Grade 4

		LEP	*	*	*	*				LEP	*	*	*		*			Ē	*	*	*	*
		Migrant	*	*	**	*				Migrant	*	*	*		* *			Migrant	*	*	**	* *
	SWD Nat. %		1.0	2.0	2.0	0.0		QMS	Nat. %		8.0	0'6	10.0	1.0			GMS	Nat. %	20.0	22.0	23.0	1.0
		SWD	2.0	1.0	1.0	0.0				SWD	10.0	10.0	8.0		-2.0			SWD	22.0	24.0	19.0	-5.0
de 4	ED Nat. %		2.0	2.0	2.0	0.0	de 4	ED	Nat. %		13.0	13.0	14.0	1.0		5.4	ED	Nat. %	29.0	30.0	33.0	3.0
d for Gra		ED	3.0	2.0	3.0	1.0	it for Gra			ED	18.0	14.0	16.0		2.0	for Grade			36.0	34.0	34.0	0.0
Advance		Asian	*	*	*	*	Proficier			Asian	*	*	*		*	at Basic		Asian	*	*	*	*
ercent at	Nat.	Am.	*	*	*	*	ercent at		Nat.	Am.	*	*	*		*	Percent		Nat. Am.	*	*	*	*
ct Data Pe	His-	panic	*	*	*	*	ct Data Pe		His-	panic	*	*	*		*	pact Data	:	His- panic	*	*	*	*
ading Subgroup Impact Data Percent at Advanced for Grade 4	Black Nat. %		2.0	2.0	2.0	0.0	ading Subgroup Impact Data Percent at Proficient for Grade 4	Black	Nat. %		11.0	11.0	12.0		1.0	Reading Subgroup Impact Data Percent at Basic for Grade 4	Black	Nat. %	27.0	29.0	32.0	3.0
ading Sub		Black	0.0	1.0	2.0	1.0	a ding Sube			Black	13.0	14.0	12.0		-2.0	Reading S		Black	32.0	31.0	32.0	1.0
WV NAEP Re		White	0.9	5.0	5.0	0.0	WV NAEP Rea			White	23.0	21.0	23.0		2.0	WV NAEP I		White	36.0	35.0	35.0	0.0
M		Male	2.0	4.0	4.0	0.0	I //M			Male	20.0	19.0	20.0		1.0	M		Male	35.0	34.0	34.0	0.0
		Female	7.0	0'9	0'9	0.0				Female	26.0	22.0	76.0		4.0			Female	38.0	36.0	35.0	-1.0
	AII Nat.	%	7.0	0.7	0.7	0.0		All	Nat.	%	23.0	23.0	24.0		1.0		IIV	Nat. %	32.0	33.0	34.0	1.0
		All	0.9	5.0	2.0	0.0				All	23.0	21.0	23.0		2.0			All	36.0	35.0	35.0	0.0
			2003	2005	2007	Change 05-07					2003	2005	2007	Change	05-07				2003	2005	2007	Change 05-07

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding. * Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

Table 5: 2003, 2005 and 2007 WV NAEP Reading Grade 4 (continued)

			>	WV NAEP Rea	Reading	y Subgrou	up Impac	ding Subgroup Impact Data Percent at Below Basic for Grade 4	srcent at	Below E	Basic for	Grade 4				
	■	AII Nat.%	Fe- male	Male	White	Black	Black Nat. %	His- panic	Nat. Am.	Asian	8	ED Nat. %	SWD	SWD Nat. %	Mi- grant	LEP
2003	35.0	38.0	30.0	40.0	35.0	55.0	61.0	*	*	*	43.0	56.0	66.0	71.0	* *	*
2002	39.0	38.0	36.0	43.0	39.0	54.0	59.0	*	*	*	49.0	54.0	65.0	67.0	*	*
2007	37.0	34.0	33.0	42.0	37.0	54.0	54.0	*	*	*	47.0	50.0	72.0	64.0	* *	*
Change 05-07	-2.0	4.0	-3.0	-1.0	-2.0	0.0	-5.0	*	*	*	-2.0	4.0	7.0	-3.0	* *	*
			M	WV NAEP Readi	eading (Subgroup	Impact	ing Subgroup Impact Data Percent At or Above Basic for Grade 4	ent At o	r Above	Basic f	or Grade	4			
							Black					ED		SWD		
		₹	- Fe	,			Nat.	His-	Nat.			Nat.		Nat.	Ξ̈́	
	M	Nat.%	male	Male	White	Black	%	panic	Am.	Asian		%	SWD	%	grant	EP
2003	65.0	62.0	70.0	0.09	65.0	45.0	39.0	*	*	*	57.0	44.0	34.0	29.0	* *	*
2005	61.0	62.0	64.0	57.0	61.0	46.0	41.0	*	*	*	51.0	46.0	35.0	33.0	*	*
2007	63.0	66.0	67.0	58.0	63.0	46.0	46.0	*	*	*	53.0	50.0	28.0	36.0	*	*
Change 05-07	2.0	4.0	3.0	1.0	2.0	0.0	5.0	*	*	*	2.0	4.0	-7.0	3.0	* *	*

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding.

** Sample size too small to provide reliable data. ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

2005 2003 2007 0.0 0.0 %> 0.82 0.₽£ 0.≷£ 0.72 == 0.12 == 0.52 ⟨⟩ 8.9 8.9 0.0 Uelsk 8:8 8:0 Subgroups 0:0 0:0 3/UROS/H 0.84 0.24 0.34 12/g 0.23 0.13 0.53 White 0.08 0.72 0.82 9/6/4 0.13 0.85 0.07 0.43 olewood 1/2 0.28 20.0 10.0 80.0 70.0 60.0 50.0 40.0 30.0 0.0 % of Students

Figure 5: 2003, 2005 and 2007 WV NAEP Reading Grade 4 Subgroup Impact Data: Percent At or Above Basic for Grade 4

2003, 2005 and 2007 WV NAEP (Aggregate of all 8th Grade performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroups, 2) percentage of students At or Above Basic by subgroup, and 3) the change in performance from 2005 to 2007 by subgroup.

Table 6: 2003, 2005 and 2007 WV NAEP Reading Grade 8

		LEP	*	*	*	*			H D	j *	*	*	*			LEP	*	*	*	*
	Ξ	grant	*	* *	*	*			Mi-	* *	*	*	**			Mi- grant	* *	*	*	*
	SWD Nat.	%	0.0	0.0	0.0	0.0		SWD	Nat. %	5.0	6.0	7.0	1.0		SWD	Nat. %	26.0	27.0	27.0	0.0
		SWD	0.0	0.0	0.0	0.0			CWS	3.0	5.0	3.0	-2.0			SWD	26.0	23.0	18.0	-5.0
Grade 8	ED Nat.	%	1.0	1.0	1.0	0.0	le 8	ED	Nat. %	14.0	14.0	15.0	1.0	8	ED	Nat. %	41.0	42.0	43.0	1.0
ced for (ED	1.0	0.0	0.0	0.0	it for Grad		Ë	16.0	12.0	14.0	2.0	for Grade		Ē	45.0	44.0	44.0	0.0
WV NAEP Reading Subgroup Impact Data Percent at Advanced for Grade 8		Asian	*	*	*	*	WV NAEP Reading Subgroup Impact Data Percent at Proficient for Grade 8		Acian	*	*	*	*	WV NAEP Reading Subgroup Impact Data Percent at Basic for Grade 8		Asian	*	*	*	*
ercent a	Nat.	Am.	*	*	*	*	ercent at		Nat.	*	*	*	*	a Percent		Nat. Am.	*	*	*	*
ct Data F	His-	panic	*	*	*	*	act Data P		His-	*	*	*	*	npact Data		His- panic	*	*	*	*
oup Impa	Black Nat.	%	0.0	0.0	0.0	0.0	roup Impa	Black	Nat. %	12.0	11.0	11.0	0.0	bgroup Ir	Black	Nat. %	41.0	40.0	42.0	2.0
g Subgro		Black	0.0	0.0	0.0	0.0	ing Subgi		Rlack	13.0	10.0	11.0	1.0	ading Su		Black	46.0	34.0	41.0	7.0
Readin		White	2.0	1.0	1.0	0.0	\EP Read		White	24.0	21.0	22.0	1.0	NAEP Re		White	47.0	45.0	46.0	1.0
W NAEP		Male	1.0	1.0	1.0	0.0	WV N/		<u>a</u>	19.0	16.0	18.0	2.0	W		Male	46.0	44.0	43.0	-1.0
>	-Fe	male	3.0	2.0	2.0	0.0			Fe-	27.0	25.0	26.0	1.0			Fe- male	48.0	45.0	48.0	3.0
	All Nat.	%	3.0	3.0	2.0	-1.0		All	Nat. %	27.0	26.0	27.0	1.0		All	Nat. %	42.0	42.0	43.0	1.0
		All	2.0	1.0	1.0	0.0			IV	23.0	21.0	22.0	1.0			₹	47.0	45.0	45.0	0.0
			2003	2005	2007	Change 05-07				2003	2005	2007	Change 05-07				2003	2005	2007	Change 05-07

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding. * Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

Table 6: 2003, 2005 and 2007 WV NAEP Reading Grade 8 (continued)

				WV NAEP	P Readir	Reading Subgroup Impact Data Percent at Below Basic for Grade 8	up Impac	t Data Pe	rcent at E	elow Ba	sic for Gr	ade 8				
		W					Black					ED		SWD		
		Nat.	Ę.				Nat.	His-	Nat.			Nat.		Nat.	Ξ̈́	
	All	%	male	Male	White	Black	%	panic	Am.	Asian	ED	%	SWD	%	grant	LEP
2003	28.0	28.0	22.0	35.0	28.0	40.0	47.0	*	*	*	37.0	44.0	71.0	68.0	*	*
2005	33.0	29.0	27.0	39.0	32.0	56.0	49.0	*	*	*	44.0	43.0	73.0	67.0	*	*
2007	32.0	27.0	24.0	38.0	31.0	48.0	46.0	*	*	*	41.0	42.0	79.0	0.99	*	*
Change 05-07	-1.0	-2.0	-3.0	-1.0	-1.0	-8.0	-3.0	*	*	*	-3.0	-1.0	6.0	-1.0	* *	*
			^	WV NAEP Re	Reading	eading Subgroup Impact Data Percent At or Above Basic for Grade 8	Impact D	ata Perce	ent At or	Above Ba	asic for (irade 8				
		All					Black					ED		SWD		
		Nat.	Ą				Nat.	His-	Nat.			Nat.		Nat.	Ė	
	All	%	male	Male	White	Black	%	panic	Am.	Asian	ED	%	SWD	%	grant	LEP
2003	72.0	72.0	78.0	65.0	72.0	0.09	53.0	*	*	*	63.0	56.0	29.0	32.0	*	*
2005	67.0	71.0	73.0	61.0	0.89	44.0	51.0	*	*	*	56.0	57.0	27.0	33.0	*	*
2007	68.0	73.0	76.0	62.0	0.69	52.0	54.0	*	*	*	59.0	58.0	21.0	34.0	*	*
Change 05-07	1.0	2.0	3.0	1.0	1.0	8.0	3.0	*	*	*	3.0	1.0	-6.0	1.0	* *	*

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the At or Above Basic level due to rounding. * Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

■2003 ■2005 2007 8:8 8:8 0.62 ONS. 26.0 26.0 63.0 ଊ 8:8 8:8 LEIST 8:8 8:8 Subgroups 8:8 8:8 31UROSIL 0.52 0.44 机 0.09 0.27 0.83 0.83 SHA 0.59 0.59 9/24 0.87 0.87 0.87 elettes. 0.57 0.75 0.88 1/2 80.0 70.0 0.09 40.0 30.0 20.0 10.0 0.0 90.0 50.0 stnabute 10 %

Figure 6: 2003, 2005 and 2007 WV NAEP Reading Grade 8 Subgroup Impact Data: Percent At or Above Basic for Grade 8

2003, 2005, 2007 and 2009 WV NAEP (Aggregate of all 4th Grade performance in West Virginia): shows the 1) percentage of students in each performance level by subgroup, 2) percentage of students **At or Above Proficient** by subgroup, and 3) the change in performance from 2007 to 2009. Due to increased accuracy in the NAEP data provided by the redesigned NAEP Data Explorer in 2009, all of the data in this table has been rounded to the nearest tenth of a percent. Data in prior years was available only to the nearest whole percent.

Table 7: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 4

	LEP	*	*	*	*	*		LEP	*	*	*	*	*		LEP	×	*	*	*	*
	Mi- grant	*	*	*	* *	* *		Mi- grant	* *	*	*	* *	*		Mi- grant	*	* *	*	*	* *
	SWD Natl.	1.1	1.6	2.1	2.2	0.1		SWD Natl.	11.4	14.5	17.3	16.7	9:0-		SWD Natl.	37.7	40.4	40.2	40.0	-0.2
	SWD	0.5	9.0	1.2	8.0	-0.4		SWD	6.5	12.1	16.8	12.8	-4.0		SWD	32.1	38.9	43.0	41.9	-1.1
Grade 4	ED Natl.	0.8	1.3	1.5	1.5	0.0	Grade 4	ED Natl.	14.3	17.9	20.1	20.3	0.2	rade 4	ED Natl.	46.9	48.1	48.6	48.7	0.1
nced for	ED	0.9	6.0	1.2	6.0	-0.3	cient for	ED	15.6	17.3	21.0	18.7	-2.3	sic for G	ED	51.9	50.4	51.1	50.7	-0.4
at Adva	Asian	*	*	*	*	*	at Profi	Asian	*	*	*	*	*	ent at Ba	Asian	*	*	*	*	*
a Percent	Nat. Am.	*	*	*	*	*	a Percent	Nat. Am.	*	*	*	*	*	ata Perc	Nat. Am.	*	*	*	*	*
pact Data	His- panic	*	*	*	*	*	pact Data	His- panic	*	*	*	*	*	Impact [His- panic	*	*	*	*	*
group In	Black Natl.	0.3	9.0	0.8	0.8	0.0	group In	Black Natl.	9.4	12.2	14.3	14.6	0.3	Subgroup Impact Data Percent at Basic for Grade 4	Black Natl.	43.8	46.9	48.4	47.9	-0.5
WV NAEP Mathematics Subgroup Impact Data Percent at Advanced for Grade 4	Black	0.0	8.0	1.0	6.0	-0.1	natics Subgroup Impact Data Percent at Proficient for Grade	Black	12.6	16.2	17.8	18.7	6:0	ematics (Black	49.0	52.6	44.8	46.5	1.7
Mathem	White	1.6	1.5	3.0	2.2	-0.8		White	22.5	23.8	30.0	26.3	-3.7		White	51.7	50.3	49.1	49.7	9.0
N NAEP I	Male	2.2	1.5	3.8	3.0	-0.8	WV NAEP Mathen	Male	23.7	26.1	30.8	26.9	-3.9	WV NAEP Math	Male	49.7	49.8	48.0	48.5	0.5
×	Fe- male	1.0	1.6	2.1	1.5	-0.6	M	Fe- male	20.6	20.8	28.3	24.9	-3.4		Fe- male	53.3	50.8	49.3	50.2	6.0
	AII Natl.	3.7	4.8	5.5	5.8	0.3		AII Natl.	27.5	30.5	33.1	32.5	-0.6		AII Natl.	44.9	44.1	42.8	42.8	0.0
	All	1.6	1.5	3.0	2.2	-0.8		All	22.3	23.6	29.6	25.9	-3.7		All	51.4	50.3	48.6	49.3	0.7
		2003	2002	2002	5009	Change 07-09			2003	2002	2007	2009	Change 07-09			2003	2002	2007	5000	Change 07-09

^{*} Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

Table 7: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 4 (continued)

	LEP	*	*	*	*	*		LEP	*	×	×	*	*
	Mi- grant	* *	*	*	*	* *		Mi- grant	* *	*	* *	*	* *
	SWD Natl.	49.9	43.5	40.5	41.0	0.5		SWD Natl.	12.5	16.0	19.3	19.0	-0.3
	QMS	6.09	48.4	39.0	44.6	9:9	de 4	SWD	7.0	12.7	18.0	13.5	-4.5
atics Subgroup Impact Data Percent at Below Basic for Grade 4	ED Natl.	38.0	32.7	6'67	29.4	-0.5	WV NAEP Mathematics Subgroup Impact Data Percent At or Above Proficient for Grade 4	ED Natl.	15.2	19.2	21.5	21.8	0.3
v Basic	ED	31.6	31.4	9'97	2.62	3.1	Profici	ED	16.5	18.2	22.2	9.61	-2.6
at Below	Asian	*	*	*	*	*	Above	Asian	*	*	*	*	*
ercent a	Nat. Am.	*	*	*	*	*	int At o i	Nat. Am.	*	*	*	*	*
act Data F	His- panic	*	*	*	*	*	Jata Perce	His- panic	*	*	*	*	*
group Imp	Black Natl.	46.4	40.3	36.5	2'98	0.2	p Impact l	Black Natl.	2.6	12.8	15.0	15.4	0.4
tics Sub	Black	38.5	30.5	36.4	33.9	-2.5	Subgrou	Black	12.6	16.9	18.8	19.6	0.8
athema	White	24.3	24.3	17.9	21.8	3.9	ematics	White	24.0	25.3	33.0	28.5	-4.5
WV NAEP Mathem	Male	24.4	22.7	17.4	21.7	4.3	P Mathe	Male	26.0	27.5	34.6	29.8	-4.8
W	Female	25.1	26.7	20.3	23.5	3.2	WV NAE	Female	21.6	22.4	30.4	26.3	-4.1
	All Natl.	23.9	20.5	18.6	18.8	0.2		All Natl.	31.2	35.3	38.6	38.4	-0.2
	All	24.7	24.6	18.8	22.6	3.8		All	23.9	25.1	32.6	28.1	-4.5
		2003	2002	2007	2009	Change 07-09			2003	2002	2007	2009	Change 07-09

 st Sample size too small to provide reliable data; stst Data not collected.

Columns highlighted in green represent National Public NAEP data.

2007 2009 2005 2003 0.0 0.0 0.0 LEP 0.0 0.0 Migrant 0.0 0.0 0.0 13.5 SWD 0.81 77.7 ED West Virginia NAEP Mathematics Grade 4 Percent At or Above Proficient 0.0 0.0 0.0 Asian 0.0 0.0 0.0 0.0 0.0 Nat. Am. 0.0 0.0 0.0 0.0 Hispanic 8.81 6.61 Black 16.9 28.5 White 0.88 (8.62 Male 9.45 0.62 26.3 Female 4.08 21.6 22.4 1.82 37.6 = 1.22 6.82 25 20 15 10 Ŋ 0 40 35 30 % of students

Figure 7: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 4 Subgroup Impact Data: Percent At or Above Proficient for Grade 4

2003, 2005, 2007 and 2009 WV NAEP (Aggregate of all 8th Grade performance in West Virginia): shows the 1) percentage of students in each performance level by subgroup, 2) percentage of students **At or Above Proficient** by subgroup, and 3) the change in performance from 2007 to 2009 by subgroup.

Due to increased accuracy in the NAEP data provided by the redesigned NAEP Data Explorer in 2009, the data in this table has been rounded to the nearest tenth of a percent. Data in prior years was available only to the nearest whole percent.

Table 8: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 8

			M	WV NAEP Mathe		tics Sub	roup Imi	matics Subgroup Impact Data Percent at Advanced for Grade 8	Percent	at Advai	nced for	Grade 8				
	All	AII Nati.	Female	Male	White	Black	Black Natl.	His- panic	Nat. Am.	Asian	ED	ED Natl.	SWD	SWD Natl.	Mi- grant	LEP
2003	1.8	4.9	1.5	2.1	1.8	0.0	0.5	*	*	*	0.5	1.0	0.1	9.0	* *	*
2002	1.4	9.6	1.4	1.5	1.3	0.4	0.7	*	*	*	0.5	1.4	0.3	8.0	* *	*
2007	2.2	9'9	1.5	2.8	2.2	0.1	8.0	*	*	*	0.6	1.8	0.2	1.0	* *	*
2009	2.5	2'2	2.1	2.8	2.4	1.2	1.1	*	*	*	1.0	2.0	0.0	1.4	* *	*
Change 07-09	0.3	6.0	9.0	0.0	0.2	1.1	0.3	*	*	*	0.4	0.2	-0.2	0.4	*	*
			W	WV NAEP Mathe		tics Subo	group Im	matics Subgroup Impact Data	Percent	at Proficient for Grade	sient for	Grade 8				
	All	AII Nati.	Female	Male	White	Black	Black Natl.	His- panic	Nat. Am.	Asian	ED	ED Natl.	SWD	SWD Natl.	Mi- grant	LEP
2003	17.8	22.4	16.7	19.0	18.2	5.9	9.9	*	*	*	9.7	10.4	8.0	5.4	* *	*
2002	16.5	22.9	16.7	16.3	16.8	5.3	7.6	*	*	*	9.4	11.9	1.4	6.1	* *	*
2007	16.4	24.4	14.0	18.7	16.8	3.9	8.6	*	*	*	9.7	13.7	3.4	8.9	* *	*
2009	17.0	25.1	15.8	18.2	17.3	10.1	10.7	*	*	*	10.3	14.7	2.2	7.5	* *	*
Change 07-09	9:0	2.0	1.8	-0.5	0.5	6.2	6.0	*	*	*	0.6	1.0	-1.2	0.7	* *	*
				WV NAEP Mat l		natics S	ubgroup.	hematics Subgroup Impact Data Percent at Basic for Grade 8	ata Perce	int at Ba	sic for Gi	ade 8				
	All	AII Natl.	Female	Male	White	Black	Black Natl.	His- panic	Nat. Am.	Asian	ED	ED Natl.	SWD	SWD Natl.	Mi- grant	LEP
2003	42.9	39.3	45.0	40.9	43.2	33.3	31.6	*	*	*	40.9	35.9	12.9	22.8	* *	*
2002	42.1	39.4	42.3	41.9	42.7	30.8	33.2	*	*	*	36.6	37.5	15.7	24.5	* *	*
2007	42.7	39.2	44.7	40.7	43.5	26.8	36.1	*	*	*	38.7	39.2	17.8	25.4	* *	*
2009	41.5	38.9	43.6	39.4	41.6	41.8	37.2	*	*	*	40.1	39.9	20.2	56.9	* *	*
Change 07-09	-1.2	-0.3	-1.1	-1.3	-1.9	15.0	1.1	*	*	×	1.4	0.7	2.4	1.5	* *	*

^{*} Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data

Table 8: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 8 (continued)

	LEP	*	*	*	*	*		LEP	*	*	*	*	*
	Mi- grant	*	*	*	* *	* *		Mi- grant	*	*	* *	* *	* *
	SWD Natl.	71.2	9'89	2'99	64.2	-2.5		SWD Natl.	0.9	6.9	6.7	8.9	1.0
	SWD	86.3	82.7	78.5	9'.//	6.0-	de 8	SWD	6.0	1.7	3.7	2.2	-1.5
Grade 8	ED Natl.	52.7	49.2	45.3	43.5	-1.8	t for Gra	ED Natl.	11.4	13.3	15.5	16.7	1.2
3asic for	ED	48.9	53.5	51.0	48.6	-2.4	roficien	ED	10.2	10.0	10.3	11.3	1.0
Below F	Asian	*	*	*	*	*	Above P	Asian	*	*	*	*	*
ercent at	Nat. Am.	*	*	*	*	*	nt At or /	Nat. Am.	*	*	*	*	*
t Data Pe	His- panic	*	*	*	*	*	ta Percer	His- panic	*	*	*	*	*
atics Subgroup Impact Data Percent at Below Basic for Grade 8	Black Natl.	61.3	58.6	53.4	51.1	-2.3	WV NAEP Mathematics Subgroup Impact Data Percent At or Above Proficient for Grade 8	Black Natl.	7.1	8.3	10.6	11.8	1.2
i cs Subgro	Black	6.09	63.5	69.3	47.0	-22.3	ubgroup 1	Black	5.9	5.7	4.0	11.3	7.3
	White	36.7	39.2	37.5	38.8	1.3	matics S	White	20.0	18.1	19.0	19.6	9:0
WV NAEP Mathem	Male	38.1	40.4	37.9	39.6	1.7	P Mathe	Male	21.1	17.7	21.5	21.0	-0.5
W	Female	36.9	39.6	39.8	38.5	-1.3	WV NAE	Female	18.1	18.1	15.5	17.8	2.3
	AII Natl.	33.4	32.1	29.8	28.6	-1.2		AII Natl.	27.3	28.5	31.0	32.6	1.6
	All	37.5	40.0	38.8	39.1	0.3		All	19.6	17.9	18.5	19.4	6.0
		2003	2005	2007	2009	Change 07-09			2003	2005	2007	2009	Change 07-09

* Sample size too small to provide reliable data; ** Data not collected

An increase in the **Below Basic** category signifies that additional students have fallen below the **Basic** level and therefore is considered a *decrease* in performance. Conversely, a decrease indicates that students have improved and are now in a higher category.

2005 2003 2007 2009 0.0 0.0 0.0 0.0 LEP 0.0 0.0 0.0 0.0 Migrant 7 8 2.2 SWD 6.0 7.1 2.01 0.01 6.01 E.11 ED **Percent At or Above Proficient** 0.0 0.0 0.0 0.0 NAEP Mathematics Grade 8 Asian 0.0 0.0 0.0 0.0 **West Virginia** Hispanic Nat. Am. 0.0 0.0 0.0 0.0 11.3 Black 0.4 6.2 7.2 0.02 1.81 0.91 6.91 White 21.5 21.0 Male **4.71** 1.12 8.71 Female 1.81 1.81 6.71 8.81 6.71 ₹ 10 25 20 15 2 0 % of Students

Figure 8: 2003, 2005, 2007 and 2009 WV NAEP Mathematics Grade 8 Subgroup Impact Data: Percent At or Above Proficient for Grade 8

2000 and 2005 WV NAEP (Aggregate of all 4th Grade performance in the West Virginia): Shows the 1) percentage of students in each performance level by subgroup, 2) percentage of students **At or Above Basic** by subgroup, and 3) the change in performance from 2000 to 2005 by subgroup.

Table 9: 2000 and 2005 WV NAEP Science Grade 4

		LEP	*	*	*			FP	*	*	*				LEP	*	*	*
	Mi-	grant	*	*	*			Mi- grant	*	*	*			Ξ	grant	*	*	*
	SWD Nat.	%	1.0	1.0	0.0		SWD	Nat. %	10.0	12.0	2.0		SWD	Nat.	%	23.0	32.0	9.0
		SWD	0.0	0.0	0.0			SWD	11.0	9.0	-2.0				SWD	28.0	37.0	9.0
rade 4	ED Nat.	%	0.0	0.0	0.0	rade 4	ED	Nat. %	9.0	11.0	2.0	de 4	ED	Nat.	%	29.0	35.0	6.0
WV NAEP Science Subgroup Impact Data Percent at Advanced for Grade 4		ED	1.0	0.0	-1.0	cience Subgroup Impact Data Percent at Proficient for Grade 4		ED	16.0	15.0	-1.0	Science Subgroup Impact Data Percent at Basic for Grade 4			ED	41.0	46.0	5.0
t Advanc		Asian	*	*	*	t Profici		Asian	*	*	*	t at Basi			Asian	*	*	*
ercent a	Nat.	Am.	*	*	*	Percent a		Nat.	*	*	*	a Percen		Nat.	Am.	*	*	*
ct Data F	His-	panic	*	*	*	ct Data F	:	His-	*	*	*	pact Dat		His-	panic	*	*	*
onp Impa	Black Nat.	%	0.0	0.0	0.0	edwl dnc	Black	Nat. %	5.0	7.0	2.0	group Im	Black	Nat.	%	25.0	31.0	6.0
e Subgro		Black	0.0	0.0	0.0	se Subgr		Black	7.0	9.0	2.0	ans eou			Black	29.0	36.0	7.0
P Scienc		White	2.0	1.0	-1.0	P Scienc		White	23.0	23.0	0.0				White	45.0	47.0	2.0
WV NAEI		Male	2.0	2.0	0.0	WV NAEP So		Male	23.0	25.0	2.0	WV NAEP			Male	44.0	45.0	1.0
	Fe-	male	1.0	1.0	0.0		ı	Fe- male	21.0	20.0	-1.0			Ре	male	43.0	48.0	5.0
	All Nat.	%	3.0	2.0	-1.0		IIV :	Nat. %	23.0	25.0	2.0		All	Nat.	%	35.0	39.0	4.0
		All	2.0	1.0	-1.0			Ā	22.0	23.0	1.0				ΑII	44.0	47.0	3.0
			2000	2005	change				2000	2005	change					2000	2005	change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding. * Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

Table 9: 2000 and 2005 WV NAEP Science Grade 4 (continued)

			LEP	*	*	*				LEP	*	*	*
		Ξ̈́	grant	*	*	**			Ξ̈́	grant	*	*	**
	SWD	Nat.	%	0.39	92.0	-10.0		SWD	Nat.	%	35.0	45.0	10.0
			SWD	62.0	54.0	-8.0	4			SWD	38.0	46.0	8.0
WV NAEP Science Subgroup Impact Data Percent at Below Basic for Grade 4	ED	Nat.	%	61.0	53.0	-8.0	WV NAEP Science Subgroup Impact Data Percent At or Above Basic for Grade 4	ED	Nat.	%	39.0	47.0	8.0
3asic for			ED	42.0	39.0	-3.0	Basic f			ED	28.0	61.0	3.0
Below F			Asian	*	*	*	or Above			Asian	*	*	*
ercent at		Nat.	Am.	*	*	*	cent At c		Nat.	Am.	*	*	*
t Data Pe		His	panic	*	*	*	Jata Per		His-	panic	*	*	*
up Impac	Black	Nat.	%	0'04	62.0	0.8-	Impact [Black	Nat.	%	0'08	38.0	8.0
Subgrou			Black	64.0	92.0	0.6-	ubgroup			Black	36.0	45.0	0.6
Science			White	31.0	28.0	-3.0	cience S			White	0'69	72.0	3.0
V NAEP			Male	31.0	28.0	-3.0	NAEP S (Male	0.69	72.0	3.0
Á		Fe	male	34.0	31.0	-3.0	AW		Fe	male	0'99	0'69	3.0
	All	Nat.	%	39.0	34.0	-5.0		ΙΙΥ	Nat.	%	61.0	0.99	5.0
			¥	32.0	30.0	-2.0				Ħ	0.89	0.07	2.0
				2000	2005	change					2000	2005	change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the At or Above Basic level due to round-

Columns highlighted in green represent National Public NAEP data.

ing. * Sample size too small to provide reliable data; ** Data not collected.

Figure 9: 2000 and 2005 WV NAEP Science Grade 4 Subgroup Impact Data: Percent At or Above Basic for Grade 4 **2000 ■**2005 8.0 0.0 0.88 0,82 0,19 ✨ 000 0.0 Subgroups 0.0 0.2F 0.2F 0,27 l 0, 63 0, <u>2</u>7 0'69 0'99 0.88 0.07 80.0 70.0 60.0 50.0 40.0 20.0 10.0 stnabute 10 %

2000 and 2005 WV NAEP (Aggregate of all 8th Grade performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroup, 2) percentage of students **At or Above Basic** by subgroup, and 3) the change in performance from 2000 to 2005 by subgroup.

Table 10: 2000 and 2005 WV NAEP Science Grade 8

	LEP	*	*	*		LEP	*	*	*		LEP	*	*	*
	Mi- grant	*	*	*		Mi- grant	*	**	*		Mi- grant	*	*	*
	SWD Nat. %	1.0	0.0	-1.0		SWD Nat. %	7.0	8.0	1.0		SWD Nat. %	18.0	19.0	1.0
	SWD	0.0	0.0	0.0		SWD	4.0	7.0	3.0		SWD	12.0	18.0	0.9
rade 8	ED Nat. %	1.0	1.0	0.0	irade 8	ED Nat. %	10.0	11.0	1.0	ade 8	ED Nat. %	21.0	25.0	4.0
WV NAEP Science Subgroup Impact Data Percent at Advanced for Grade 8	ED	0.0	0.0	0.0	WV NAEP Science Subgroup Impact Data Percent at Proficient for Grade 8	ED	12.0	13.0	1.0	Science Subgroup Impact Data Percent at Basic for Grade 8	ED	27.0	29.0	2.0
at Advan	Asian	*	*	*	at Profici	Asian	*	*	*	nt at Bas	Asian	*	*	*
Percent a	Nat. Am.	*	*	*	Percent a	Nat. Am.	*	*	*	ta Percer	Nat. Am.	*	*	*
ict Data I	His- panic	*	*	*	act Data	His- panic	*	*	*	pact Da	His- panic	*	*	*
edml dno	Black Nat. %	0.0	0.0	0.0	edwl dno	Black Nat. %	0.9	0.9	0.0	group In	Black Nat. %	18.0	21.0	3.0
e Subgr	Black	0.0	0.0	0.0	se Subgr	Black	0.3	10.0	0.3	ence Suk	Black	19.0	21.0	2.0
P Scienc	White	2.0	2.0	0.0	P Scieno	White	23.0	22.0	-1.0		White	33.0	34.0	1.0
WV NAE	Male	2.0	3.0	1.0	WV NAE	Male	25.0	25.0	0.0	WV NAEP	Male	32.0	33.0	1.0
1	Fe- male	1.0	1.0	0.0		Fe- male	19.0	18.0	-1.0		Fe- male	34.0	33.0	-1.0
	All Nat. %	4.0	3.0	-1.0		All Nat. %	25.0	24.0	-1.0		All Nat. %	28.0	30.0	2.0
	All	2.0	2.0	0.0		All	22.0	22.0	0.0		All	33.0	33.0	0.0
		2000	2005	change			2000	2002	change			2000	2005	change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding. * Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

Table 10: 2000 and 2005 WV NAEP Science Grade 8 (continued)

	LEP	*	*	*		LEP	*	*	*
	Mi- grant	*	*	**		Mi- grant	*	*	**
	SWD Nat. %	75.0	73.0	-2.0		SWD Nat. %	25.0	27.0	2.0
3	SWD	84.0	75.0	0.6-	8 8	SWD	16.0	25.0	9.0
WV NAEP Science Subgroup Impact Data Percent at Below Basic for Grade 8	ED Nat. %	0.89	63.0	-5.0	WV NAEP Science Subgroup Impact Data Percent At or Above Basic for Grade 8	ED Nat. %	32.0	37.0	2.0
Basic for	ED	0.09	27.0	-3.0	e Basic	ED	40.0	43.0	3.0
Below	Asian	*	*	*	or Above	Asian	*	*	*
ercent at	Nat. Am.	*	*	*	cent At o	Nat. Am.	*	*	*
t Data P	His- panic	*	*	*	Jata Per	His- panic	*	*	*
up Impac	Black Nat. %	0'94	73.0	-3.0	Impact [Black Nat. %	24.0	27.0	3.0
Subgrou	Black	0'92	0'89	0'8-	ubgroup	Black	24.0	32.0	8.0
Science	White	42.0	43.0	1.0	ience S	White	58.0	0'29	-1.0
/ NAEP \$	Male	41.0	40.0	-1.0	NAEP S c	Male	59.0	0.09	1.0
W	Fe- male	46.0	47.0	1.0	I //W	Fe- male	54.0	23.0	-1.0
	All Nat. %	43.0	43.0	0.0		All Nat. %	22.0	0.73	0.0
	IIA	43.0	43.0	0.0		IIA	22.0	0.73	0.0
		2000	2005	change			2000	2005	change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding.

* Sample size too small to provide reliable data; ** Data not collected.

Columns highlighted in green represent National Public NAEP data.

■2005 **2000** Figure 10: 2000 and 2005 WV NAEP Science Grade 8 Subgroup Impact Data: Percent At or Above Basic for Grade 8 0.0 0.0 0.0 0.0 © 52.0 16.0 0.01 0.6+ 1 ✨ 0.0 0.0 LEIST 0.0 0.0 Subgroups φ. φ. Θ 0.4.0 0.82 0.72 0.08 0.62 % 0.52 0.52 0.72 0.72 0.09 50.0 40.0 30.0 20.0 10.0 stnábute jo %

2002 WV NAEP (Aggregate of all 4th Grade performance in West Virginia): shows the 1) percentage of students in each performance level by subgroup, and 2) percentage of students **At or Above Basic** by subgroup

Table 11: 2002 WV NAEP Writing Grade 4

	LEP	*		LEP	*		LEP	*		LEP	*		LEP	*
	Mi- grant	*		Mi- grant	*		Mi- grant	*		Mi- grant	*		Mi- grant	*
	SWD Nat. %	0.0		SWD Nat. %	0.9		SWD Nat. %	50.0		SWD Nat. %	44.0		SWD Nat. %	56.0
	QMS	0.0		QMS	3.0		QMS	33.0	4	QMS	64.0	e 4	QMS	36.0
Grade 4	ED Nat. %	1.0	Grade 4	ED Nat. %	14.0	ade 4	ED Nat. %	62.0	r Grade	ED Nat. %	23.0	Basic for Grade 4	ED Nat. %	77.0
ced for	ED	0.0	ient for	ED	12.0	Percent at Basic for Grade 4	ED	0.79	Basic fo	ED	21.0		ED	79.0
Advan	Asian	*	: Profici	Asian	*	t at Bas	Asian	*	Below I	Asian	*	r Above	Asian	*
ercent at	Nat. Am.	*	ercent al	Nat. Am.	*	a Percen	Nat. Am.	*	Percent at Below Basic for Grade	Nat. Am.	*	ent At o	Nat. Am.	*
Writing Subgroup Impact Data Percent at Advanced for Grade 4	His- panic	*	Writing Subgroup Impact Data Percent at Proficient for Grade 4	His- panic	*	Subgroup Impact Data	His- panic	*		His- panic	*	WV NAEP Writing Subgroup Impact Data Percent At or Above	His- panic	*
roup Impa	Black Nat. %	1.0	iroup Impa	Black Nat. %	13.0	ıbgroup Ir	Black Nat. %	63.0	WV NAEP Writing Subgroup Impact Data	Black Nat. %	23.0	ıp Impact	Black Nat. %	77.0
ng Subg	Black	1.0	ognS bu	Black	17.0	r iting Su	Black	0.99	g Subgr	Black	17.0	Subgrou	Black	83.0
-	White	1.0	EP Writi	White	18.0	NAEP Writing	White	65.0	Writin	White	17.0	Writing	White	83.0
WV NAEP	Male	0.0	WV NAEP	Male	10.0	I //W	Male	65.0	MV NAEF	Male	24.0	/ NAEP \	Male	76.0
	Female	1.0		Female	26.0		Female	64.0		Female	0.6	M	Female	91.0
	All Nat. %	2.0		All Nat. %	25.0		All Nat. %	59.0		All Nat. %	15.0		All Nat. %	85.0
	All	1.0		All	18.0		All	64.0		All	16.0		All	84.0
		2002			2002			2002			2002			2002

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the At or Above Basic level due to rounding.

Columns highlighted in green represent National Public NAEP data.

^{*} Sample size too small to provide reliable data; ** Data not collected.

Figure 11A: 2002 WV NAEP Writing Grade 4 Subgroup Impact Data: Percent **At or Above Basic** for Grade 4

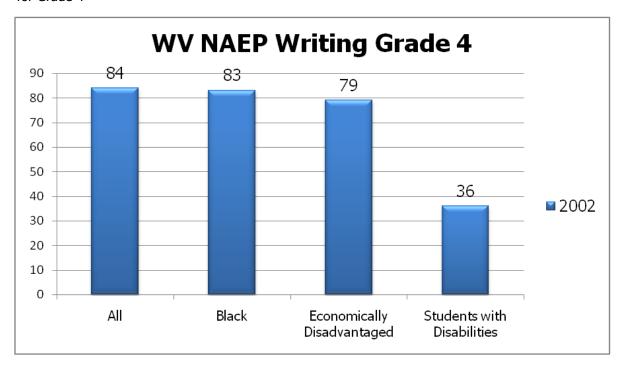
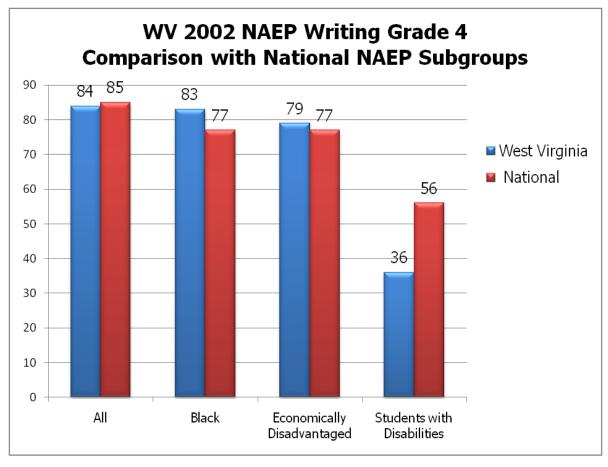


Figure 11B: 2002 NAEP Writing Subgroup Comparison for West Virginia and National Percent **At or Above Basic** for Grade 4



2002 and 2007 WV NAEP (Aggregate of all 8th Grade performance in West Virginia): shows the 1) percentage of students in each performance level by subgroup, 2) percentage of students **At or Above Basic** by subgroup, and 3) the change in performance from 2002 to 2007.

Table 12: 2002 and 2007 WV NAEP Writing Grade 8

	LEP	*	*	*		LEP	*	*	*		LEP	*	*	*
	Mi- grant	* *	*	* *		Mi- grant	* *	*	* *		Mi- grant	* *	*	* *
	SWD Nat. %	0.0	0.0	0.0		SWD Nat. %	4.0	0.9	2.0		SWD Nat. %	42.0	48.0	0.9
	SWD	0.0	0.0	0.0		SWD	2.0	2.0	0.0		SWD	35.0	33.0	-2.0
rade 8	ED Nat. %	0.0	0.0	0.0	rade 8	ED Nat. %	15.0	16.0	1.0	de 8	ED Nat. %	58.0	63.0	5.0
ed for G	ED	0.0	0.0	0.0	: nt for G	ED	12.0	14.0	2.0	for Gra	ED	62.0	63.0	1.0
Advanc	Asian	*	*	*	Proficie	Asian	*	*	*	Percent at Basic for Grade 8	Asian	*	*	*
rcent at	Nat. Am.	*	*	*	rcent at	Nat. Am.	*	*	*	Percent	Nat. Am.	*	*	*
ct Data Pe	His- panic	*	*	*	ct Data Pe	His- panic	*	*	*	pact Data	His- panic	*	*	*
Writing Subgroup Impact Data Percent at Advanced for Grade 8	Black Nat. %	0.0	0.0	0.0	Writing Subgroup Impact Data Percent at Proficient for Grade 8	Black Nat. %	12.0	15.0	3.0	NAEP Writing Subgroup Impact Data	Black Nat. %	0.09	65.0	5.0
ng Subg	Black	0.0	0.0	0.0	ng Subg	Black	13.0	15.0	2.0	iting Su	Black	62.0	61.0	-1.0
	White	1.0	0.0	-1.0		White	20.0	22.0	2.0	VAEP Wr	White	0.09	62.0	2.0
WV NAEP	Male	0.0	0.0	0.0	WV NAEP	Male	11.0	11.0	0.0	- M	Male	61.0	63.0	2.0
	Fe- male	1.0	1.0	0.0		Fe- male	30.0	32.0	2.0		Fe- male	59.0	60.0	1.0
	All Nat. %	2.0	2.0	0.0		All Nat. %	28.0	29.0	1.0		All Nat. %	54.0	57.0	3.0
	All	1.0	0.0	-1.0		All	20.0	22.0	2.0		All	0.09	61.0	1.0
		2002	2002	Change			2002	2002	Change			2002	2002	Change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the At or Above Basic level due to rounding.

Columns highlighted in green represent National Public NAEP data.

^{*} Sample size too small to provide reliable data; ** Data not collected.

Table 12: 2002 and 2007 WV NAEP Writing Grade 8 (continued)

	LEP	*	*	*		LEP	*	*	*
	Mi- grant	*	* *	* *		Mi- grant	* *	* *	* *
	SWD Nat. %	54.0	46.0	0.8-		SWD Nat. %	46.0	54.0	8.0
	SWD	64.0	65.0	1.0	8	SWD	36.0	35.0	-1.0
Grade 8	ED Nat. %	27.0	20.0	-7.0	ır Grade	ED Nat. %	73.0	80.0	7.0
sic for	ED	27.0	24.0	-3.0	Basic fo	ED	73.0	76.0	3.0
elow Ba	Asian	*	*	*	Above F	Asian	*	*	*
nt at B	Nat. Am.	*	*	*	t At or	Nat. Am.	*	*	*
ata Perce	His- panic	*	*	*	a Percent	His- panic	*	*	*
Writing Subgroup Impact Data Percent at Below Basic for Grade 8	Black Nat. %	27.0	20.0	-7.0	riting Subgroup Impact Data Percent At or Above Basic for Grade 8	Black Nat. %	73.0	80.0	7.0
ubgroup	Black	25.0	24.0	-1.0	bgroup Ir	Black	75.0	76.0	1.0
Vriting S	White	19.0	16.0	-3.0	i ting Su	White	81.0	84.0	3.0
WV NAEP V	Male	29.0	26.0	-3.0	WV NAEP Wr	Male	71.0	74.0	3.0
M	Fe- male	10.0	7.0	-3.0	N /W	Fe- male	90.0	93.0	3.0
	All Nat. %	16.0	13.0	-3.0		All Nat. %	84.0	87.0	3.0
	All	19.0	16.0	-3.0		All	81.0	84.0	3.0
		2002	2007	Change			2002	2007	Change

Note: Calculations are rounded to reflect whole numbers. Numerical differences of 1% may occur in the **At or Above Basic** level due to rounding.

Columns highlighted in green represent National Public NAEP data.

^{*} Sample size too small to provide reliable data; ** Data not collected.

Figure 12A: 2002 and 2007 WV NAEP Writing Grade 8 Subgroup Impact Data: Percent **At or Above Basic** for Grade 8

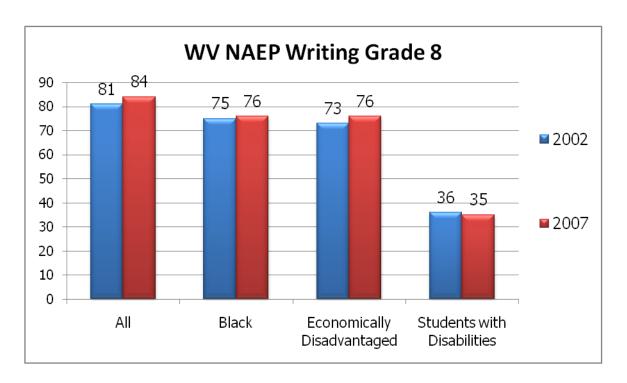
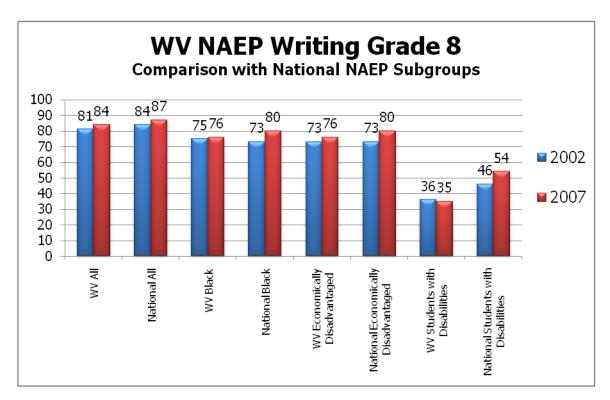


Figure 12B: 2002 and 2007 NAEP Writing Subgroup Comparison for West Virginia and National Percent **At or Above Basic** for Grade 8



NAEP Findings 2003, 2005, and 2007 (Reading and Mathematics) and 2000 and 2005 (Science)

No new NAEP data releases have occurred for <u>Reading</u>, <u>Science</u>, and <u>Writing</u> since the 2nd edition of the *Closing the Achievement Gap Report for 21st Century West Virginia Learners*; therefore, no changes have been made within the Findings section for those content areas.

Reading -- Grade 4

- In 2007, the national percentage of students performing within the All subgroup scoring **At or Above Basic** was 66 percent while the West Virginia All subgroup had 63 percent.
- West Virginia's Black subgroup had a higher percentage of students performing within the At or Above Basic level in 2003 and 2005 than the national Black subgroup, but in 2007, both the WV and national Black subgroups had 46 percent of students performing at this level.
- A significant achievement gap continues to persist between the West Virginia Black subgroup and the WV White subgroup. In 2007, the WV Black subgroup had 46 percent (4 out of 10) of its students scoring within the At or Above Basic level while the WV White subgroup had 63 percent (6 out of 10) of its students scoring at that same performance level.
- The West Virginia Black subgroup increased the percentage of students performing At or Above Basic one percent between 2003 and 2007.
- West Virginia's Economically Disadvantaged subgroup has consistently had a higher percentage of students scoring At or Above Basic in 2003, 2005 and 2007 than the national ED subgroup.
- A significant achievement gap continues to persist between the West Virginia
 Economically Disadvantaged subgroup and the WV White subgroup. In 2007, the
 WV ED subgroup had 53 percent (5 out of 10) of its students scoring At or Above
 Basic while the WV White subgroup had 63 percent (6 out of 10).
- West Virginia's **Students with Disabilities** subgroup had a decrease of 6 percent in the percentage of students scoring **At or Above Basic** from 2003 (34%) to 2007 (28%).
- West Virginia's Students with Disabilities subgroup had a larger percentage of students performing At or Above Basic than the national SWD subgroup in both 2003 and 2005; however, that percentage significantly decreased compared with the national SWD subgroup in 2007 with only 28 percent of WV SWD students performing within this level.
- A significant achievement gap continues to persist between the West Virginia Students with Disabilities subgroup and the WV White subgroup. In 2007, the WV SWD subgroup had 28 percent (roughly 3 out of 10) performing At or Above Basic while the WV White subgroup had 63 percent (6 out of 10).

Reading - Grade 8

- In 2007, the national percentage of All subgroup students performing At or Above Basic was 73 percent while the West Virginia All subgroup percentage was 68 percent. There were no gains for the WV All subgroup between 2005 and 2007.
- The West Virginia **Black** subgroup has consistently shown a smaller percentage of students performing within the **At or Above Basic** level than the national **Black** subgroup in 2005 (44% to 51%) and 2007 (52% to 54%).
- The West Virginia **Black** subgroup showed an increase of 8 percent in students performing **At or Above Basic** between 2005 and 2007.
- An achievement gap continues to persist between the West Virginia Black subgroup and the WV White subgroup. In 2007, the WV Black subgroup had 52 percent (5 out of 10) of its students scoring At or Above Basic while the WV White subgroup had 69 percent (almost 7 out of 10).
- The West Virginia **Economically Disadvantaged** subgroup (59%) performed slightly higher (1%) in the percentage of students scoring **At or Above Basic** compared to the national **ED** subgroup (58%) in 2007.
- The West Virginia **Economically Disadvantaged** subgroup showed a 3 percent increase in the **At or Above Basic** performance level between 2005 and 2007.
- An achievement gap persists between the WV Economically Disadvantaged subgroup and the WV White subgroup. In 2007, the WV ED subgroup had 59 percent (almost 6 out of 10) scoring At or Above Basic while the WV White subgroup had 69 percent (almost 7 out of 10).
- The West Virginia **Students with Disabilities** subgroup showed a percentage of students scoring **At or Above Basic** consistently lower than the national **SWD** percentage in 2003 (29% to 32%), 2005 (27% to 33%), and 2007 (21% to 34%).
- Between 2003 and 2007, the WV Students with Disabilities subgroup decreased 8
 percent the percentage of students scoring At or Above Basic.
- A significant achievement gap continues to persist between the WV Students with Disabilities subgroup and the WV White subgroup. In 2007, the WV SWD subgroup had 21 percent (2 out of 10) performing At or Above Basic while the WV White subgroup had 69 percent (almost 7 out of 10).

NAEP Mathematics---Grade 4 and Grade 8 (Reporting Notations/Changes)

The 2005 NAEP Mathematics assessment results were based on a new National NAEP Framework. Thus, the 2003 results cannot be compared with the 2005 results; however, comparisons can be made between the years of 2005, 2007 and/or 2009.

Beginning in 2009, the National Center of Education Statistics (NCES) released a redesign of the NAEP Data Explorer. This redesign increased the precision of data that is available to states, thus, starting with the 2009 data release, the reporting of NAEP data has changed from the nearest whole percent to the nearest tenth of a percent.

In addition, the cumulative achievement level reporting standard has been changed from the percent **At or Above Basic** to the percent **At or Above Proficient.**

Mathematics - Grade 4

- In 2009, the West Virginia All subgroup had 28.1 percent of its students performing At or Above Proficient compared with the National All subgroup at 38.4 percent.
- In 2009, the West Virginia All subgroup had 77.4 percent of its students performing At or Above Basic—a decrease of 3.8 percent of students performing At or Above Basic in 2007.
- In 2009, the **National All** subgroup remained constant with 81 percent of students performing **At or Above Basic**—the same percentage as in 2007.
- The West Virginia **Black** subgroup consistently had a higher percentage of students scoring **At or Above Proficient** than the **National Black** subgroup in 2003 (12.6% to 9.7%), 2005 (16.9% to 12.8%), 2007 (18.8% to 15.0%), and in 2009 (19.6% to 15.4%).
- The West Virginia **Black** subgroup has consistently **increased** the percentage of students performing **At or Above Proficient** each year from 2005 (16.9%) through 2009 (19.6%).
- The West Virginia **Black** subgroup showed a 0.8 percent increase in students performing **At or Above Proficient** between 2007 and 2009.
- An achievement gap persists between the West Virginia Black subgroup and the West Virginia White subgroup. In 2009, the WV Black subgroup had 19.6 percent (roughly 2 out of 10 students) performing At or Above Proficient while the WV White subgroup had 28.5 percent (approximately 3 out of 10).
- In 2009, the West Virginia **Economically Disadvantaged** subgroup **decreased** the percentage of students performing **At or Above Proficient** by 2.6 percent from 2007.
- In 2009, the West Virginia **Economically Disadvantaged** subgroup had 19.6 percent of its students performing **At or Above Proficient** compared with the **National ED** subgroup at 21.8 percent. This was a difference of -2.2 percent.
- The West Virginia **Economically Disadvantaged** subgroup had 70.3 percent (7 out of 10 students) performing **At or Above Basic** in 2009. This was a **decrease** of 3 percent from 2007.
- An achievement gap persists between the West Virginia Economically Disadvantaged subgroup and the West Virginia White subgroup. In 2009, the WV ED subgroup had 19.6 percent (2 out of 10 students) performing At or Above Proficient while the WV White subgroup had 28.5 percent (approximately 3 out of 10).

Mathematics - Grade 4 (continued)

- In 2009, the West Virginia **Students with Disabilities** subgroup **decreased** the percentage of students performing **At or Above Proficient** by 4.5 percent from 2007.
- In 2009, the West Virginia **Students with Disabilities** subgroup had 13.5 percent of its students performing **At or Above Proficient** compared with the **National SWD** subgroup at 19.0 percent. This was a difference of -5.5 percent.
- The West Virginia **Students with Disabilities** subgroup had 55.5 percent (approximately 6 out of 10 students) performing **At or Above Basic** in 2009. This was a **decrease** of 5.5 percent from 2007 within that performance achievement level.
- An achievement gap persists between the West Virginia Students with Disabilities subgroup and the West Virginia White subgroup. In 2009, the WV SWD subgroup had 13.5 percent (roughly 1 out of 10 students) performing At or Above Proficient while the WV White subgroup had 28.5 percent (approximately 3 out of 10).

Mathematics - Grade 8

- In 2009, the **National** percentage of **All** subgroup students performing **At or Above Proficient** was 32.6 percent while the West Virginia **All** subgroup percentage was 19.4 percent. This was a difference of 13.2 percent.
- The West Virginia All subgroup consistently performed below the **National All** subgroup in percentage of students scoring **At or Above Proficient** in 2005 (17.9% to 28.5%), in 2007 (18.5% to 31.0%), and in 2009 (19.4% to 32.6%).
- The West Virginia All subgroup increased 0.9 percent in the number of students scoring At or Above Proficient between 2007 and 2009.
- The West Virginia **All** subgroup showed a slight **decrease** in the percentage of students performing **At or Above Basic** from 2007 (61.3%) to 2009 (61.0%). The WV **All** subgroup performance (61.0%) in 2009 was **below** the **National All** subgroup performance of 71.5 percent.
- The West Virginia **Black** subgroup performed slightly **below** the **National Black** subgroup in percentage of students scoring **At or Above Proficient** in 2009 (11.3% to 11.8%). This was a difference of 0.5 percent.
- The West Virginia **Black** subgroup consistently performed below the **National Black** subgroup in percentage of students scoring **At or Above Proficient** in 2005 (5.7 to 8.3 percent), in 2007 (4.0 to 10.6 percent), and in 2009 (11.3 to 11.8 percent).
- The West Virginia Black subgroup increased 7.3 percent in the number of students scoring At or Above Proficient between 2007 and 2009.
- The West Virginia **Black** subgroup performed **above** the **National Black** subgroup in the percentage of students scoring **At or Above Basic** in 2009 (53.1% to 49.0%). This was a difference of 4.1 percent.
- An achievement gap persists between the West Virginia Black subgroup and the West Virginia White subgroup. In 2009, the WV Black subgroup had 11.3 percent (1 out of 10 students) performing At or Above Proficient while the WV White subgroup had 19.6 percent (approximately 2 out of 10).

Mathematics - Grade 8 (continued)

- The West Virginia **Economically Disadvantaged** subgroup performed below the **National ED** subgroup in percentage of students scoring **At or Above Proficient** in 2005 (10.0 to 13.3 percent), in 2007 (10.3 to 15.5 percent), and in 2009 (11.3 to 16.7 percent).
- The West Virginia **Economically Disadvantaged** subgroup **increased** 1.0 percent in the percentage of students performing **At or Above Proficient** between 2007 and 2009.
- The West Virginia **Economically Disadvantaged** subgroup performed below the **National ED** subgroup in the percentage of students scoring **At or Above Basic** in 2005 (46.5 to 50.8 percent), in 2007 (49.0 to 54.7 percent), and in 2009 (51.4 to 56.6 percent).
- The West Virginia **Economically Disadvantaged** subgroup **increased** 2.4 percent in the percentage of students performing **At or Above Basic** between 2007 and 2009.
- An achievement gap persists between the West Virginia Economically Disadvantaged subgroup and the West Virginia White subgroup. In 2009, the WV ED subgroup had 11.3 percent (1 out of 10 students) performing At or Above Proficient while the WV White subgroup had 19.6 percent (approximately 2 out of 10).
- This achievement gap is more apparent within the percentage of students performing At or Above Basic in 2009. The West Virginia Economically Disadvantaged subgroup had 51.4 percent of its students performing at this level while the West Virginia White subgroup had 61.3 percent---a performance gap of 9.9 percent.
- The West Virginia Students with Disabilities subgroup performed below the National SWD subgroup in percentage of students scoring At or Above Proficient in 2005 (1.7 to 6.9 percent), in 2007 (3.7 to 7.9 percent), and in 2009 (2.2 to 8.9 percent).
- The West Virginia **Students with Disabilities** subgroup **decreased** 1.5 percent in the percentage of students performing **At or Above Proficient** between 2007 and 2009.
- The West Virginia **Students with Disabilities** subgroup performed below the **National SWD** subgroup in the percentage of students scoring **At or Above Basic** in 2005 (17.4 to 31.4 percent), in 2007 (21.4 to 33.2 percent), and in 2009 (22.4 to 35.8 percent).
- The West Virginia **Students with Disabilities** subgroup **increased** 1.0 percent in the percentage of students performing **At or Above Basic** from 2007 to 2009.
- A significant achievement gap persists between the West Virginia Students with Disabilities subgroup and the West Virginia White subgroup. In 2009, the WV SWD subgroup had 2.2 percent of its students performing At or Above Proficient while the WV White subgroup had 19.6 percent.
- This achievement gap is more apparent within the percentage of students performing At or Above Basic in 2009. The West Virginia Students with Disabilities subgroup had 22.4 percent of its students performing at this level while the West Virginia White subgroup had 61.3 percent---a performance gap of 38.9 percent.

Science - Grade 4

- The WV **All** subgroup performed above the national **All** subgroup in percentage of students scoring **At or Above Basic** in 2000 (68% to 61%) and 2005 (70% to 66%).
- The WV All subgroup increased 2 percent in percentage of students performing At or Above Basic between 2000 and 2005.
- The WV **Black** subgroup performed above the national **Black** subgroup in percentage of students scoring **At or Above Basic** in both 2000 (36% to 30%) and 2005 (45% to 38%).
- The WV **Black** subgroup increased 9 percent in students performing **At or Above Basic** between 2000 and 2005.
- A significant achievement gap persists between the WV Black subgroup and the WV White subgroup. In 2005, the WV Black subgroup had 45 percent (approximately 5 out of 10) performing At or Above Basic while the WV White subgroup had 72% (7 out of 10).
- In 2000 (58% to 39%) and 2005 (61% to 47%), the WV **Economically Disadvantaged** subgroup performed significantly higher than the national **ED** subgroup in students scoring **At or Above Basic**.
- The WV Economically Disadvantaged subgroup increased 3% in students performing At or Above Basic between 2000 and 2005.
- An achievement gap persists between the WV Economically Disadvantaged subgroup and the WV White subgroup. In 2005, the WV ED subgroup had 61 percent (6 out of 10) performing At or Above Basic while the WV White subgroup had 72 percent (7 out of 10).
- The WV Students with Disabilities subgroup performed above the national SWD subgroup in percentage of students scoring At or Above Basic in both 2000 (38% to 35%) and 2005 (46% to 45%).
- The WV **Students with Disabilities** subgroup increased 8 percent in students performing **At or Above Basic** between 2000 and 2005.
- A significant achievement gap persists between the WV Students with Disabilities subgroup and the WV White subgroup. In 2005, the WV SWD subgroup had 46 percent (roughly 5 out of 10) performing At or Above Basic while the WV White subgroup had 72 percent (7 out of 10).

Science – Grade 8

- The WV All subgroup and the national All subgroup had the same percentage of students performing **At or Above Basic** (57%) for both 2000 and 2005.
- No gains were made for the WV All subgroup between 2000 and 2005 in the percentage of students performing **At or Above Basic**.
- The WV **Black** subgroup outperformed the national **Black** subgroup in percentage of students performing **At or Above Basic** in 2005 (32% to 27%).
- The WV **Black** subgroup increased 8 percent in students performing **At or Above Basic** between 2000 and 2005.
- A significant achievement gap persists between the WV Black subgroup and the WV White subgroup. In 2005, the WV Black subgroup had 32 percent (3 out of 10) performing At or Above Basic while the WV White subgroup had 57 percent (almost 6 out of 10).
- In 2000 (40% to 32%) and 2005 (43% to 37%), the WV **Economically Disadvantaged** subgroup outperformed the national **ED** subgroup in the percentage of students performing **At or Above Basic**.
- The WV **Economically Disadvantaged** subgroup increased 3 percent in students performing **At or Above Basic** between 2000 and 2005.
- A significant achievement gap persists between the WV Economically Disadvantaged subgroup and the WV White subgroup. In 2005, the WV ED subgroup had 43 percent (4 out of 10) performing At or Above Basic while the WV White subgroup had 57 percent (almost 6 out of 10).
- In 2000 (16% to 25%) and 2005 (25% to 27%), the WV **Students with Disabilities** subgroup performed below the national **SWD** subgroup in the percentage of students performing **At or Above Basic**.
- The WV **Students with Disabilities** subgroup increased 9 percent in students performing **At or Above Basic** between 2000 and 2005.
- A significant achievement gap persists between the WV Students with Disabilities subgroup and the WV White subgroup. In 2005, the WV SWD subgroup had 25 percent (approximately 3 out of 10) performing At or Above Basic while the WV White subgroup had 57 percent (almost 6 out of 10).

The ACT Program ACT



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The ACT Program

ACT

The ACT/Educational Planning and Assessment System (EPAS) includes ACT, EXPLORE, and PLAN. All of these EPAS programs are based on a common content continuum in each of the five areas tested and are helpful for measuring student achievement, for gauging student readiness, for transitioning to the next level of learning, and for school program evaluation. The subgroups used by the ACT Program are different from the required No Child Left Behind (NCLB; 2001) subgroups.

ACT

The ACT is not part of the state assessment system, West Virginia Measures of Academic Progress (WV-MAP). It is part of a private national assessment system that provides college admission testing opportunities directly to local school systems. Students pay a fee for the test administration and results.

National forms of the multiple-choice ACT tests are constructed by selecting items from the item pool that match both the content and statistical specifications for the tests. Each form of the ACT is a sample from the larger domain on which the test is based.

The ACT consists of four curriculum-based tests: English, mathematics, reading, and science; the optional writing test is an impromptu essay on a given prompt. The tests are standardized multiple-choice tests based on major areas of high school and postsecondary instructional programs. Performance on these tests has a direct relationship to a student's educational achievement.

The four tests are measures of academic development that rely largely on the students' abilities to apply the content knowledge and reasoning skills acquired in their coursework to high-level tasks. These tasks often require the integration of proficiencies and skills from various high school courses. Consequently, the ACT tests contain a large proportion of analytical and problem-solving exercises. Students are evaluated in each of the following areas:

English is a 75-item, 45-minute test that measures the student's understanding of the conventions of standard English and rhetorical styles.

Mathematics is a 60-item, 60-minute test that assesses the mathematical skills acquired through grade 12. The areas include Algebra 1, Geometry, and Algebra II.

Reading is a 40-item, 35-minute test that measures the student's reading comprehension as a product of referring and reasoning skills.

Science is a 40-item, 35-minute measurement of the student's interpretation, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences.

Note: Abbreviations and terminology contained throughout tables and figures in the ACT section include:

Nation All graduating students

All West Virginia graduating students

Mex. Am. Mexican American
Am. Indian Native American
AK Alaska Native

	College Readine	ess Benchmarks	
Subject Test	EXPLORE Test Score	PLAN Test Score	ACT Test Score
English	13	15	18
Mathematics	17	19	22
Reading	15	17	21
Science	20	21	24

College Readiness Benchmark Scores are early predictors of success in college-level work. A benchmark score is the minimum score needed on an ACT subject-area test to indicate that a student has a 50% chance of obtaining a B or higher, or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses. These college courses include English composition, algebra, social science and biology.

2000-2008 ACT Reading Mean Scale Scores (Aggregate of all high school graduates): Shows 1) the national mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 13: 2000-2008 ACT Reading

				AC	ACT READING Mean Scale Scores	G Mean Sc	ale Scores				
Year	Nation	(WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Total Tested
2000	21.4	20.9	21.0	20.8	21.0	17.7	23.4	20.0	18.5	22.1	12,267
2001	21.3	20.8	20.9	20.6	20.8	17.3	23.4	18.2	19.8	23.2	11,857
2002	21.1	21.0	21.1	20.8	21.1	16.8	21.6	20.8	19.6	22.4	11,451
2003	21.2	20.9	21.1	20.8	21.0	17.4	20.8	19.6	19.6	22.6	11,728
2004	21.3	21.1	21.2	50.9	21.2	17.6	21.3	20.4	18.8	23.8	11,486
2005	21.3	20.9	21.1	20.7	21.0	17.6	50.6	20.8	20.1	23.3	11,451
2006	21.4	21.2	21.4	20.9	21.2	18.0	22.4	22.3	21.1	23.6	10,990
2007	21.5	21.2	21.3	21.0	21.2	17.6	21.0	21.8	19.5	23.2	11,480
2008	21.4	21.4	21.4	21.3	21.4	17.5	20.4	*NA	20.7	23.6	11,603
Change 07-08	-0.1	0.2	0.1	0.3	0.2	-0.1	9.0-	*NA	1.2	0.4	123

* The Mexican American/Chicano subgroup has been combined with the Hispanic subgroup

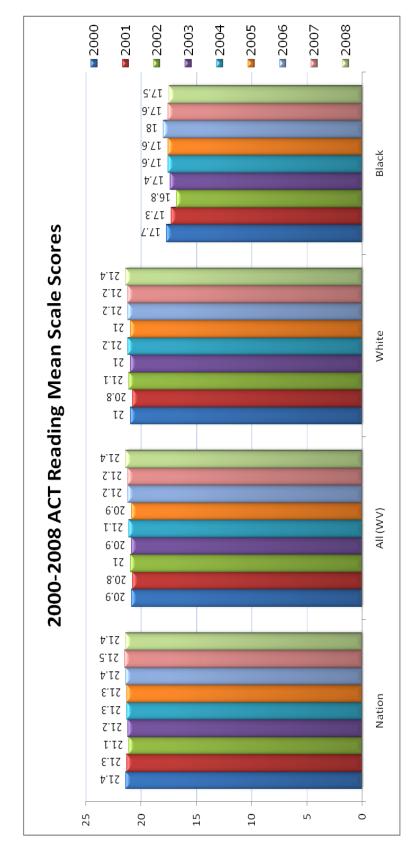


Figure 13: 2000-2008 ACT Reading Mean Scale Scores

* ACT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups

* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 11. Instead, those results are numerically presented within Table 11.

2000-2008 ACT Mathematics Mean Scale Scores (Aggregate of all high school graduates): Shows 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroups' mean scale scores.

Table 14: 2000-2008 ACT Mathematics

				ACT MA	THEMATI	CS Mean S	ACT MATHEMATICS Mean Scale Scores	S			
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Total Tested
2000	20.7	19.0	18.5	19.6	19.0	16.6	20.2	18.8	16.8	23.1	12,267
2001	20.7	18.9	18.5	19.5	18.9	16.3	20.5	18.0	18.8	23.8	11,857
2002	50.6	19.1	18.6	19.8	19.2	16.3	18.4	19.9	17.8	22.7	11,451
2003	50.6	19.2	18.6	19.9	19.3	16.1	19.0	18.3	18.0	22.8	11,728
2004	20.7	19.4	18.9	20.0	19.4	16.8	19.6	18.5	17.7	23.3	11,486
2002	20.7	19.3	18.8	20.0	19.3	17.0	18.8	18.6	19.1	52.6	11,451
2006	20.8	19.6	19.0	20.3	19.6	17.0	20.5	19.1	18.9	23.6	10,990
2007	21.0	19.5	18.9	20.2	19.5	17.1	19.9	19.3	19.0	23.0	11,480
2008	21.0	19.6	19.0	20.3	19.6	16.8	19.9	*NA	18.4	23.7	11,603
Change 07-08	0.0	0.1	0.1	0.1	0.1	-0.3	0.0	*NA	9.0-	0.7	123

* The Mexican American/Chicano subgroup has been combined with the Hispanic subgroup

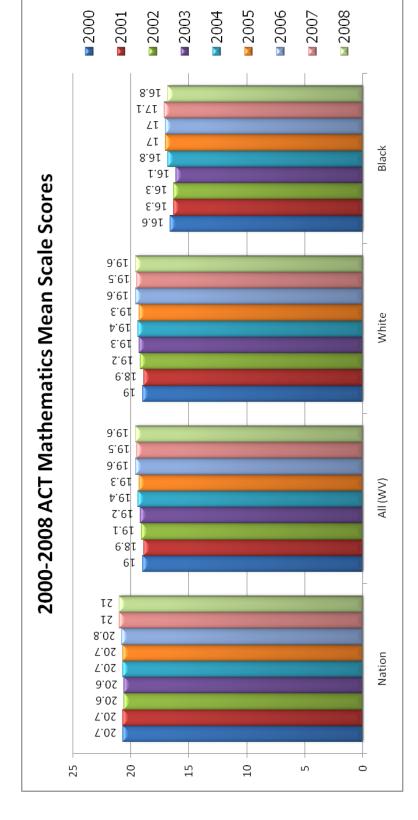


Figure 14: 2000-2008 ACT Mathematics Mean Scale Scores

* ACT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups

* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 12. Instead, those results are numerically presented within Table 12.

2000-2008 ACT Science Mean Scale Scores (Aggregate of all high school graduates): Shows 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 15: 2000-2008 ACT Science

				ACT	ACT SCIENCE Mean Scale Scores	Mean Scale	Scores				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Total Tested
2000	21.0	20.4	20.0	20.9	20.5	17.7	22.0	19.6	18.4	22.0	12,267
2001	21.0	20.3	19.9	20.8	20.4	17.1	21.4	19.5	20.2	23.0	11,857
2002	20.8	20.4	19.9	21.0	20.5	17.2	19.3	20.7	18.9	22.0	11,451
2003	20.8	20.3	20.0	20.8	20.4	17.2	20.7	18.9	18.4	22.3	11,728
2004	20.9	20.3	20.0	20.8	20.4	17.9	19.8	20.2	18.7	22.4	11,486
2002	20.9	20.4	20.0	20.9	20.4	17.9	19.5	19.8	20.5	22.2	11,451
2006	20.9	20.5	20.1	21.0	20.6	17.8	21.0	20.9	20.4	22.3	10,990
2007	21.0	20.5	20.0	21.1	20.5	17.8	20.2	20.4	19.9	22.6	11,480
2008	20.8	20.5	20.0	21.1	20.5	17.5	19.8	*NA	19.8	23.1	11,603
Change 07-08	-0.3	0.0	0.0	0.0	0.0	-0.3	-0.4	*NA	-0.1	0.5	123

* The Mexican American/Chicano subgroup has been combined with the Hispanic subgroup

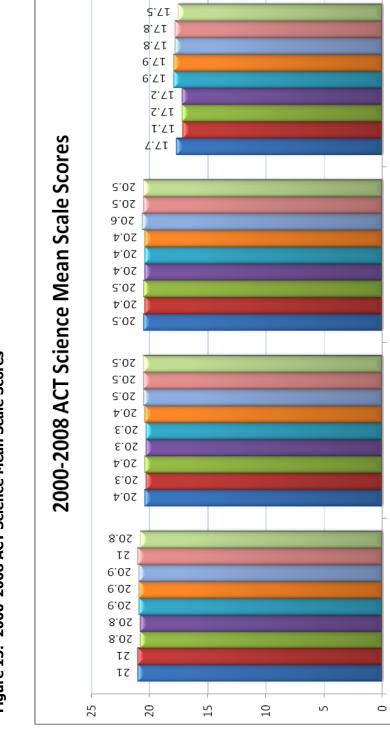


Figure 15: 2000-2008 ACT Science Mean Scale Scores

▼ 2000

2001

2007

2003

2004

2002

≥ 2006

2007

≥ 2008

Black

White

All (WV)

Nation

* ACT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups

* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 13. Instead, those results are numerically presented within Table 13.

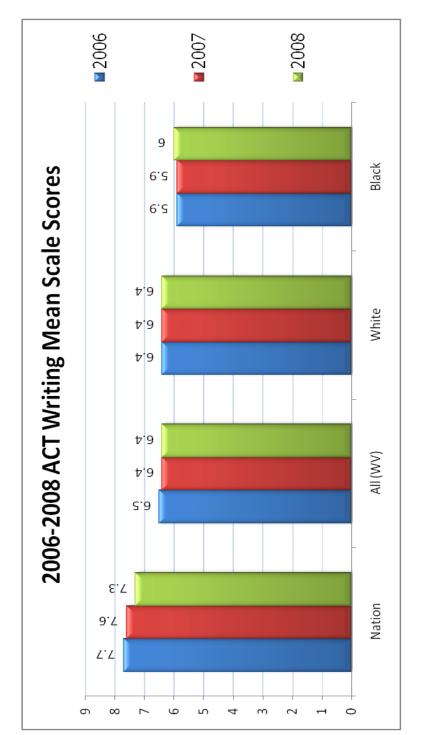
2006-2008 ACT Writing Mean Scale Scores (Aggregate of all high school graduates): Shows 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 16: 2006-2008 ACT Writing

				ACT	ACT WRITING Mean Scale Scores	Mean Scal	e Scores				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Total Tested
2006	7.7	6.5	2'9	6.2	6.4	5.9	6.9	N/A	6.2	7.1	6,560
2007	7.6	6.4	9:9	6.1	6.4	5.9	9:9	N/A	6.0	7.1	6,549
2008	7.3	6.4	2'9	6.1	6.4	0.9	2'9	*NA	6.4	6.9	5,383
Change 07-08	-0.3	0.0	0.1	0.0	0:0	0.1	0.1	*NA	0.4	-0.2	-1166

 st The Mexican American/Chicano subgroup has been combined with the Hispanic subgroup

Figure 16: 2006-2008 ACT Writing Mean Scale Scores



* ACT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups

* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 14. Instead, those results are numerically presented within Table 14.

ACT Findings:

ACT Reading 2000—2008

- National ACT mean scale scores were equal to the mean scale scores for the WV All subgroup for 2008 (21.4).
- At the national level, there was a 0.1 decrease in mean scale scores between 2007—2008.
- There was a slight increase (0.2) in mean scale scores for WV **All** subgroup between 2007—2008.
- A performance gap existed between the WV Black and WV White subgroups for each year 2000-2008. On average, the Black subgroup had 3.6 mean scale score points less than the White subgroup per testing year.
- The **Black** subgroup mean scale scores decreased slightly (0.1) between 2007—2008.
- The White subgroup mean scale scores increased slightly (0.2) between 2007—2008.

ACT Mathematics 2000—2008

- National ACT mean scale scores were slightly higher than the mean scale scores for the WV All subgroup for 2000—2008 (21.0 to 19.6 in 2008).
- At the national level, there were no gains in mean scale scores from 2007—2008.
- There was a slight increase (0.1) in mean scale scores for WV **All** subgroup between 2007—2008.
- A performance gap existed between the WV Black and WV White subgroups for each year 2000-2008. On average, the Black subgroup had 2.6 mean scale score points less than the White subgroup per testing year.
- The **Black** subgroup mean scale scores decreased slightly (0.3) between 2007—2008.
- The **White** subgroup mean scale scores increased slightly (0.1) between 2007—2008.

ACT Science 2000—2008

- National ACT mean scale scores were slightly higher than the mean scale scores for the WV All subgroup for 2007—2008 (20.8 to 20.5 in 2008).
- At the national level, there was a -0.2 decrease in mean scale scores between 2007— 2008.
- There were no gains in mean scale scores for WV All subgroup between 2007—2008.
- A performance gap existed between the WV Black and WV White subgroups for each year 2000-2008. On average, the Black subgroup had 2.9 mean scale score points less than the White subgroup per testing year.

ACT Science 2000—2008 (continued)

- The Black subgroup mean scale scores decreased slightly (-0.3) between 2007—2008.
- There were no gains in mean scale scores for the White subgroup between 2007— 2008.

ACT Writing 2006-2008

- National ACT mean scale scores were higher (7.7, 7.6, and 7.3) than the mean scale scores for the WV All subgroup (6.5, 6.4, and 6.4) for 2006, 2007, and 2008.
- National ACT mean scale scores decreased (-0.3) between 2007—2008.
- There were no gains in mean scale scores for WV All subgroup between 2007 and 2008.
- A performance gap existed between the WV Black and WV White subgroups for each year 2006-2008. On average, the Black subgroup had 0.5 mean scale score points less than the White subgroup per testing year.
- The WV **Black** subgroup mean scale scores increased slightly (0.1) between 2007—2008.
- There were no gains in the mean scale scores for WV White subgroup between 2007
 —2008.

ACT PLAN



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ACT PLAN

The ACT PLAN Program is designed to be administered in tenth grade to provide students with an early indication of their educational progress in the context of post-high school educational and career options they are considering. PLAN contains four curriculum-based tests: English, mathematics, reading and science. These standardized multiple-choice tests are based on the major areas of high school and postsecondary instructional programs.

The four tests are measures of academic development that rely largely on the students' abilities to apply the content knowledge and reasoning skills acquired in their coursework to high-level tasks. These tasks often require the integration of proficiencies and skills from various high school courses. Consequently, the PLAN tests contain a large proportion of analytical and problem-solving exercises. PLAN is a part of the West Virginia Measures of Academic Progress (WV-MAP). Students are evaluated in each of the following areas:

English is a 50-item, 30-minute test that measures the student's understanding of the conventions of standard written English and of rhetorical skills.

Mathematics is a 40-item, 40-minute test designed to assess the mathematical skills that students have typically acquired in first— and second-year high school courses (pre-algebra, first-year algebra, and plane geometry).

Reading is a 25-item, 20-minute test that measures the student's reading comprehension as a product of referring and reasoning skills.

Science is a 30-item, 25-minute test that measures the student's interpretation, analysis, evaluation, reasoning, and problem-solving skills acquired in general, introductory courses in the natural sciences.

Note:

Abbreviations and terminology contained throughout tables and figures in the ACT PLAN section include:

Nation An annual representative sample of 10th grade students

All 10th grade West Virginia students who took the exam under

standard conditions (without accommodations)

Mex. Am. Mexican American

Am. Indian Native American

AK Alaska Native

Other All students not members of a defined subgroup

	College Reading	ess Benchmarks	
Subject Test	EXPLORE Test Score	PLAN Test Score	ACT Test Score
English	13	15	18
Mathematics	17	19	22
Reading	15	17	21
Science	20	21	24

College Readiness Benchmark Scores are early predictors of success in college-level work. A benchmark score is the minimum score needed on an ACT subject-area test to indicate that a student has a 50% chance of obtaining a B or higher, or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses. These college courses include English composition, algebra, social science and biology.

2002—2007 ACT PLAN Reading Mean Scale Scores (Aggregate of all grade 10 students): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 17: 2002—2007 ACT PLAN Reading

					AC	ACT PLAN READING	EADING					
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2002	15.8	16.3	16.8	15.7	16.5	14.5	15.5	14.1	14.0	18.8	14.3	16.9
2003	15.8	16.5	17.2	15.8	16.7	14.6	16.7	15.7	14.7	19.0	14.6	17.0
2004	15.8	16.5	17.1	15.9	16.7	14.4	15.5	16.2	14.4	18.8	14.8	16.7
2005	15.8	16.7	17.4	15.9	16.8	14.7	15.8	16.0	14.9	18.9	15.0	16.9
2006	16.9*	16.5	17.2	15.8	16.6	14.7	15.6	16.7	15.8	19.1	14.4	16.9
2007	16.9	16.5	17.1	15.9	16.6	14.7	15.5	15.7	15.7	18.7	14.6	15.1
Change 06-07	0.0	0.0	-0.1	0.1	0.0	0.0	-0.1	-1.0	-0.1	-0.4	0.2	-1.8

*National normative data are based on 10th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT PLAN testing results data is based on new national norms developed in 2005. Data can be compared from 2002 – 2005. Test year 2006 is baseline data and can be compared with 2007 data.

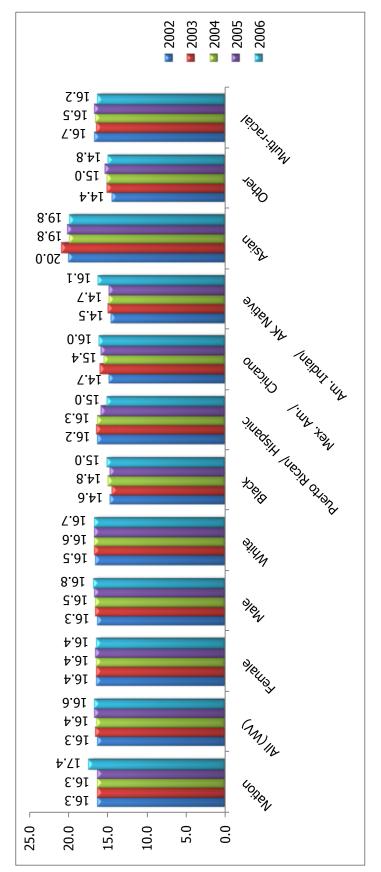


Figure 17: 2002-2006 ACT PLAN Reading Mean Scale Scores

Note: Due to space limitations, data labels are provided for 2002, 2004, and 2006.

2002—2007 ACT PLAN Mathematics Mean Scale Scores (Aggregate of all grade 10 students): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 18: 2002—2007 ACT PLAN Mathematics

					ACT	PLAN MA	ACT PLAN MATHEMATICS	S				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2002	16.3	16.3	16.4	16.3	16.5	14.6	16.2	14.7	14.5	20.0	14.4	16.7
2003	16.3	16.5	16.4	16.5	16.6	14.4	16.4	15.9	14.8	20.9	15.0	16.4
2004	16.3	16.4	16.4	16.5	16.6	14.8	16.3	15.4	14.7	19.8	15.0	16.5
2002	16.3	16.6	16.5	16.6	16.7	14.6	15.7	15.7	14.7	20.1	15.2	16.7
2006	17.4*	16.6	16.4	16.8	16.7	15.0	15.0	16.0	16.1	19.8	14.8	16.2
2007	17.4	16.3	16.4	16.3	16.4	14.8	15.8	15.4	15.4	19.6	14.6	15.1
Change 06-07	0.0	-0.3	0.0	-0.5	-0.3	-0.2	0.8	9.0-	-0.7	-0.2	-0.2	-1.1

*National normative data are based on 10th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT PLAN testing results data is based on new national norms developed in 2005. Data can be compared from 2002 -2005. Test year 2006 is baseline data and can be compared with 2007 data.

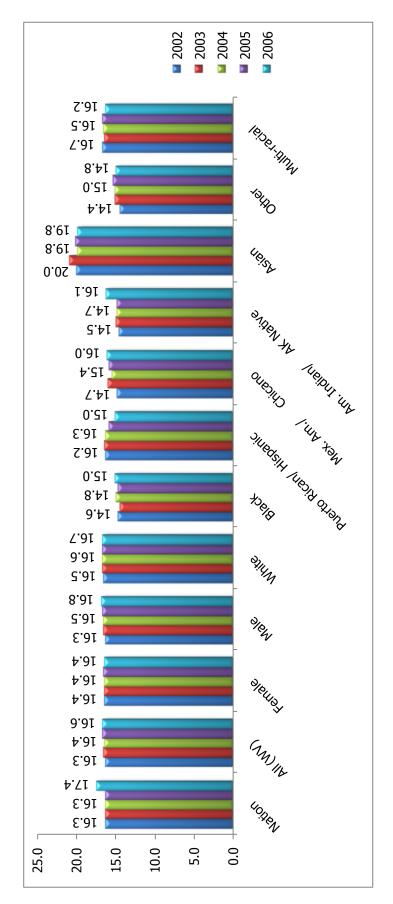


Figure 18: 2002-2006 ACT PLAN Mathematics Mean Scale Scores

Note: Due to space limitations, data labels are provided for 2002, 2004, and 2006.

2002—2006 ACT PLAN Science Mean Scale Scores (Aggregate of all grade 10 students): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 19: 2002—2006 ACT PLAN Science

					AC	ACT PLAN SCIENCE	CIENCE					
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2002	17.4	17.5	17.6	17.4	17.6	16.4	17.5	16.7	15.9	20.2	16.2	17.7
2003	17.4	17.5	17.6	17.5	17.7	15.8	17.4	17.1	16.1	20.0	16.3	17.6
2004	17.4	17.7	17.8	17.6	17.9	16.3	17.0	16.9	16.3	20.0	16.5	17.6
2005	17.4	17.8	17.9	17.7	18.0	16.5	17.3	17.0	16.5	20.2	16.6	17.8
2006	18.2*	17.7	17.9	17.5	17.8	16.4	16.5	16.7	17.3	20.1	16.2	17.7
2007	18.2	17.5	17.6	17.3	17.5	16.2	17.1	16.5	17.4	19.4	16.0	15.8
Change 06-07	0:0	-0.2	-0.3	-0.2	-0.3	-0.2	9.0	-0.2	0.1	-0.7	-0.2	-1.9

*National normative data are based on 10th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT PLAN testing results data is based on new national norms developed in 2005. Data can be compared from 2002 -2005. Test year 2006 is baseline data and can be compared with 2007 data.

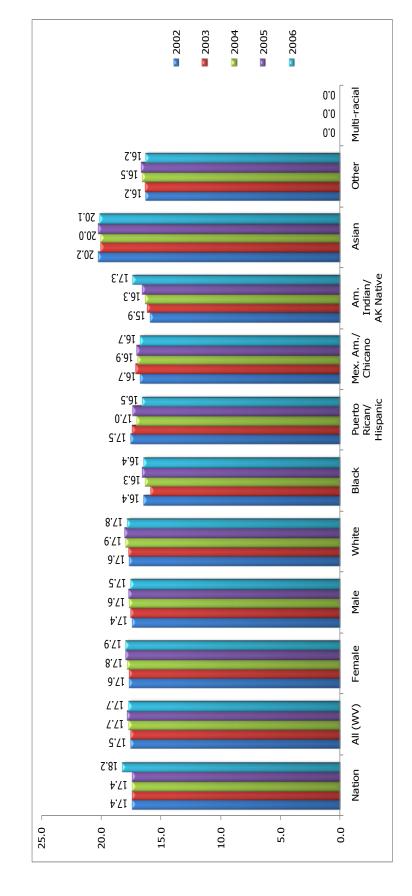


Figure 19: 2002-2006 ACT PLAN Science Mean Scale Scores

Note: Due to space limitations, data labels are provided for 2002, 2004, and 2006.

New national norms were developed for ACT Plan in 2005. Data can be compared from 2002-2005 and from 2006-2007.

ACT PLAN Reading 2002—2007

- WV All subgroup mean scale score was slightly higher (0.7 average per year) than the mean scale score for the National subgroup for 2002–2005.
- The WV **All** subgroup mean scale score was lower (0.4) than the mean scale score for the National subgroup (16.9 to 16.5) in 2006 and 2007.
- The WV All subgroup mean scale score remained unchanged (16.5) from 2006-2007.
- A performance gap existed between the WV Black and WV White subgroups for each year 2002-2007.
- In 2007, the performance gap between the WV **Black** and WV **White** subgroups was 1.9 mean scale points.
- Both the **Black** and **White** subgroup mean scale score (14.7 and 16.6 respectively) remained unchanged between 2006 and 2007.

ACT PLAN Mathematics 2002—2007

- WV All mean scale score and National All subgroup mean scale score were relatively the same (0.15 average points difference per year) from 2002–2005.
- In 2006, the National mean scale score was 0.8 points higher than the WV **All** subgroup score (17.4 to 16.6).
- In 2007, the National mean scale score was 1.1 points higher than the WV **All** subgroup mean scale score (17.4 to 16.3 respectively).
- The WV **All** subgroup mean scale score decreased slightly (0.3) from 2006-2007 (16.6 to 16.3 mean scale score points).
- A performance gap existed between the WV Black and WV White subgroups for each year 2002–2007. In 2007, the performance gap was 1.6 mean scale points (14.8 to 16.4 respectively).
- The WV **Black** subgroup mean scale score decreased 0.2 points between 2006 and 2007.
- The WV White subgroup mean scale score decreased 0.3 points between 2006 and 2007.

ACT PLAN Science 2002—2007

- WV All subgroup mean scale score was slightly higher (0.23 average per year) than the mean scale score for the National subgroup for 2002-2005.
- In 2007, the National mean scale score was 0.7 points higher than the WV All subgroup score (18.2 to 17.5).
- WV **All** subgroup mean scale score decreased slightly (0.2) from 2006-2007 (17.7 to 17.5).
- The National mean scale score increased 0.8 points in 2006 to 18.2 and maintained that increase in 2007 due to new national norms being developed in 2005.
- A performance gap existed between the WV Black and WV White subgroups for each year 2002—2007.
- In 2007, the performance gap between the WV **Black** and WV **White** subgroups was 1.3 mean scale points (16.2 to 17.5).
- In 2007, the WV **Black** subgroup mean scale score decreased by 0.2 points (16.4 to 16.2).
- In 2007, the WV **White** subgroup mean scale score decreased by 0.3 points (17.8 to 17.5).

ACT EXPLORE



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ACT EXPLORE

The ACT EXPLORE Program is designed to be administered in the eighth grade to provide students with an early indication of their educational progress in the context of the post -high school educational and career options they are considering. EXPLORE contains four curriculum-based tests: English, mathematics, reading, and science. These standardized multiple-choice tests are based on the major areas of high school and postsecondary instructional programs.

The four tests are measures of academic development that rely largely on the students' abilities to apply the content knowledge and reasoning skills acquired in their coursework to high-level tasks. These tasks often require the integrations of proficiencies and skills from various courses. Consequently, the EXPLORE tests contain a large proportion of analytical and problem-solving exercises. EXPLORE is a part of the West Virginia Measures of Assessment Progress (WV-MAP). Students are evaluated in each of the following areas:

English is a 40-item, 30-minute test that measures the student's understanding of the conventions of standard English and rhetorical skills.

Mathematics is a 30-item, 30-minute test designed to assess the mathematical skills that students have typically acquired in middle school and junior high courses.

Reading is a 30-item, 30-minute test that measures the student's reading comprehension as the product of referring and reasoning skills.

Science is a 28-item, 30-minute test that measures the student's interpretation, analysis, evaluation, reasoning and problem-solving skills acquired in science courses through grade 8.

Note:

Abbreviations and terminology contained throughout tables and figures in the ACT EXPLORE section include:

Nation An annual representative sample of 8th grade students

All 8th grade West Virginia students who took the exam under

standard conditions (without accommodations)

Mex. Am. Mexican American

Am. Indian Native American

AK Alaska Native

Other All students not members of a defined subgroup

	College Readine	ess Benchmarks	
Subject Test	EXPLORE Test Score	PLAN Test Score	ACT Test Score
English	13	15	18
Mathematics	17	19	22
Reading	15	17	21
Science	20	21	24

College Readiness Benchmark Scores are early predictors of success in college-level work. A benchmark score is the minimum score needed on an ACT subject-area test to indicate that a student has a 50% chance of obtaining a B or higher, or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses. These college courses include English composition, algebra, social science and biology.

Shows the 1) the national mean scale **2000—2007 ACT EXPLORE Reading Mean Scale Scores (Aggregate of all grade 8 students):** Shows the 3 score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

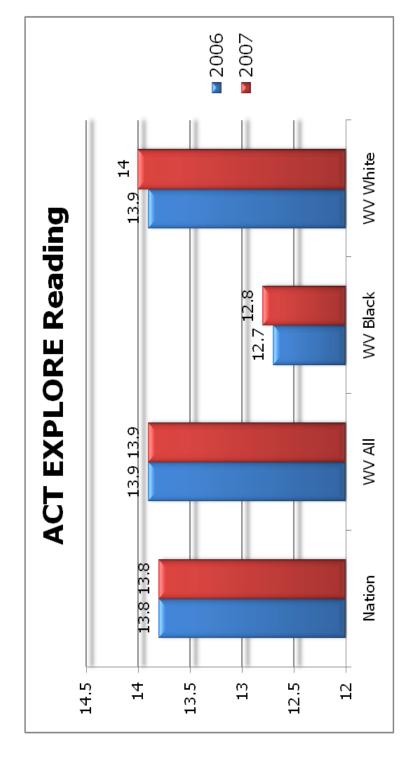
Table 20: 2000—2007 ACT EXPLORE Reading

					ACT	EXPLORE	ACT EXPLORE READING	(n				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ His- panic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2000	13.9	13.6	14.5	12.7	14.1	11.3	11.3	10.4	11.4	14.2	12.6	14.1
2001	13.9	14.3	14.7	13.8	14.6	12.4	14.2	13.4	12.9	15.3	13.4	14.8
2002	13.9	13.8	14.3	13.4	14.2	12.2	13.6	13.1	12.8	14.2	13.2	14.2
2003	13.9	13.8	14.3	13.3	14.1	12.3	12.9	12.8	12.4	14.4	12.7	13.9
2004	13.9	13.8	14.3	13.3	13.9	12.2	13.4	12.9	12.0	16.4	12.8	13.8
2002	13.9	13.9	14.4	13.4	14.1	12.5	12.4	13.4	12.6	15.2	12.7	13.8
2006	13.8*	13.9	14.3	13.4	13.9	12.7	13.4	12.0	13.1	16.0	11.2	12.0
2007	13.8	13.9	14.3	13.6	14.0	12.8	12.6	13.4	12.7	15.6	12.1	14.3
Change 06-07	0.0	0.0	0.0	0.2	0.1	0.1	-0.8	1.4	-0.4	-0.4	6.0	2.3

*National normative data are based on 8th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT EXPLORE testing results data is based on new national norms developed in 2005. Data can be compared from 2002 - 2005. Test year 2006 is baseline data and can be compared with 2007 data.

Figure 20: 2006-2007 ACT EXPLORE Reading Mean Scale Scores



Due to the development of new national norms in 2005, only mean scale scores from 2006 and 2007 can be compared in any meaningful way.

2000—2007 ACT EXPLORE Mathematics Mean Scale Scores (Aggregate of all grade 8 students): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroup mean scale scores.

Table 21: 2000—2007 ACT EXPLORE Mathematics

					ACT EX	PLORE M	ACT EXPLORE MATHEMATICS	CS				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2000	14.4	13.9	14.0	13.9	14.3	12.0	12.3	11.8	12.5	15.0	13.5	14.2
2001	14.4	14.4	14.4	14.4	14.7	12.6	14.0	13.5	13.1	16.1	13.8	14.8
2002	14.4	14.1	14.3	14.0	14.5	12.1	13.6	12.8	12.9	14.8	13.9	14.7
2003	14.4	14.2	14.4	14.0	14.3	12.2	12.7	12.6	12.4	15.0	13.6	14.7
2004	14.4	14.2	14.4	14.1	14.4	12.6	14.0	12.7	12.4	17.3	13.6	14.3
2002	14.4	14.5	14.7	14.4	14.7	13.0	12.9	13.9	13.3	16.8	13.5	14.5
2006	15.1*	14.5	14.6	14.4	14.6	13.2	14.1	13.3	14.0	17.7	12.4	13.0
2007	15.1	14.7	14.8	14.7	14.8	13.3	12.4	14.0	13.4	17.7	13.5	14.6
Change 06-07	0.0	0.2	0.2	0.3	0.2	0.1	-1.7	0.7	-0.6	0.0	1.1	1.6

*National normative data are based on 8th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT EXPLORE testing results data is based on new national norms developed in 2005. Data can be compared from 2002 - 2005. Test year 2006 is baseline data and can be compared with 2007 data.

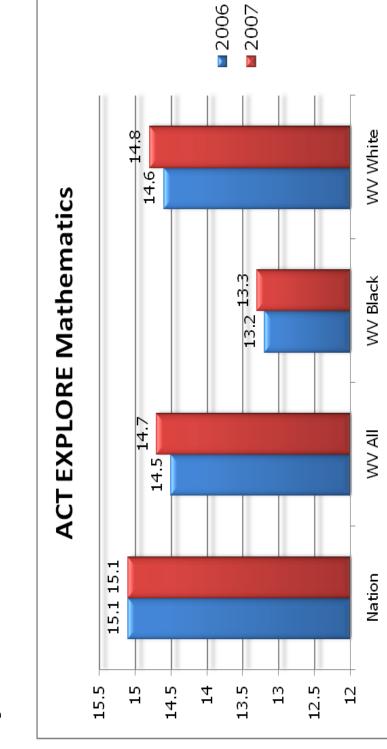


Figure 21: 2006-2007 ACT EXPLORE Mathematics Mean Scale Scores

Due to the development of new national norms in 2005, only mean scale scores from 2006 and 2007 can be compared in any meaningful way.

2000—2007 ACT EXPLORE Science Mean Scale Scores (Aggregate of all grade 8 students): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroups' mean scale scores.

Table 22: 2000—2007 ACT EXPLORE Science

					ACT	EXPLORE	ACT EXPLORE SCIENCE					
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican/ Hispanic	Mex. Am./ Chicano	Am. Indian/ AK Native	Asian	Other	Multi- racial
2000	15.9	14.0	14.4	13.7	14.4	12.3	12.0	11.9	12.3	14.8	13.4	14.4
2001	15.9	16.1	16.3	16.0	16.4	14.8	16.1	15.3	14.9	17.2	15.6	16.6
2002	15.9	16.0	16.1	15.8	16.2	14.6	15.3	15.1	15.2	16.0	15.6	16.3
2003	15.9	15.7	15.9	15.5	15.9	14.5	14.5	14.8	14.6	16.4	15.1	16.0
2004	15.9	15.7	15.9	15.4	15.8	14.4	15.4	14.9	14.1	17.9	15.2	15.8
2005	15.9	15.9	16.2	15.7	16.1	14.9	15.2	15.6	15.0	17.8	15.1	15.9
2006	15.9*	15.9	16.1	15.7	16.0	15.1	15.7	13.6	15.3	18.2	14.0	14.1
2007	15.9	16.0	16.2	15.9	16.1	15.1	14.4	15.8	14.9	18.2	14.8	16.1
Change 06-07	0.0	0.1	0.1	0.2	0.1	0.0	-1.3	2.2	-0.4	0.0	0.8	2.0

*National normative data are based on 8th grade students who took all four academic tests within standard time limits as part of a national study conducted in the fall of 2005.

The 2006 ACT EXPLORE testing results data is based on new national norms developed in 2005. Data can be compared from 2002 - 2005. Test year 2006 is baseline data and can be compared with 2007 data.

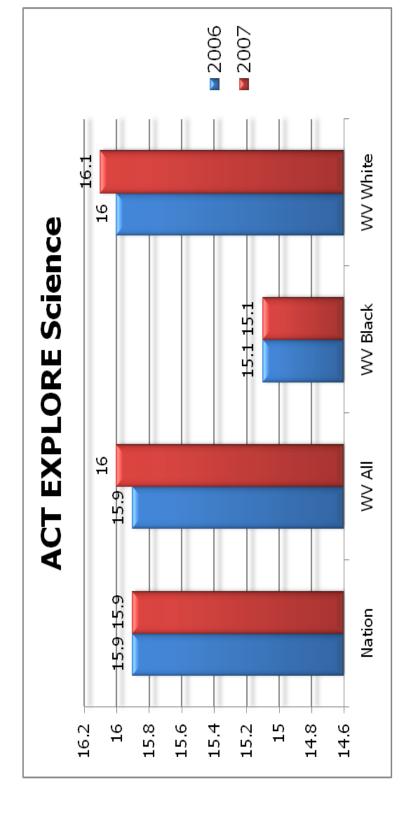


Figure 22: 2006-2007 ACT EXPLORE Science Mean Scale Scores

Due to the development of new national norms in 2005, only mean scale scores from 2006 and 2007 can be compared in any meaningful way.

ACT EXPLORE Findings:

New national norms were developed for ACT EXPLORE in 2005. Data can be compared from 2002-2005 and from 2006-2007.

ACT EXPLORE Reading

- The WV All subgroup mean scale score was slightly higher than the National All subgroup mean scale score (13.9 to 13.8) in 2006 and 2007.
- The WV All subgroup mean scale score remained constant (13.9) from 2006-2007.
- In 2006 (with the new national norms developed in 2005), the achievement gap between the WV Black and WV White subgroups was 1.2 mean scale points (12.7 to 13.9).
- The achievement gap between the WV **Black** and WV **White** subgroups persists despite small yearly increases in the **Black** subgroup mean scale score in 2005 (0.3 gain), 2006 (0.2 gain) and 2007 (0.1 gain).
- The WV **Black** subgroup scored 1.2 mean score points below the WV **White** subgroup in 2007 (12.8 to 14.0).
- The WV **White** subgroup mean scale score increased 0.1 points between 2006 and 2007.
- The WV **Black** subgroup mean scale score increased 0.1 points between 2006 and 2007.

ACT EXPLORE Mathematics

- WV All subgroup mean scale score was slightly lower than the National mean scale score in 2006 (14.5 to 15.1) and in 2007 (14.7 to 15.1).
- WV All subgroup scored 0.4 mean scale score points below the National All subgroup in 2007.
- The WV All subgroup had a mean scale score increase of 0.2 from 2006 to 2007.
- An achievement gap continues to persist between the WV Black subgroup and the WV White subgroup. In 2007, the gap was 1.5 mean scale score points (13.3 to 14.8).
- In 2006 (with the new national norms developed in 2005), the achievement gap between the WV **Black** and WV **White** subgroups was 1.4 mean scale score points (13.2 to 14.6).
- From 2000—2006, the achievement gap between the WV **Black** and WV **White** subgroups continued to narrow although not always in a consistent yearly manner. In 2000, the performance gap was 2.3 mean scale score points, but that gap narrowed to 1.5 mean scale score points in 2007.

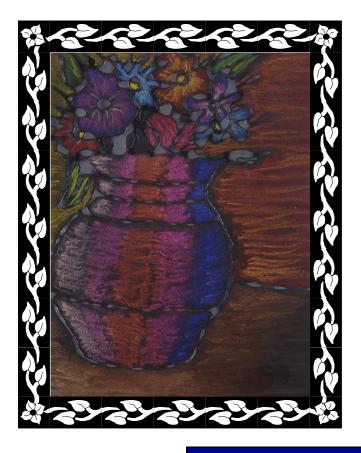
ACT EXPLORE Mathematics (continued)

- The WV **White** subgroup mean scale score increased 0.2 points (14.6 to 14.8) between 2006 and 2007.
- The WV **Black** subgroup mean scale score increased 0.1 points (13.2 to 13.3) between 2006 and 2007.

ACT EXPLORE Science

- WV All subgroup mean scale score was slightly above (0.1 points) the National All subgroup mean scale score in 2007 (16.0 to 15.9).
- The WV All subgroup had a mean scale score increase of 0.1 between 2006 and 2007.
- An achievement gap continues to persist between the WV Black subgroup and the WV White subgroup. In 2007, the gap was 1.0 mean scale score points (15.1 to 16.1).
- In 2006 (with the new national norms developed in 2005), the achievement gap between the WV **Black** and WV **White** subgroups was 0.9 mean scale score points (15.1 to 16.0).
- From 2000—2006, the achievement gap between the WV **Black** and WV **White** subgroups continued to narrow. In 2000, the performance gap was 2.1 mean scale score points, but that gap narrowed to 1.2 mean scale score points in 2005, 0.9 mean scale score points in 2006, and 1.0 mean scale score points in 2007.
- The WV **White** subgroup mean scale score increased 0.1 points between 2006 and 2007.
- The WV **Black** subgroup mean scale score remained constant (15.1) between 2006 and 2007.

SAT



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SAT

The Scholastic Aptitude Test (SAT) Reasoning Test measures critical reading, mathematical reasoning skills and writing. Tests are based on skills and knowledge that students have developed over time and that are necessary to be successful in college. The SAT is aligned with current curriculum and institutional practices in high schools and colleges. The subgroups used by the College Board are different from the required No Child Left Behind (NCLB; 2001) subgroups and the ACT subgroups.

The SAT is not part of the state assessment system, West Virginia Measures of Academic Progress (WV-MAP). It is part of a private national assessment system that provides college admission testing opportunities directly to local school systems. Students pay a fee for the test administration and results.

Students are evaluated in the following areas:

Critical Reading (formerly known as **Verbal**) is a 70 minute, three-part, multiple-choice exam. The first two sections are 25 minutes each and the third section is 20 minutes. The Critical Reading section measures sentence completions and passage-based reading.

Mathematics is a three-section, multiple-choice, and student-produced response exam. The first two sections are 25 minutes each and the last section is 20 minutes. The exam measures numbers and operations, algebra and functions geometry, statistics, probability and data analysis abilities.

Writing is a 60-minute assessment containing both multiple-choice questions and a direct writing task in the form of an essay. The exam measures grammar, usage and word choice and the examinee's ability to organize and express ideas clearly, develop and support a main idea and to develop a point of view on an issue using reasoning and evidence.

Note:

Abbreviations contained throughout tables and figures in the report include:

Nation All graduating students

All West Virginia graduating students in public school

Mex. Am. Mexican American

Am. Indian Native American Indian

Other All students not members of a defined subgroup

2000—2008 SAT Critical Reading Mean Scale Scores (Aggregate of all public high school graduates): Shows the 1) the national mean scale score by subgroup, and 3) all other subgroups, mean scale scores.

Table 23: 2000—2008 SAT Critical Reading (formerly Verbal)

				S	AT CRITIC	AL READ	ING (FOF	SAT CRITICAL READING (FORMERLY VERBAL)	ERBAL)				
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican	Mex. Am.	Hispanic	Am. Indian	Asian	Other	Total Tested
2000	505	525	525	526	527	450	*	*	530	*	557	*	3375
2001	206	526	526	526	272	444	603	517	283	609	577	217	3003
2002	504	523	519	527	523	434	*	*	548	*	553	230	2967
2003	202	520	516	526	519	433	*	*	501	*	547	526	3041
2004	208	521	515	528	519	442	495	497	225	202	573	514	2854
2002	208	524	517	533	523	468	*	488	995	208	554	531	2804
2006	503	518	515	522	517	445	533	521	519	609	560	256	2869
2007	505	514	208	522	516	429	471	483	464	909	544	493	2952
2008	505	509	206	513	510	462	*	472	501	491	533	511	2804

*Sample too small to provide reliable data

■ 2005 ■ 2003 **■** 2006 ≥ 2008 ▼ 2004 **■** 2007 **2001** ≥ 2002 79t 67t Stt 897 Black 7445 £87 #E# ttt 050 **SAT Critical Reading Mean Scale Scores** 015 9TS ΔTS 273 White 6TS 6TS 273 252 252 605 ττs 818 t7S All (WV) 175 270 273 979 272 205 205 203 805 Nation 805 **Z**05 70S 905 SOS 009 200 100 500 400 300 0

Figure 23: 2000-2008 SAT Critical Reading (formerly Verbal) Mean Scale Scores

SAT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups.

Due to low N sizes, some subgroups' results are not graphically displayed within Figure 21. Instead, those results are numerically presented within Table 21. •

2000—2008 SAT Mathematics Mean Scale Scores (Aggregate of all public high school graduates): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroup, and 3) all other subgroups' mean scale scores.

Table 24: 2000—2008 SAT Mathematics

						SAT M.	SAT MATHEMATICS	SOIL					
Year	Nation	(WV)	Female	Male	White	Black	Puerto Rican	Mex. Am.	Hispanic	Am. Indian	Asian	Other	Total Tested
2000	514	511	494	533	514	418	*	*	491	452	290	*	3375
2001	514	512	497	531	513	423	099	480	485	494	612	505	3003
2002	516	514	495	536	515	404	*	*	253	496	293	513	2967
2003	519	511	491	535	511	405	*	*	478	*	581	503	3041
2004	518	514	491	539	511	415	488	451	543	516	619	497	2854
2005	520	514	496	538	511	447	*	485	572	513	288	511	2804
2006	518	511	493	535	510	428	278	504	491	488	609	202	2869
2007	515	206	485	532	202	413	465	495	480	486	583	505	2952
2008	515	499	482	521	499	441	*	476	501	477	584	495	2804

*Sample too small to provide reliable data

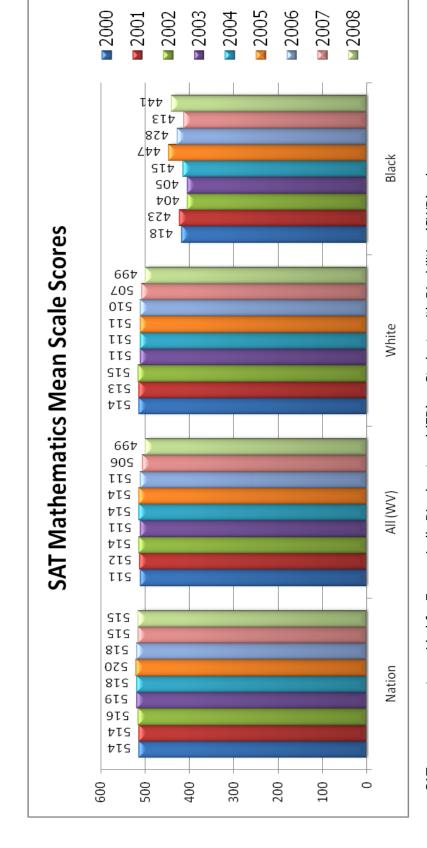


Figure 24: 2000-2008 SAT Mathematics Mean Scale Scores

SAT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups.

Due to low N sizes, some subgroups' results are not graphically displayed within Figure 22. Instead, those results are numerically presented within Table 22. •

2006—2008 SAT Writing Mean Scale Scores (Aggregate of all public high school graduates): Shows the 1) the national mean scale score by subgroup, 2) the All (West Virginia) mean scale score by subgroups, mean scale scores.

Table 25: 2006—2008 SAT Writing

						SAT	SAT WRITING	(5)					
Year	Nation	All (WV)	Female	Male	White	Black	Puerto Rican	Mex. Am.	Hispanic	Am. Indian	Asian	Other	Total Tested
2006	497	515	518	511	515	443	512	505	502	516	552	529	5869
2007	494	503	206	500	206	422	478	470	479	498	538	476	2952
2008	494	495	501	488	496	450	×	457	491	498	535	503	2804

*Sample too small to provide reliable data

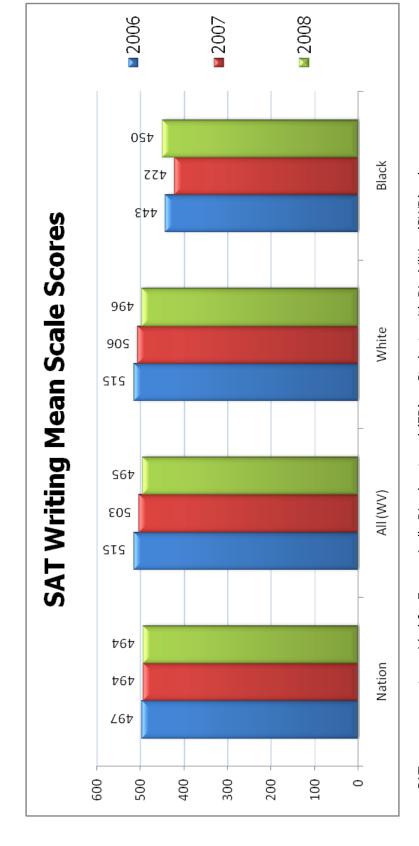


Figure 25: 2006-2008 SAT Writing Mean Scale Scores

SAT scores are not provided for Economically Disadvantaged (ED) or Students with Disabilities (SWD) subgroups.

Due to low N sizes, some subgroups' results are not graphically displayed within Figure 23. Instead, those results are numerically presented within Table 23.

SAT Findings:

SAT Critical Reading (formerly Verbal) 2000-2008

- Between 2000 and 2008, the WV **All** subgroup performed an average of 15 mean scale score points higher per testing year than the National subgroup.
- In 2007, the WV **All** subgroup scored 514 mean scale score points compared with the National subgroup at 502 mean scale score points. WV **All** subgroup scored 12 points higher.
- In 2008, the WV All subgroup scored 7 mean scale score points above the National subgroup (509 to 502).
- An achievement gap persists between the WV Black subgroup and the WV White subgroup. Between testing years 2000-2008, the WV Black subgroup had a mean scale score that averaged 75 points below the WV White subgroup.
- In 2007, the WV Black subgroup performed 87 mean scale score points below the WV White subgroup score (429 to 516).
- In 2008, the WV **Black** subgroup performed 48 mean scale score points below the WV **White** subgroup score (462 to 510).

SAT Mathematics 2000-2008

- Between 2000 and 2008, the WV All subgroup performed an average of 7 mean scale score points lower than the National subgroup score per testing year.
- In 2007, the WV **All** subgroup scored 506 mean scale score points compared with the National subgroup at 515 mean scale score points (9 points less).
- In 2008, the WV All subgroup scored 499 mean scale score points compared with the National subgroup at 515 mean scale score points (16 points less).
- An achievement gap persists between the WV Black subgroup and the WV White subgroup. Between testing years 2000-2008, the WV Black subgroup had a mean scale score that averaged 88 points below the WV White subgroup score.
- In 2007, the WV Black subgroup performed 94 mean scale score points below the WV White subgroup score (413 to 507).
- In 2008, the WV **Black** subgroup performed 58 mean scale score points below the WV **White** subgroup score (441 to 499).

SAT Writing 2006-2008

- In 2007, the WV **All** subgroup performed 9 mean scale score points above the National subgroup score (503 to 494).
- In 2008, the WV **All** subgroup performed 1 mean scale score points above the National subgroup score (495 to 494).

SAT Writing 2006-2008 (continued)

• An achievement gap persists between the WV **Black** subgroup and the WV **White** subgroup. Between testing years 2006-2008, the WV **Black** subgroup had a mean scale score that averaged 68 points below the WV **White** subgroup score.

Career/Technical Education (CTE) ACT WorkKeys End of Course Exams



Montana Morris

Tyler Consolidated Middle/High School

Tyler County

Career/Technical Education (CTE) ACT WorkKeys End-of-Course Exams

The West Virginia Career and Technical Education prepares approximately 4,500 students annually for the workforce and further education through educational programs and training offered at career and technical education sites throughout the state. The career and technical programs utilize over 300 schools and are available to students in every county in the state.

The federal Carl D. Perkins Vocational and Technical Act of 1998 requires states to assess and report career/technical students progress related to a number of core indicators of performance. Three core indicators are relevant measures of student achievement/outcomes. The two assessment tools used by West Virginia are:

ACT WorkKeys – All Career/Technical completers are required to take the attainment of academic skills assessments in reading and mathematics. Performance levels are established for each career/technical concentration based on industry standards for entry and progression within the workplace. [Note: A West Virginia Career/Technical completer is defined as a student that has completed, at a minimum, the four career/technical concentration units for the area of study.]

End-of-Course Exams – All students that take a career/technical core course are required to take an online, end-of-course test designed to assess mastery of the specified technical skills, content standards, and objectives. These tests are administered at the end of each semester, with mastery defined as 74 percent.

The remaining indicator used for compliance is the Postsecondary Placement of Completers in Employment or Postsecondary Education. It is described on page 157 of this report, and the most recent data are located on page 162.

Note:

Abbreviations contained throughout tables and figures in the report include:

AK Nat. Alaska Native

Nat. Am. Native American Indian

Other All students not members of a defined subgroup

WorkKeys: Academic Skills Attainment (Aggregate of all performance in West Virginia): Shows the percentage of student meeting workplace proficiency standards in reading and mathematics by subgroup.

Table 26: 2005-2007 ACT CTE WorkKeys

		2002-200	2005-2007 CTE ACT WorkK	⁻ WorkKey	' s Percenta	ge of Stude	eys Percentage of Students Meeting Standards in Academic Skill Attainment	g Standar	ds in Acad	emic Skill A	\ttainment		
	Total Number Tested	Female	Male	White	Black	Hispanic	Nat. Am./ AK Nat.	Asian	ED	SWD	LEP	Non- traditional Enrollees	Other
2002	3,785	68.74	42.84	53.04	46.53	50.00	25.00	80.00	51.96	17.21	50.00	73.9	73.9 42.82
2006	4,473	84.10	61.65	86'89	26.67	42.86	20.00	66.67	58.92	39.71	00.00	79.36	79.36 63.62
2007	4,522	75.27	68.47	71.13	66.34		76.92 100.00 100.00	100.00	71.96	55.86	76.92	73.93	63.82

Other = Tech Prep students

2004-2007 CTE End-of-Course Exams: Technical Skills Attainment (Aggregate of all performance in West Virginia): Shows the percentage of student meeting workplace proficiency standards in technical skills by subgroup.

Table 27: 2004-2007 CTE End-of-Course

		2004-200	2004-2007 CTE End-of-Cou		i e Percenta	ge of Stude	rse Percentage of Students Meeting Standards in Technical Skill Attainment) Standar	ds in Tech	nical Skill A	ttainment		
	Total Num- ber Tested	Female	Male	White	Black	Hispanic	Nat. Am./ AK Nat.	Asian	ED	SWD	LEP	Non- traditional Enrollees	Other
2004	18,509	42.69	37.89	40.28	25.79	40.00	33.33	43.04	42.00	20.48	44.26	41.31	34.84
2002	31,538	64.49	60.63	62.74	48.86	51.91	46.15	72.67	57.85	42.91	55.37	62.09	58.06
2006	27,618	64.97	65.53	65.85	57.19	49.19	72.00	93.59	59.00	50.08	42.62	68.46	61.74
2007	27,051	66.37	62.79	66.41	56.68	57.26	50.00	66.67	69.71	51.01	57.50	70.99	72.79

Mastery is defined at 74% Other = Tech Prep students

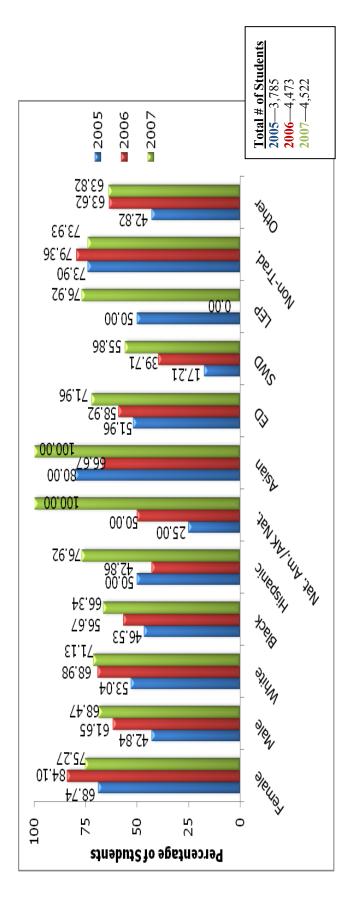


Figure 26: 2005—2007 CTE ACT WorkKeys: Academic Skills Attainment

2006--27,618 2007--27,051 2004--18,509 2005--31,538 ■2005 ≥ 2006 ≥2007 **■**2004 TOTAL 64,27 TO SHAPE ₽2.19 58.06 34.84 66'04 91 89 49 15.14 05.72 75.22 ✨ 97.44 50.08 80.08 Chy. 16.24 81.02 79.27 92.59 79.88 79.88 79.99 ଊ 45.00 Subgroups 43.04 50.00 00.27 ST:91 33.33 -S 6I'6t 16'IS 89'9S 6I'2S 00.01 14.99 62.22 88.29 67.29 88.29 82.01 2/6/4 68'ZE ∠6'+9 61'+9 Sperio + 69'Zb 20 80 9 5 2 20 30 10 0 Percentage of Students

Figure 27: 2004—2007 CTE End-of-Course Exams: Technical Skills Attainment

Career/Technical Education (CTE) Findings:

ACT CTE WorkKeys 2005-2007

- In 2006, 4,473 students were tested and in 2007, 4,522 students were tested. There was an increase of 49 students between 2006 and 2007.
- The **White** subgroup had a 2.2 percentage increase in students meeting workplace proficiency standards in reading and mathematics from 2006 to 2007.
- The **Black** subgroup had a 9.7 percentage increase in students meeting workplace proficiency standards in reading and mathematics from 2006 to 2007.
- An achievement gap persists between the **Black** and **White** subgroups in 2005—2007.
- In 2006, a 12.3 percentage gap existed between the **Black** and **White** subgroups in the percentage of students meeting workplace proficiency standards in reading and mathematics (56.7 to 68.9).
- In 2007, a 4.8 percentage gap existed between the **Black** and **White** subgroups in the percentage of students meeting workplace proficiency standards in reading and mathematics (66.3 to 71.1).
- Between 2006 and 2007, the Economically Disadvantaged subgroup increased 13.1% in the percentage of students meeting workplace proficiency standards in reading and mathematics.
- Between 2006 and 2007, the Students with Disabilities subgroup increased 16.2% in the percentage of students meeting workplace proficiency standards in reading and mathematics.

CTE End-of-Course 2004-2007

- Mastery is defined at 74%.
- In 2006, 27,618 students were tested and in 2007, 27,051 students were tested. There was a decrease of 567 students tested in 2007.
- The White, Economically Disadvantaged, and Students with Disabilities subgroups each made consistent yearly increases across four years of data (2004-2007).
- The **White** subgroup had a 0.6 percentage increase in students meeting workplace proficiency standards in technical skills from 2006 to 2007.
- The **Black** subgroup had a 0.5 percentage decrease in students meeting workplace proficiency standards in technical skills from 2006 to 2007.
- An achievement gap persists between the **Black** and **White** subgroups in 2004—2007.
- In 2006, an 8.7 percentage gap existed between the **Black** and **White** subgroups in the percentage of students meeting workplace proficiency standards in technical skills (57.2 to 65.9).

CTE End-of-Course 2004-2007

• In 2007, a 9.8 percentage gap existed between the **Black** and **White** subgroups in the percentage of students meeting workplace proficiency standards in technical skills (56.7 to 66.4).

High Schools That Work (HSTW)



Emily Kaiser

South Jefferson Elementary School

Jefferson County

High Schools That Work (HSTW)

High Schools That Work (HSTW) is the largest and oldest of the Southern Regional Education Board (SREB) improvement initiatives for high school and middle grades leaders and teachers. Sites in 30 states and the District of Columbia are currently using the framework of HSTW Goals and Key Practices. This program is designed to prepare students for postsecondary education and careers, and to improve curriculum and instruction in high schools. HSTW is based on the belief that most students can master complex academic and technical concepts if schools create an environment that encourages students to make the effort to succeed. Member schools implement 10 key practices for changing what is expected of students, what they are taught, and how they are taught. West Virginia joined this effort-based school improvement initiative in 1986. HSTW is currently in 42 high schools in 16 West Virginia counties. The HSTW goals, key practices, and key conditions as a school improvement initiative are aligned to the West Virginia *Framework for High Performing School Systems*.

School leaders and teachers can motivate students to achieve at high levels when they:

- expand students' opportunities to learn a rigorous academic core with either a career/ technical or academic concentration that is taught in ways that enable students to see the usefulness of what they have been asked to learn.
- create supportive relationships between students and adults. These relationships involve providing students with the extra help needed to meet challenging course standards and with the support to make successful transitions from the middle grades to high school and from high school to postsecondary studies and careers.
- work as teacher advisors with parents and students to set goals and to help students take the right courses that prepare them for postsecondary studies and careers.
- focus school leadership on supporting what and how teachers teach by providing common planning time and professional development aligned with school improvement plans.

High Schools That Work has four achievement levels for which cut scores are determined. They are **Advanced**, **Proficient**, **Basic**, and **Below Basic**. HSTW assessments were re-normed in terms of benchmarks and cut scores in 2008. Consequently, the 2008-2009 achievement data is not comparable to past assessment results.

The HSTW assessment also includes perceptual data that is acquired through surveys administered to senior students and to teachers. The perceptual data that has been collected to date indicate that schools are making progress in strengthening their focus on high expectations, literacy and numeracy across the curriculum, engaging and challenging science instruction, integrating academics into career/technical courses, and providing timely guidance to all students. In addition, data indicate teachers believe their schools have increased the emphasis on continuous school improvement.

High Schools That Work (HSTW)

A new *High Schools That Work* (*HSTW*) assessment was administered in 2008. This assessment in reading, mathematics and science contained test items with increased rigor.

In addition, *High Schools That Work* (*HSTW*) assessment benchmarks and cut scores were re-normed in 2008.

A direct result of this assessment change is that the **2008 achievement data cannot be compared to data from 2004 and 2006**.

2004, 2006 and 2008 High Schools That Work Reading Assessment (Aggregate of all performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroup and 2) the percentage of students **At or Above Basic** by subgroup.

Table 28: 2004, 2006 and 2008 High Schools That Work Reading Assessment

		HSTW RE/	NDING Subgrou	up Impact Data	W READING Subgroup Impact Data Percent at Advanced	nced		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	2.0	5.0	2.0	5.0	2.0	1.0	2.0	8.0
2006	0.9	7.0	0.9	0.9	1.0	2.0	2.0	5.0
2008	7.0	9.0	4.0	7.0	3.0	6.0	8.0	10.0
		HSTW RE	NDING Subgrou	up Impact Data	W READING Subgroup Impact Data Percent at Proficient	icient		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	31.0	34.0	28.0	32.0	20.0	22.0	30.0	19.0
2006	32.0	35.0	30.0	33.0	19.0	31.0	24.0	20.0
2008	23.0	27.0	18.0	24.0	12.0	16.0	21.0	19.0
		HSTW R	EADING Subg	roup Impact Da	STW READING Subgroup Impact Data Percent at Basic	ısic		
	All	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	36.0	41.0	31.0	36.0	35.0	29.0	46.0	31.0
2006	36.0	40.0	32.0	36.0	42.0	29.0	38.0	36.0
2008	23.0	24.0	21.0	23.0	19.0	18.0	26.0	51.0
		HSTW READ:	ING Subgroup	Impact Data Pe	HSTW READING Subgroup Impact Data Percent at Below Basic**	Basic**		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	28.0	21.0	36.0	27.0	43.0	47.0	22.0	42.0
2006	26.0	19.0	33.0	25.0	39.0	38.0	32.0	49.0
2008	48.0	40.0	0'95	46.0	0'59	61.0	44.0	
		HSTW READI	I NG Subgroup 1	impact Data Per	READING Subgroup Impact Data Percent At or Above Basic	ve Basic		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	72.0	80.0	64.0	73.0	57.0	52.0	78.0	58.0
2006	74.0	82.0	0.89	75.0	62.0	62.0	0.69	61.0
2008	53.0	60.0	43.0	54.0	34.0	40.0	55.0	80.0

** A decrease in the percentage of students within the **Below Basic** performance level indicates an increase in performance and that these students have moved into a higher performance level.

2004, 2006 and **2008** High Schools That Work Mathematics Assessment (Aggregate of all performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroup and 2) the percentage of students At or Above Basic by subgroup.

Table 29: 2004, 2006 and 2008 High Schools That Work Mathematics Assessment

		HSTW MATHE	MATHEMATICS Subgroup Impact Data Percent at Advanced	oup Impact Da	ta Percent at A o	dvanced		
	IIA		Male	White	Black	Hispanic	Multiracial	Other
2004	2.0	1.0	3.0	2.0	0.0	2.0	1.0	3.0
2006	3.0	2.0	4.0	3.0	1.0	1.0	2.0	4.0
2008	1.0	1.0	1.0	1.0	0.0	2.0	3.0	7.0
		HSTW MATHE	MATHEMATICS Subgroup Impact Data Percent at Proficient	oup Impact Da	ta Percent at P i	roficient		
	W	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	11.0	10.0	12.0	11.0	5.0	8.0	10.0	7.0
2006	12.0	10.0	13.0	12.0	5.0	3.0	13.0	11.0
2008	10.0	10.0	11.0	11.0	3.0	6.0	0.6	14.0
		HSTW MAT	HSTW MATHEMATICS Subgroup Impact Data Percent at Basic	ogroup Impact	Data Percent at	Basic		
	All	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	41.0	43.0	40.0	42.0	26.0	33.0	52.0	38.0
2006	42.0	45.0	40.0	43.0	27.0	37.0	40.0	29.0
2008	38.0	41.0	36.0	39.0	29.0	33.0	32.0	82.0
	HS	HSTW MATHEMA	ATHEMATICS Subgroup Impact Data		Percent at Below Basic**	w Basic**		
	All	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	46.0	47.0	46.0	45.0	70.0	57.0	37.0	53.0
2006	43.0	43.0	44.0	42.0	68.0	59.0	45.0	56.0
2008	51.0	49.0	52.0	49.0	67.0	59.0	56.0	197.0
	HS	HSTW MATHEMA	ATHEMATICS Subgroup Impact Data Percent At or Above Basic	o Impact Data	Percent At or A	bove Basic		
	W	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	54.0	54.0	55.0	55.0	31.0	43.0	63.0	48.0
2006	57.0	57.0	57.0	58.0	33.0	41.0	55.0	44.0
2008	49.0	52.0	48.0	51.0	32.0	41.0	44.0	103.0

** A decrease in the percentage of students within the **Below Basic** performance level indicates an increase in performance and that these students have moved into a higher performance level.

2004, 2006 and 2008 High Schools That Work Science Assessment (Aggregate of all performance in West Virginia): Shows the 1) percentage of students in each performance level by subgroup and 2) the percentage of students **At or Above Basic** by subgroup.

Table 30: 2004, 2006 and 2008 High Schools That Work Science Assessment

		HSTW SCI	W SCIENCE Subgroup Impact Data Percent at Advanced	Impact Data P	ercent at Advar	peou		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	2.0	1.0	4.0	2.0	1.0	1.0	2.0	4.0
2006	4.0	2.0	2.0	4.0	0.0	1.0	2.0	4.0
2008	2.0	2.0	3.0	2.0	0.0	2.0	3.0	5.0
		HSTW SCI	HSTW SCIENCE Subgroup Impact Data Percent at Proficient	Impact Data P	ercent at Profic	ient		
	IIA	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	14.0	10.0	17.0	14.0	0.9	10.0	16.0	11.0
2006	16.0	13.0	20.0	17.0	7.0	9.0	19.0	14.0
2008	12.0	10.0	14.0	12.0	3.0	9.0	13.0	16.0
		S MLSH	HSTW SCIENCE Subgroup Impact Data Percent at Basic	oup Impact Data	Percent at Bas	ic		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	28.0	30.0	27.0	29.0	23.0	20.0	26.0	24.0
2006	27.0	30.0	25.0	29.0	13.0	22.0	19.0	18.0
2008	34.0	36.0	31.0	35.0	19.0	30.0	28.0	81.0
		HSTW SCIEN	HSTW SCIENCE Subgroup Impact Data Percent at Below Basic**	npact Data Perc	ent at Below B	asic**		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	995	29.0	53.0	55.0	70.0	70.0	22.0	62.0
2006	53.0	25.0	51.0	51.0	80.0	69.0	0'09	65.0
2008	52.0	53.0	52.0	51.0	77.0	60.0	26.0	199.0
		HSTW SCIEN	HSTW SCIENCE Subgroup Impact Data Percent	ipact Data Perce	ent At or Above Basic	e Basic		
	IIV	Female	Male	White	Black	Hispanic	Multiracial	Other
2004	44.0	41.0	48.0	45.0	30.0	31.0	44.0	39.0
2006	47.0	45.0	50.0	50.0	20.0	32.0	40.0	36.0
2008	48.0	48.0	48.0	49.0	22.0	41.0	44.0	102.0

** A decrease in the percentage of students within the Below Basic performance level indicates an increase in performance and that these students have moved into a higher performance level.

High Schools That Work Findings:

A new **High Schools That Work** (**HSTW**) assessment was administered in 2008 with test items in each content area having increased rigor. The assessment benchmarks and cut scores were re-normed.

<u>Due to these changes, the 2008 **HSTW** achievement data cannot be compared to data from 2004 or 2006</u>. Comparison data is not available until the 2010 test results are released in summer 2010.

Findings are presented for comparisons of 2004 and 2006 data only.

HSTW Reading Assessment 2004 and 2006

- The **All** subgroup increased the percentage of students scoring **At or Above Basic** by 2.0 percent from 2004 to 2006 (72 to 74).
- The **White** subgroup increased the percentage of students scoring **At or Above Basic** by 2.0 percent from 2004 to 2006 (73 to 75).
- The **Black** subgroup increased the percentage of students performing **At or Above Basic** by 5.0 percent from 2004 to 2006 (57 to 62).
- An achievement gap persists between the Black and White subgroups. In 2004, the
 percentage of students within the Black subgroup performing At or Above Basic was
 57 percent compared to 73 percent within the White subgroup (16% fewer students).
- In 2006, the **Black** subgroup had 62 percent of students scoring **At or Above Basic** while the **White** subgroup had 75 percent (13% fewer students).

HSTW Mathematics Assessment 2004 and 2006

- The **All** subgroup increased the percentage of students scoring **At or Above Basic** by 3.0 percent from 2004 to 2006 (54 to 57).
- The **White** subgroup increased the percentage of students scoring **At or Above Basic** by 3.0 percent from 2004 to 2006 (55 to 58).
- The **Black** subgroup increased the percentage of students performing **At or Above Basic** by 2.0 percent from 2004 to 2006 (31 to 33).
- An achievement gap persists between the Black and White subgroups. In 2004, the
 percentage of students within the Black subgroup performing At or Above Basic was
 31 percent compared with 55 percent within the White subgroup (24% fewer
 students).
- In 2006, the **Black** subgroup had 33 percent of students scoring **At or Above Basic** while the **White** subgroup had 58 percent (25% fewer students).

HSTW Science Assessment 2004 and 2006

- The **All** subgroup increased the percentage of students scoring **At or Above Basic** by 3.0 percent from 2004 to 2006 (44 to 47).
- The **White** subgroup increased the percentage of students scoring **At or Above Basic** by 5.0 percent from 2004 to 2006 (45 to 50).
- The **Black** subgroup decreased the percentage of students performing **At or Above Basic** by 10.0 percent from 2004 to 2006 (30 to 20).
- An achievement gap persists between the Black and White subgroups. In 2004, the
 percentage of students within the Black subgroup performing At or Above Basic was
 30 percent compared to 45 percent within the White subgroup (15% fewer students).
- In 2006, the **Black** subgroup had 20 percent of students scoring **At or Above Basic** while the **White** subgroup had 50 percent (30% fewer students).

Additional State Public School Subgroup Impact Data Criterion



Rachel Sommerville

Richwood High School
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Additional State Public School Subgroup Impact Data Criterion

The additional data in this section are presented by the numbers or rates per subgroups as determined by student participation within each indicator. A description of each indicator precedes the tables that report the statistics. The tables provide trend data by indicator and subgroups.

Advanced Placement Courses

Advanced Placement Courses are sponsored by the College Board. The Board provides teacher training on the instructional aspects of delivering quality Advanced Placement coursework for West Virginia students. The College Board also provides assessments of the courses for students who have enrolled and completed Advanced Placement coursework. The Advanced Placement scores range from 1 to 5 per Advanced Placement course/assessment.

Attendance Rate

According to West Virginia Board of Education Policy 4110, public school attendance of days present divided by the number of days of membership, multiplied by one hundred, equals attendance rate for students on the attendance registers in classes in grades K-12. The calculation for the student attendance rate is as follows: [total days present / (total days present + total days absent)] x 100. Attendance data are maintained on the West Virginia Education Information System (WVEIS).

Dropout Rate

A dropout is a student who was enrolled in school at sometime during the previous year, but who left school sometime during the year and did not return to **any** school by October 1 of the following school year or did not receive a General Equivalency Diploma (GED). Students who have died are not considered dropouts. Dropout data are maintained on the WVEIS. The calculation for West Virginia's Dropout Rate is the number of dropouts (students in grades 7-12) divided by enrollment (grades 7-12).

Graduation Rate

The public school graduation rate is measured using the number of students who graduate from a public high school with a regular diploma (not including a GED or any other diploma not fully aligned with the state's academic standards) in the standard number of years. As authorized by Title I Part A of NCLB, §200.19, West Virginia will include a provision for students with disabilities that allows the Individualized Education Program (IEP) team to determine the standard number of years for graduation.

The calculation for West Virginia's graduation rate is the method recommended by the National Center for Education Statistics (NCES): the total number of four-year graduates divided by the sum of the total number of four-year graduates plus the dropouts for the four years of high school for this class of graduates as represented in the following formula:

$$g_t/(g_t+d^{12}_t+d^{11}_{(t-1)}+d^{10}_{(t-2)}+d^{9}_{(t-3)})$$

g = graduates t = year of graduation d = dropouts12, 11, 10, g = class level

College Going Rate

The West Virginia Department of Education does not currently collect this data nor does the Department have a formal definition or protocol for collecting this data.

Retention Rate

The West Virginia Department of Education does not currently collect this data nor does the Department have a formal definition or protocol for collecting this data.

Career/Technical Education Postsecondary Placement of Completers

Postsecondary placement of completers in employment or education is required for compliance with the Carl D. Perkins Vocational and Technical Act of 1998. Placement status is determined by a follow-up conducted within one year of graduation for all career/technical completers to ascertain their employment or postsecondary education status.

Impact Data Results

The aforementioned input data are reported with findings following each category of information.

Organization of Additional Data

The identified assessment measures and corresponding data are presented in the following manner:

- table that reports the statistics for each measure from 2004-2009, by subgroup
- findings are noted

2004—2009 Advanced Placement Enrollment Subgroup Impact Data (Aggregate of all high school students): Shows the number of West Virginia students by subgroup who were enrolled in Advanced Placement classes.

Table 31: 2004—2009 Advanced Placement Enrollment

		2004—2009 ADVANCEI	9 ADVANC	ED PLACE	MENT Sub	D PLACEMENT Subgroup Impact Data (Duplicated Count of Students)	act Data (Duplicated	Count of	Students)		
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	11,177	6,128	5,049	10,317	146	91	8	615	1,278	42	2	526
2002	10,720	2,952	4,768	6,935	180	25	21	527	1,309	40	2	449
2006	12,909	288′5	7,022	11,859	223	63	36	969		65	2	125
2007	13,762	97'9	7,502	12,707	278	114	22	613		62		645
2008	18,064	10,195	698'2	16,481	327	177	4	1,075	2,603	165	0	1,065
2009	19,123	11,097	8,026	17,547	439	114	9	1,017	2,875	32	0	150
Change 08-09	1,059	905	157	1,066	112	63	2	-58	272	-133	0	-915

"Duplicated Count of Students" refers to the fact that a student is counted for each course that s/he takes. Thus, the numbers provided within this table are more of a representation of the total seat count in all AP courses rather than a count of individual students who participated in AP

2004—2009 Advanced Placement Performance Subgroup Impact Data (Aggregate of all high school students): Shows the number of West Virginia high school students by subgroup who scored a 3 or above on Advanced Placement exams.

Table 32: 2004—2009 Advanced Placement Performance

2004—2	2009 ADVAF	2004—2009 ADVANCED PLACEMENT Performance Subgroup Impact Data (Duplicated Count of Students)	:MENT Perf	ormance Si	ubgroup In	npact Data	(Duplicate	d Count o	f Students)	
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	Other	No Response
2004	2,155	1,104	1,051	1,828	18	19	6	197	22	27
2005	2,073	1,090	983	1,743	16	32	5	180	71	56
2006	4,745	2,389	2,356	3,960	28	74	22	414	113	134
2007	5,296	2,748	2,548	4,612	64	50	26	340	142	32
2008	5,910	3,062	2,848	5,136	60	42	22	396	142	72
2009	99//9	3,542	3,224	5,868	428	16	22	28	180	146
Change 08-09	856	480	376	732	368	-26	0	-368	38	74

"Duplicated Count of Students" refers to the fact that a student is counted for each course that s/he takes. Thus, the numbers provided within this table are more of a representation of the total seat count in all AP courses rather than a count of individual students who participated in AP courses.

2004—2009 Attendance Rate Subgroup Impact Data (Aggregate of all high school students): Shows the attendance rate of West Virginia students by subgroup who were enrolled in public schools.

Table 33: 2004—2009 Attendance Rate

			20	2004—2009	ATTENDAN	2009 ATTENDANCE RATE Subgroup Impact Data	ubgroup I	mpact Dat	Б			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	96.41	96.51	96.32	96.46	95.27	96.01	94.90	97.59	66'96	96.00	l	92.66
2002	96.74	96.87	96.63	96.78	95.83	96.41	95.11	98.52	98.21	96.12		95.92
2006	97.28	97.41	97.17	97.31	96.74	90'.26	96.10	98.49	96.54	68'96		97.64
2007	97.20	97.34	90'26	97.21	62'96	97.43	96.21	98.55	96.43	96.84		98.27
2008	96.37	96.49	96.25	96.39	95.81	£9 [.] 96	95.22	96'26	95.53	98.36		97.52
2009	96.58	96.71	62.96	96.59	96.17	22'96	95.34	98.10	95.82	95.88	_	97.37
Change 08-09	0.21	0.22	0.34	0.20	0.36	0.14	0.12	0.14	0.29	0.02		-0.15

2004—2009 Dropout Rate Subgroup Impact Data (Aggregate of all high school students): Shows the number of West Virginia students by subgroup who dropped out of school.

Table 34: 2004—2009 Dropout Rate

				2004—200	9 DROPOL	JT RATE Su	-2009 DROPOUT RATE Subgroup Impact Data	pact Data				
	All	Female	Male	White	Black	Hispanic	Hispanic Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	3.21	2.68	3.70	3.16	4.47	2.95	8.23	0.62	3.79	3.75		1.66
2002	3.04	2.71	3:35	3.01	3.85	3.72	2.78	1.48	3.74	4.36		2.07
2006	2.34	2.13	2.54	2.33	2.74	2.29	5.04	0.61	4.65	5.29		3.58
2002	2.39	2.20	2.56	2.37	2.79	2.29	4.32	1.10	4.11	0.53		2.36
2008	3.00	2.70	3.30	3.00	3.20	2.30	7.30	1.00	3.80	3.40		1.80
2009	2.80	2.50	3.10	2.80	3.00	3.20	2.50	08'0	3.50	3.50		1.60
Change 08-09	-0.20	-0.20	-0.20	-0.20	-0.20	06.0	-1.80	-0.20	-0.30	0.10	_	-0.20

2004—2009 Graduation Rate Subgroup Impact Data (Aggregate of all high school students): Shows the percentage of West Virginia students who graduated by subgroup.

Table 35: 2004—2009 Graduation Rate

			200)4—2009 G	SRADUATI	2004—2009 GRADUATION RATE Subgroup Impact Data	Subgroup 1	Impact Da	ıta			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	83.99	86.32	81.84	83.91	83.52	83.16	75.00	98.01	80.49	73.55	100.00	96.92
2002	84.26	90.98	82.52	84.33	81.20	88.54	63.64	92.20	77.99	75.24	100.00	87.76
2006	84.59	86.30	82.96	84.64	80.62	87.50	82'22	98.55	74.03	72.73	00.09	82.89
2002	84.66	86.29	83.08	84.77	81.77	78.38	64.00	98.28	74.19	73.23	100.00	90.83
2008	83.96	85.57	82.32	83.98	81.03	85.07	29'99	69.63	77.39	77.35	100.00	93.15
5009	83.81	85.76	81.93	83.92	79.74	84.85	61.54	62'26	78.12	75.74	0.00	84.13
Change 08-09	-0.15	0.19	-0.39	-0.06	-1.29	-0.22	-5.13	3.76	0.73	-1.61	-100.0	-9.02

2004—2009 College Going Rate Subgroup Impact Data (Aggregate of all public high school students): Data are unavailable.

Table 36: 2004-2009 College Going Rate

			2004	2009 CO	LLEGE GO	2004-2009 COLLEGE GOING RATE Subgroup Impact Data	Subgroup	Impact D	ata			
	ΙΝ	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	9	SWD	Migrant	FP
2004												
2002												
2006				-	<u>.</u>	-						
2007	Unavalla	Onavaliable from West Virginia Department of Education	vest virgin	па Depart	ment of E(aucation						
2008	The High HEPC do	ier Educati es not aggi	on Policy (regate this	Commissic s data by s	on collects subgroup	The Higher Education Policy Commission collects College Going Rate data by WV High School and County, but the HEPC does not aggregate this data by subgroup and this data is not available.	ioing Rate Ita is not	data by V available.	W High S	chool and	County, bu	r the
2009												
Change												

2004—2009 Retention Rate Subgroup Impact Data (Aggregate of all public high school students): Data are unavailable.

Table 37: 2004-2009 Retention Rate

			20	04-2009 R	ETENTIO	2004-2009 RETENTION RATE Subgroup Impact Data	ogroup In	npact Data	e			
	■	Female	Male	White	Black	Hispanic	Nat. Am	Asian	9	SWD	Migrant	LEP
2004							:					
2005	Unavaila	ble from V	Vest Virgii	Unavailable from West Virginia Department of Education	ment of E	ducation						
2006	The High	ner Educati	on Policy	Commissic	on collects	The Higher Education Policy Commission collects College Going Rate data by WV High School and County, but the	oing Rate	data by V	W High S	chool and	County, bu	t the
2007	HEPC do	HEPC does not aggregate this	regate th	is data by ف	data by subgroup.		1	•)		:	
2008												
2009												
Change												

2004-2007 Placement of Completers in Employment or Postsecondary Education (Aggregate of all 2004 Completers): Shows the 1) percentage of students placed in employment or the military in each subgroup, 2) percentage of students placed in continuing education or training in each subgroup, and 3) the percentage of students not placed in each subgroup.

Table 38: 2004-2007 CTE Placement in Employment or Postsecondary Education

2004-2007 CTE POSTSECONDARY PL	POSTSECON	DARY PL	ACEMEN	T Percen	tage of	Students I	Placed in	Employ	ment o	r Postse	condary	ACEMENT Percentage of Students Placed in Employment or Postsecondary Education
	Total Num- ber of		2	1,4/6	<u>.</u>		Nat. Am./ AK	: :: •	2	Q	<u>.</u>	Nontraditional
2004-2005		בוומע	יום ת	NIIICE NVIIICE	DIACK	HISPAIIIC	Ndt.	Asidii	3	OWD		בוווסווםפא
Employment/ Military	2,614	48.73	61.71	57.20	45.56	80.00	75.00	16.67	60.73	66.34	60.00	50.99
2004-2005 Continued Education/Training	1,639	45.29	30.36	35.78	48.89	20.00	0:00	66.67	29.25	21.26	40.00	43.07
2004-2005 Not Placed	331	5.98	7.93	7.02	5.55	0.00	25.00	16.66	10.02	12.40	0.00	5.94
TOTAL # Completers	4,584											
2005-2006 Employment/ Military	2,650	45.12	60.35	48.98	26.44	14.29	0.00	20.00	56.00	65.64	100.00	49.38
2005-2006 Continued Education/Training	1,706	42.36	30.64	41.34	57.47	57.14	100.0	80.00	34.07	24.76	50.00	43.06
2005-2006 Not Placed	503	12.52	9.01	9.68	16.09	28.57	0.00	0.00	9.93	9.6	0.00	7.56
TOTAL # Completers	4,859											
2006-2007 Employment/ Military	2,278	39.16	54.37	49.53	30.63	20.00	14.29	0.00	55.50	68.89	50.00	48.27
2006-2007 Continued Education/Training	1,953	51.48	36.45	41.45	62.16	38.46	57.14	83.33	36.68	23.18	50.00	44.00
2006-2007 Not Placed	431	9:36	9.18	9.05	7.21	11.54	28.57	16.67	7.82	9.93	0.00	7.73
TOTAL # Completers	4,662											

Figure 28: CTE Placement in Employment/Military

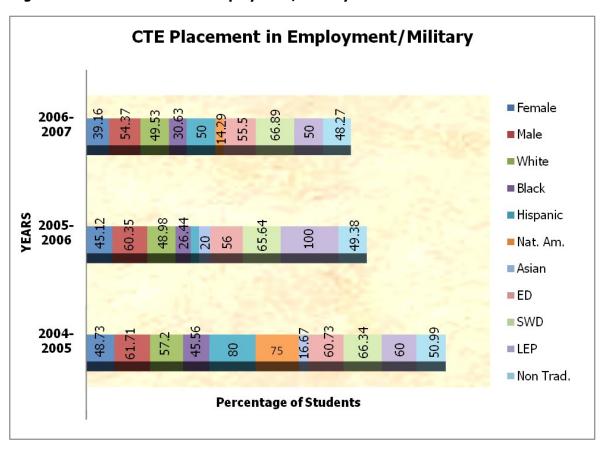
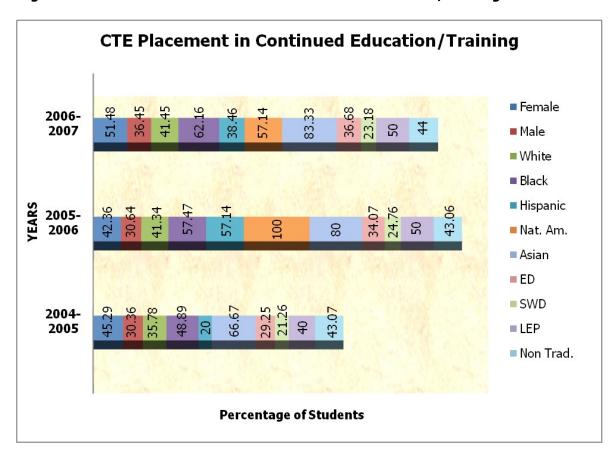


Figure 29: 2004—2007 CTE Placement in Continued Education/Training



Additional State Public School Subgroup Impact Data Criterion Findings:

Advanced Placement (AP) Courses 2004-2009

- Within the **All** subgroup, there has been a consistent **increase** in the number of Advanced Placement (AP) courses taken each year from 2005 through 2009. The total increase in AP courses taken across those five years is 8,403.
- In 2009, there were 19,123 students (**All** subgroup) counted as enrolled in AP classes. This was an **increase** of 1,059 AP courses from 2008.
- Within the **White** subgroup, there has been a consistent **increase** in the number of AP courses taken each year from 2005 through 2009. The total increase in AP courses taken across those five years is 7,612.
- Between 2008 and 2009, the number of students within the White subgroup who were counted as enrolled in AP classes increased by 1,066.
- A significant achievement gap exists between the **Black** and **White** subgroups in the number of AP courses taken. In 2009, there were 439 students (**Black** subgroup) counted as enrolled in AP courses compared with 17,547 students (**White** subgroup) counted as enrolled.
- Within the Black subgroup, there has been a consistent increase in the number of enrollees in AP courses each year from 2005 through 2009. The total increase in AP courses taken across those five years is 259. This Black subgroup enrollee increase remains significantly below the White subgroup enrollee increase—a difference of 7,353 AP courses taken.
- Between 2008 and 2009, the number of students within the Economically
 Disadvantaged subgroup who were counted as enrolled in AP courses increased by
 272.
- A significant achievement gap exists between the Economically Disadvantaged and White subgroups in the number of AP courses taken. In 2009, there were 2,875 students (ED subgroup) counted as enrolled in AP courses compared with 17,547 students (White subgroup) counted as enrolled.
- Between 2008 and 2009, the number of students within the Students With Disabilities subgroup who were counted as enrolled in AP courses decreased by 133.
- A significant achievement gap exists between the Students with Disabilities and White subgroups in the number of AP courses taken. In 2009, there were 32 students (SWD subgroup) counted as enrolled in AP courses compared with 17,547 students (White subgroup) counted as enrolled.

Advanced Placement Performance 2004-2009

• Within the **All** subgroup, there has been a consistent **increase** in the number of students scoring a 3 or above on AP exams each year from 2005 through 2009. The total increase across those five years is 4,693.

Advanced Placement Performance 2004-2009 (continued)

- In 2009, there were 6,766 students (**All** subgroup) who scored a 3 or above on AP exams. This was an **increase** of 856 from 2008.
- Within the White subgroup, there has been a consistent increase in the number of students scoring a 3 or above on AP exams each year from 2005 through 2009. The total increase in AP exams with scores of 3 or above across those five years was 4,125.
- Between 2008 and 2009, the number of students within the **White** subgroup who scored a 3 or above on AP exams increased by 732.
- A significant achievement gap exists between the Black and White subgroups in the number of students who scored a 3 or above on AP exams. In 2009, there were 428 students (Black subgroup) who scored a 3 or above on AP exams compared with 5,868 students (White subgroup) who scored 3 or above.
- Between 2008 and 2009, the number of students within the Black subgroup who scored a 3 or above on AP exams increased by 368.

Attendance Rate 2004-2009

- There was a slight **increase** (0.21) in attendance within the **All** subgroup between 2008 and 2009.
- There was a slight **increase** (0.20) in attendance rate within the **White** subgroup between 2008 and 2009.
- The **Black** subgroup made a small **gain** in attendance rate (0.36) between 2008 and 2009.
- The **Economically Disadvantaged** subgroup had **a slight increase** in student attendance rates between 2008 and 2009 (0.29).
- The **Students With Disabilities** subgroup had a slight **increase** in student attendance rates between 2008 and 2009 (0.02).
- A small performance gap persists within attendance rate for the White and Black subgroups (0.42 percent higher performance for White subgroup), the White and Economically Disadvantaged subgroups (0.77 percent higher performance for White subgroup), and the White and Students with Disabilities subgroups (0.71 percent higher performance for White subgroup).

Dropout Rate 2004-2009

- The **All** subgroup had a small **decrease** (0.20) in the number of students who dropped out of school between 2008 and 2009.
- The **White** subgroup had a small **decrease** (0.20) in the number of students who dropped out of school between 2008 and 2009.
- The **Black** subgroup had a small **decrease** (0.20) in the number of students who dropped out of school between 2008 and 2009.
- The **Economically Disadvantaged** subgroup had a small **decrease** (-0.30) in the number of students who dropped out of school between 2008 and 2009.
- The **Students With Disabilities** subgroup had a small increase (0.10) in the number of students who dropped out of school between 2008 and 2009.
- The **Black** subgroup (0.20 percent higher dropout rate), the **Economically Disadvantaged** subgroup (0.70 percent higher dropout rate), and the **Students with Disabilities** subgroup (0.70 percent higher dropout rate) persisted in maintaining a higher dropout rate than the **White** subgroup.

Graduation Rate 2004-2009

- The **All** subgroup **decreased** 0.15 the percentage of students who graduated from high school (83.96 to 83.81) from 2008 to 2009.
- The **White** subgroup **decreased** 0.06 the percentage of students who graduated from high school (83.98 to 83.92) from 2008 to 2009.
- The **Black** subgroup **decreased** 1.29 the percentage of students who graduated from high school (81.03 to 79.74) from 2008 to 2009.
- The **Black** subgroup had a 4.18 **lower** percentage of students graduating from high school than the **White** subgroup (79.74 to 83.92) in 2009.
- The **Economically Disadvantaged** subgroup **increased** 0.73 the percentage of students who graduated from high school (77.39 to 78.12) from 2008 to 2009.
- The **Economically Disadvantaged** subgroup **increased** the percentage of students who graduated from high school from 2006 to 2007 (0.16%), from 2007 to 2008 (3.20%), and from 2008 to 2009 (0.73%).

Graduation Rate 2004-2009 (continued)

- A gap (5.8%) exists between the percentage of students within the Economically Disadvantaged subgroup who graduated from high school and the percentage of White subgroup students who graduated in 2009.
- The **Students With Disabilities** subgroup **decreased** 1.61 the percentage of dents graduating from high school (77.35 to 75.74) from 2008 to 2009.
- A gap (8.18%) exists between the percentage of students within the Students With Disabilities subgroup who graduated from high school and the percentage of White subgroup students who graduated in 2009.

College Going Rate 2004-2009

No findings to report. Data is unavailable from West Virginia Department of Education.

Retention Rate 2004-2009

No findings to report. Data is unavailable from West Virginia Department of Education.

CTE Placement in Employment or Postsecondary Education 2004-2007

- In 2004-2005, the **White** subgroup had 57% of Completers entering either employment or the military. That percentage of students **decreased** 8% in 2005-2006 to only 49%.
 - ♦ 6 out of 10 **White** students entered employment or the military in 2004-2005
 - ♦ 5 out of 10 **White** students entered employment or the military in 2005-2006
 - ♦ 5 out of 10 **White** students entered employment or the military in 2006-2007
- In 2004-2005, the Black subgroup had 46% of Completers entering either employment or the military. That percentage of students decreased 19% in 2005-2006 to only 26%.
 - 5 out of 10 Black students entered employment or the military in 2004-2005
 - ♦ 3 out of 10 **Black** students entered employment or the military in 2005-2006
 - ♦ 3 out of 10 Black students entered employment or the military in 2006-2007

CTE Placement in Employment or Postsecondary Education 2004-2007 (continued)

- In 2004-2005, the **Economically Disadvantaged** subgroup had 61% of Completers entering either employment or the military. That percentage of students **decreased** 4% in 2005-2006 to only 56%.
 - ♦ 6 out of 10 Economically Disadvantaged students entered employment or the military in 2004-2005
 - ♦ 6 out of 10 Economically Disadvantaged students entered employment or the military in 2005-2006
 - ♦ 6 out of 10 Economically Disadvantaged students entered employment or the military in 2006-2007
- In 2004-2005, the **Students with Disabilities** subgroup had 66% of Completers entering either employment or the military. That percentage of students remained relatively constant in 2005-2006 (66%) and in 2006-2007 (67%).
- In 2004-2005, the **White** subgroup had 36% of Completers entering either continued education or training. That percentage of students **increased** 6% in 2005-2006 to 41%. The percentage of students **increased** approximately 1% in 2006-2007.
- In 2004-2005, the **Black** subgroup had 49% of Completers entering either continued education or training. That percentage of students **increased** almost 9% in 2005-2006 to 57%. The percentage of students **increased** approximately 5% in 2006-2007.
 - 5 out of 10 Black students entered continued education or training in 2004-2005
 - ♦ 6 out of 10 Black students entered continued education or training in 2005-2006
 - ♦ 6 out of 10 **Black** students entered continued education or training in 2006-2007
- In 2004-2005, the **Economically Disadvantaged** subgroup had 29% of Completers entering either continued education or training. That percentage of students **increased** almost 5% in 2005-2006 to 34%. The percentage of students **increased** approximately 3% in 2006-2007.
 - ◆ 3 out of 10 Economically Disadvantaged students entered continued education or training in 2004-2005
 - ◆ 3 out of 10 Economically Disadvantaged students entered continued education or training in 2005-2006
 - ◆ 4 out of 10 Economically Disadvantaged students entered continued education or training in 2004-2005
- In 2004-2005, the **Students With Disabilities** subgroup had 21% of Completers entering either continued education or training. That percentage of students **increased** almost 4% in 2005-2006 to 25%. The percentage of students **decreased** approximately 2% in 2006-2007.
 - ◆ 2 out of 10 Students With Disabilities entered continued education or training in 2004-2005
 - ◆ 3 out of 10 (approx.) **Students With Disabilities** entered continued education or training in 2005-2006
 - 2 out of 10 Students With Disabilities entered continued education or training in 2006-2007

21st Century Health Literacy Data



Adrienne Stover

Woodrow Wilson High School

Raleigh County

21st Century Health Literacy Data

Health Education Assessment Project (HEAP)

Beginning with the 2006-2007 school year, the WVDE Office of Healthy Schools, Division of Student Support Services, developed and implemented the first online statewide Health Education Assessment Project (HEAP) as required by House Bill 2816. Assistance for this project was provided by the WVDE Office of Technology in making the assessment available online from December 2006 through May 2007 for all 6th and 8th grade students and high school health education students.

In 2007-2008, The SmartTrack[™] was awarded the contract to provide the online assessments to West Virginia public schools. HEAP assessment categories and items were adopted from the State Collaborative on Assessment and State Standards (SCASS) Health Education Assessment Project (HEAP) which began in 1993. The adopted categories and items aligned to the West Virginia K-12 Health Education Content Standards and Objectives (CSOs).

The pilot year for the HEAP assessment in West Virginia was 2003. The operational assessment included questions on health education topics such as nutrition, physical activity, growth and development, and the informed use of alcohol, tobacco and other drugs. The topic of mental health for 6th grade students and mental health replaced injury prevention for 8th grade and high school students. All West Virginia schools with 6th, 8th, and/or high school students are expected to administer HEAP. The following chart indicates the number of students at each grade level completing HEAP during the 2007-2008 school year.

GRADE LEVEL	NUMBER OF WV COUNTIES PARTICIPATING IN HEAP TESTING	NUMBER OF STUDENTS TESTED
6	50	5,442
8	47	6,112
High School	50	10,712

Overall, 22,266 students participated in the HEAP assessment in 2007-2008. This was an increase of 5,758 students from the previous year.

An examination of HEAP test items (2007-2008) across all content areas and grade levels indicates that the following topic areas had proficiency scores above 90 percent:

HEAP Topic Areas with Profic	ciency Scores Above 90 Percent
Recognition of food groups	Effects of physical activities on body systems
Bicycle safety	Proper storage of medications
First aid and safety	Dating relationships and safety
Safe methods of weight loss	Long-term effects of tobacco use

The following HEAP test topic areas had proficiency scores below 70 percent:

HEAP Topi	c Areas with Proficiency Scores Below	v 70 Percent
Interpreting and understanding food labels	Identifying types of nutrients found in foods	Understanding the benefits of nutrients found in foods
Identifying accurate sources of health information	Understanding components of exercise and linking those to individual fitness plans	Recognizing the effects of stress on health
Refusal skills	Identifying and understanding the stages of human development	Identifying risks associated with sex- ual activity
Short– and long-term effects of alcohol and drugs	Short-term effects of tobacco use	Identifying and analyzing advertising techniques

It should be noted that HEAP selected-response test items should be only one tool used to measure student progress in 21st century health literacy. The WVDE Office of Healthy Schools will continue to design and offer teacher professional development training sessions that not only make use of HEAP data, but also include a variety of additional assessment materials/tools that teachers can use at the classroom level.

Additional information on this program can be found in the **Closing the Achievement Gap Initiatives in West Virginia** section starting on page 177.

FITNESSGRAM

In October 2005, the West Virginia Board of Education (WVBE) revised Policy 2520.6, 21st Century Physical Education 5-12 Content Standards and Objectives (CSOs) to require annual administration of the FITNESSGRAM in grades four through eight and high school physical education courses beginning with the 2006-2007 school year. In preparation for this testing, the WVDE Office of Healthy Schools provided professional development training in the administration of the FITNESSGRAM to over 900 physical education teachers in all 55 counties through Regional Education Service Agencies (RESAs) and/or county-provided staff development offerings.

The following chart outlines participation in the FITNESSGRAM assessment:

	FITNESSGRAM Participation	
2006-2007	762 schools	55 counties
2007-2008	604 schools	57 school districts

This assessment measures three components of health-related physical fitness that have been identified as being important to overall health and function: (1) aerobic capacity; (2) body composition; and (3) muscular strength, endurance and flexibility. For each test category, teachers report the number of students tested and the number of students who performed within the Healthy Fitness Zone as defined by the FITNESSGRAM assessment. The 2007-2008 results indicate that a majority of West Virginia students performed within the Healthy Fitness Zone; however, the results also suggest that there were some areas that might require additional attention from individual students.

Additional information on this program can be found in the **Closing the Achievement Gap Initiatives in West Virginia** section starting on page 177.

		Table 39	9: West Virginia Fi	Table 39: West Virginia Fitness Gram Results		
Year	% Healthy Zone for Strength	% Healthy Zone for Aerobic Capacity	% Healthy Zone for Flexibility	% Healthy Zone for Trunk Lift	% Healthy Zone for Curl-up	% Healthy Zone % Healthy Zone % Healthy Zone for for Flexibility for Trunk Lift for Curl-up Body Composition
2002-06	69	99	81	98	82	89
2006-07*	-	1	I	-		I
2007-08	69	29	81	28	83	29
2008-09	69	89	08	28	82	89
*Data not available	iilable					

	Table 4	Table 40: West Virginia HEAP Results (Proficiency set at 80% right response)	a HEAP Results ((Proficiency set	at 80% right res	sponse)	
Year	% Right Response for Nutrition	% Right Response for Physical Activity	% Right Response for Injury Prevention	% Right Response for Growth & Development	% Right Response for Tobacco	% Right Response for Alcohol & Drugs	% Right Response for Mental Health
2003*	89	73	06	89	89	29	57
2007	29	75	86	77	71	72	75
2008	99	73	76	92	29	70	71
2009	99	71	16	73	99	89	89
*2003 was the pilot year.	ne pilot vear.						

These scores were provided by the WVDE Office of Healthy Schools.

Closing the Achievement Gap Initiatives in West Virginia



Ben Neal

Richwood High School Nicholas County

Introduction

The society in which today's students are expected to succeed is significantly different from that of even a decade ago. Revolutionary changes in technology, demands of the global marketplace and significant social, political and environmental issues dramatically affect what students must know and be able to do. To thrive in the 21st century, our nation's future rests in our student's ability to function effectively in a culturally diverse, technologically complex and economically competitive global society. This demands systemic changes in both the structure and outcomes that currently characterize public education. To remain competitive, we must have an educational system that (1) redefines its core curriculum to include 21st century skills, content and technologies, (2) assures world -class rigor in its performance standards, (3) uses the latest research on learning to guide instructional processes, (4) emphasizes balanced and authentic means of assessment that go beyond the limits of norm-referenced tests, and (5) continues its dedication to learning for all students regardless of race, handicap or socioeconomic background. Virginia, a collaborative effort among citizens, educators, policy makers and business leaders has embraced this challenge. Examining educational practice from pre-kindergarten through higher education, these entities are dedicated to creating an aligned system that prepares students with the necessary 21st century skills, personal dispositions and deep understanding of rigorous core curricula necessary for success in the 21st century.

West Virginia has established a comprehensive plan and is engaged in a systematic, systemic approach that has resulted in a multitude of initiatives. The following listing reviews the structural initiatives and processes to restructure public education in West Virginia in order to provide 21st century instruction, learning and assessment.

This comprehensive listing of initiatives is followed by a summary of specific programmatic initiatives to address closing the achievement gaps of identified subgroups.

Summary of Systematic, Systemic Initiatives for 21st Century Instruction, Learning and Assessment

DATA ANALYSIS, PLANNING AND PROCESS DESIGN

- Developed Frameworks for High Performing School Systems, Schools & Classrooms.
- Submitted West Virginia's Application for 21st Century Learning to the Partnership for 21st Century Skills that confirmed West Virginia's commitment to address the Six Key Elements for 21st Century Instruction & Learning: rigorous core subjects, learning skills and technology tools and 21st century context, content and assessment in order to change instruction and learning and improve student performance.
- Secured Legislative revision of Basic Skills Statute 18-2E-7 to provide for *21st Century Instruction and Learning in All Schools.*
- Developed and implemented an electronic five-year school system and school *Strategic Improvement Plan* process.
- Established a High School Task Force that developed A Vision for Student Success
 Report with specific recommendations for increasing the rigor of the high school
 curriculum and student achievement.
- Developed a *Professional Development Stakeholder Report* to support 21st century learning.
- Developed an OEPA Accountability Study for state accreditation that would exceed NCLB requirements and support more rigorous course requirements and increased student performance in the above mastery and distinguished sub-groups on the WESTEST, SAT & ACT assessments.
- Developed the Closing the Achievement Gap Report that summarizes all data (assessment data and performance indicators) pertaining to student achievement and progress, reviews and reports on evaluation of programs and initiatives and draws conclusions/findings based on data, and generates suggested action steps.
- Established a High Needs Task Force that developed *A Strategic Plan for Improving Results for Students in High Need Populations* with specific recommendations for closing the achievement gap for minority, low income and special needs students:
 - 1. Accelerated expansion of Pre-K programs
 - 2. Expansion of research based programs such as Reading First, Phonemic Awareness and the RTI model
 - 3. Implementation of an electronic based management system (TESTMATE CLARITY) that supports special education and Title I teachers in documenting student progress
 - 4. Implementation of a model to increase the enrollment of students from targeted

- populations in 6th and 7th grade pre-algebra courses in Algebra I classes and upper level content courses
- 5. Establishment of an *Advisory Council for Improved Results* to receive data regarding student achievement progress, to continue the development of *Closing the Achievement Gap Report* and to support the development of a Web site to provide information to teachers, parents and community on resources, initiatives and practices to close the achievement gap
- Established a *Response to Intervention Requirement* in Policy 2419 that requires early intervention with students not at mastery in reading and math skills.
- Developed a *Comprehensive Report of Findings and Recommendations for Technology* in order to provide equity of access to technology (hardware, software, infrastructure, technical support and professional development).
- Restructured WVDE to align staff and job responsibilities to provide a coordinated, integrated approach to support 21st century instruction and learning.

CURRICULUM AND INSTRUCTION (POLICY, RESOURCES & INITIATIVES)

- Reviewed and revised Content Standards and Objectives to increase alignment with NAEP, SAT and ACT frameworks and to increase the level of depth of knowledge (increased rigor).
- Developed Instructional Guides that includes performance based measures for assessing progress for Reading/Language Arts, Math, Science and Social Studies.
- Developed *Online Instructional Units for English/Language Arts* at the middle school level.
- Provided Writing Roadmap Online Program for all students in grades 4-12.
- Developed *Online Instructional Units for Algebra* I and initiated the development of *Online Instructional Units for Geometry*.
- Expanded the Reading First Model to 23 additional schools through alternate funding.
- Developed a Comprehensive Math and Science Work Plan to Improve Achievement.
- Established 14 *Model 21st Century Enhanced HSTW Sites.*
- Revised Policy 2510 to include the following for all entering 9th grades students in 2008:
 - 1. Required completion of an online learning course prior to graduation
 - 2. Required all high schools to offer a minimum of four AP courses
 - 3. Recommended that all middle school students complete a technology course
 - 4. Increased course requirements to include a more rigorous core program:

- 4 units of math
- Transition College English and Math Courses for all students not meeting college benchmark assessment standard
- Required science sequence for all students: physical science, biology and chemistry
- Eliminated the "entry" pathway for students
- Added a new Algebra III course and developed content standards and objectives designed for work beyond Algebra II, transitioning students from Algebra II to Trigonometry or Trigonometry to Pre-Calculus.
- Developed Standards and Objectives for Calculus, a course that has been taught throughout West Virginia for which no state content standards and objectives were approved.
- Established and supported with Benedum funding the *Carnegie Learning Cognitive Tutor* program in 37 counties (one high school in each county).
- Established a *Mathematics Program Improvement Review Process* a proven evaluation process focused on standards for high quality mathematics programs in grades K-12.
- Implemented the *Math Science Partnership Program* in 24 counties that is designed to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers.
- Established *College Readiness Standards for Mathematics and English* with Higher Education. These standards have been identified as those needed for a student to be enrolled and succeed without remediation in a minimum credit bearing college level mathematics or English course at a postsecondary institution.
- Established Project Lead the Way in pilot counties that is designed to support the
 establishment of a high school pre-engineering program taken in conjunction with a
 college-preparatory level academics to better prepare students for post-secondary
 engineering studies.
- Established a plan for implementing HB 4669 in 10 counties with significant minority populations that included the assignment of Closing the Achievement Gap Liaisons.

TECHNOLOGY

 Developed a Teach 21 Web Site with interactive content standards and objectives, learning skills and technology standards and objectives learning resources, instructional guides and units of instruction to support standards based instruction and higher skill acquisition. Please see http://wvde.state.wv.us/teach21.

- Designed and implemented a TIS training program for approximately 125 educators annually including identified Title II, TIS staff, librarians, special educators and career technical teachers.
- Designed and implemented in partnership with *INTEL* an online professional development program to support the effective integration of technology into instruction utilizing the INTEL tools.
- Developed Learning Skills and Technology Tools CSOs at each programmatic level.
- Established an agreement with Edvantia and formed a National Technical Advisory
 Team for the construction of specifications and pilot process for an 8th grade
 technology assessment that resulted in the piloting of TECH STEPS in selected
 counties in 2007-2008 and with the comprehensive implementation in grades K-8 in
 2008-2009.
- Established a partnership with Oracle that provided for the comprehensive training
 of 10 teacher leaders with follow-up support for use of Think.com and the online
 project based learning course.
- Completed a national assessment of *Online Virtual Spanish* course http://www.setdatapp.org and TIS Initiative and Impact on Achievement: http://www.setdatapp.org.
- Established a Virtual School Advisory Committee to determine recommendations to increase equity of access to virtual courses and to support the effective and comprehensive implementation of processes to maintain quality and appropriate instructional facilitator support for all virtual courses.
- Provided individual planning sessions with districts to assist in matching federal, local, state and E-rate funds for maximum benefits.
- Established a partnership with Verizon to provide Thinkfinity professional development and online lessons and resources.
- Expanded WVEIS access to statewide administrative and informational network for administrator and teacher use.
- Assisted districts with the changes for implementing online planning process.
- Applied for E-rate discounts for statewide infrastructure that serves schools and districts.
- Assisted districts in applying for wireless access grants through funding from the School Building Authority.
- Continued to manage the statewide filtering servers for districts.
- Continued additional uses of the statewide e-learning platform for teachers and students.

- Worked with OEPA to develop a review process of technology use in schools.
- Worked with national organizations, ISTE, COSN, NSBA and SETDA to present information regarding WV and 21st Century Partnership.

ASSESSMENT and ACCOUNTABILITY

- Design of a *Balanced Assessment Program* to support measuring more rigorous CSOs that includes:
 - 1. Pre-K-12 summative assessment
 - 2. Predictive and college readiness assessment for all students in grade 8, 9 and 11
 - 3. Writing assessments for grades 3-11
 - 4. Writing Roadmap 2 for grades 3-11
 - 5. Professional development to support effective classroom assessment processes
 - 6. Classroom assessments linked to Basic Skills K-8 instructional software
 - 7. Online Benchmark assessments for all grades.
- Developed and monitored a *review system to track achievement of student intellectual gifts* and that prepares teachers to meet needs in areas where achievement is not accelerating.
- Developed and implemented a system to evaluate and monitor effectiveness of Title I and Special Education services.
- Developed and implemented a trend data assessment site on NCLB secure site.
- Designed a process for implementing *Online IEPs* for identified special needs students.
- Designed and implemented a process for supporting achievement of special needs students in low performing schools in each RESA.
- Developed an evaluation design for tracking and documenting and assessing progress in attaining 21st Century Critical Element Implementation.
- Established *NAEP Coordinators* in all schools and technical assistance to increase understanding of NAEP test administration, results and interpretation and provided all NAEP schools with practice *NAEP Test-Lets*
- Designed and delivered comprehensive *Professional Development Institutes for County Leadership Teams.*

PROFESSIONAL DEVELOPMENT

- Instituted comprehensive Professional Development Institutes for *County Leadership Teams*.
- Developed and implemented a *Principal Leadership Academy* that will provide professional development on 21st century instruction and learning to all principals within a three-year period.
- Designed and implemented a *Digital Resource for 21st Century Learning* for Admin-istrators: http://wvde.state.wv.us/21stcenturydigitalresource.
- Designed and implemented a *Teacher Leadership Academy* that provided professional development for teacher leaders from each county to support 21st century instruction and learning (600 teachers, summer 2007, and will deliver to another 600 teachers, summer 2008).
- Expanded professional development support to test coordinators and instructors on TESTMATE CLARITY, PLAN, EXPLORE, SAT and ACT Analysis and Instructional Planning.
- Implemented a *E-Learning Grant* that has provided over 30 e-learning course offerings to thousands of teachers: http://wvde.state.wv.us/pd/elearning/.
- Established a *National Board Resource Web Site* to support the expansion of National Board Certified Teachers in West Virginia: http://wvde.state.wv.us/nationalboard/.
- Established a *Mentorship Web Site* to provide an on-line resource to support new teachers success in the classroom: http://wvde.state.wv.us/mentoship/.
- Established Teach 21 Model Schools and Model Teacher Sites.
- Implemented a *Professional Development Model for Training TIS Specialists* that includes ETT grant and county TIS specialists, librarians, career and technical instructors and Title I instructors to support 21st century instruction.
- Designed a 21st Century Online Course for all educators.
- Implemented NASTA Online Middle School Science Professional Development Modules
 for middle school science and special education teachers that is designed to improve
 content knowledge.
- Established a 21st Century Science and Technology Initiative to provide intensive hands -on professional development to high school science teachers to use NOVA5000 Data Loggers to obtain and interpret information from science experiments.
- Established an annual *Social Studies/Economic Institute* to improve content knowledge and contextual applications for teachers.

Summary of Closing the Achievement Gap Initiatives in West Virginia

The gaps in school achievement among racial, limited English proficient, economically disadvantaged and students with disabilities are well documented in national research. The research divides the occurrence of achievement gaps into four time frames: **before school**, **during school**, **school system expectations** and **beyond school** programs (Barton, 2003).

Before School Programs

First and foremost, the early experiences of a child's life **before school** affects the development process. Low birth weight, exposure to environmental hazards, hunger and nutrition and lack of environmental stimulation necessary for cognitive development are experiences that produce negative development in children. Secondly, the learning connection which deals with the support for learning at home is important to the developmental process. These factors deal with parental achievement expectations, reading to young children, access to a quiet study place, attention to physical and health needs, amount of TV watching and parent availability to the child/children (Barton, 2003). To date, the West Virginia Department of Education has worked to provide statewide leadership to close the achievement gap. These statewide **before school** initiatives are as follows: Even Start, QELL, and Pre-K systems.

Even Start

Even Start (Title I, Part B) is a federally funded family literacy program that encompasses adult education, early childhood education and interactive family literacy activities for every family enrolled. Local Even Start programs must be partnerships between the local school system and at least one community partner. Currently, West Virginia has six local programs. This is the maximum number of programs that can be funded based on federal allocations. Local Even Start programs must meet the federal 15 elements of program quality and the West Virginia Even Start Performance Indicators. Federal funding has been decreasing over the past three years and another decrease in current funding levels has been projected for 2008. Research to support the continuation of funding, family literacy research, (Padak & Rasiniski, 2003) has shown mixed results because the research primarily evaluated the components of family literacy, rather than family literacy as an intervention.

West Virginia Quality Enhancement for Language and Literacy (QELL) Project: READ IT AGAIN!

The purpose of the Quality Enhancement for Language and Literacy (QELL) Project, also called *READ IT AGAIN!*, is to ensure that children in West Virginia's Pre-K programs achieve a foundation in early language and literacy to support their successful transition to kindergarten and facilitate the acquisition of reading readiness skills. Using a storybook approach, QELL is a supplement that can be used with any curricular preschool framework and is designed to build competencies in vocabulary, narrative, alphabet knowledge, phonological awareness and print awareness.

Beginning in 2005, a pilot project was implemented with a small cohort of preschool educators from two districts. In each district, teacher volunteers were recruited to implement *Read It Again*! for a 16 to 20 week period. Phases of implementation included:

- Teacher Training: (November 2005) Pilot teachers completed training on early language and literacy instruction and received instructions and materials for pilot project implementation.
- Implementation: (January 2006) Teachers implement Read It Again! in two lessons per week in small group or large group settings. Technical assistance was provided by the University of Virginia. Teachers maintained a log describing implementation of activities and children's responsiveness to the activities. They also participated in telephone focus groups and completed questionnaires to rate/describe the usability and effectiveness of the Read It Again! materials.

During the past year, program evaluation was conducted using a pre-test/post-test design with eight equivalent non-participating programs to document (1) child outcomes in language and literacy, (2) program quality, including overall attention to language and literacy and (3) caregiver perceptions and knowledge. In addition to a focus group with pilot participants, program evaluation data was used to finalize the quality enhancement in the final stages of development (June-August 2007).

Evaluation results for the program had significant effects for three measures of the *Clinical Evaluation of Language Fundamentals* (*CELF*), the two measures of phonological awareness (*Get It, Got It, Go*) and one measure of print concepts. Based on the research findings, the program information has been submitted for publication and will be available to all

preschool teachers in the state. A statewide workshop for preschool teachers will be conducted in January 2008.

West Virginia Universal Pre-K System

The West Virginia Universal Pre-K System promotes oral language development and pre-literacy skills and reduces the deficit of these skills by early intervention. Currently, 12,201 students (58 percent) are served in all 55 counties from a total estimated population of 21,000. West Virginia is one of five states in the nation with a state legislative mandate for a universal Pre-K system. A study funded by the Benedum Foundation provided evidence that for every dollar invested in high quality public Pre-K education, the state will realize a \$5.20 savings because of fewer special education placements, fewer grade retentions and higher graduation rates for students who participate in Pre-K (Padak & Rasiniski, 2005). Lewis County was the first WV county to become universal in 2007. Taylor and Mineral Counties are currently pursuing universality in 2008. Based on the 2008-2009 county Pre-K plans, the WV Pre-K Steering Team has identified ten counties to be recommended for universality in 2008-2009. Each county will have to submit a letter of intention in order to begin the Universality Audit process.

West Virginia Universal Pre-K: Preschool Special Education Services

As with universal Pre-K services, the purpose of public preschool special education is to promote the development of language, pre-literacy, cognitive, social-emotional development and motor skills for every child and reduce the deficit of these skills with early intervention for children with developmental delays.

Public Preschool Special Education is required by the Individuals with Disabilities Education Act (IDEA 2004). A free appropriate public education based on an individualized education program (IEP) is implemented in the least restrictive environment. The program is designed to meet the educational needs of children with developmental delays and may be provided through a variety of service options. A child must be determined eligible for preschool special needs through the following criteria: 1) a 25 percent delay in two areas of development, including cognition, fine motor, gross motor, communication, social/emotional/affective development and self-help skills or 2) meeting eligibility criteria in the program regulations for one of the categorical areas specified in W. Va. Code §18-20-1. In 2006-2007, 6,033 eligible children, ages three through five years received services.

An evaluation of early childhood outcomes through the online assessment system associated with Creative Curriculum was initiated in 2006-2007. Data from this assessment system and additional data from districts using other curricula are collected through the online system and analyzed to report student progress as required by IDEA 2004.

Beginning July 1, 2008, the WVDE will begin collecting data on the number and percent of public preschool special education students who achieve age level status in all developmental areas prior to entering kindergarten and exiting the special education system.

School Programs

The **school** indicators deal with teaching and learning, as well as with the learning environment during the time the child is enrolled in the school system. The instructional infrastructure (including the quality of leadership, pedagogy, professional development, rigor of the curriculum, teacher preparation and availability of appropriate instructional and administrative technology) are powerful school-related indicators of academic achievement.

To date, the West Virginia Department of Education has worked to provide statewide leadership to close the achievement gap during the **school** time frame in the following areas: Increasing Student Achievement, Highly Qualified Personnel and Instructional Technology.

Increasing Student Achievement

Teacher Leadership Institute

The Teacher Leadership Institute is in its second year of work toward building the capacity for 21st century learning within all 55 West Virginia school systems. Each summer, teams of teacher leaders selected by the county superintendents according to identified criteria, participate in an intense week of professional development based upon standards-focused 21st century learning design and implementation. This professional development experience, targeting approximately 600 teachers and their county office leaders, continues throughout the following school year through participation in webinars. The Institute targets general education teachers of reading and English/language arts, mathematics, science and social studies, as well as special educators and technology integration specialists who work collaboratively or co-teach with general education teachers in these four content areas.

The Office of Instruction requests that selected Teacher Leaders from each county demonstrate at least six of the following traits:

- Strong content knowledge in mathematics, reading, English/language arts, science or social studies
- Skill in technology integration within the content area and in the use of Microsoft Office software
- Proficiency with teaching reading skills in the content area
- Knowledge and skill in differentiating instruction
- Utilization of research-based instructional strategies
- Experiences in co-teaching or active participation in a collaborative instructional team (special educator without content certification)
- National Board Certification and/or Milken Educator
- Strong interest in the work of the 2007 Teacher Leadership Institute

With a focus on standards-focused, project-based learning, the Institute guides teachers through the backward design process, the effective implementation of various technologies and 21st century learning skills, as well as the habits of mind necessary for success in the 21st century workplace. The goal in standards-focused, project-based learning is to provide students with authentic problems and driving questions around which they base their inquiry, critical thinking and problem-solving skills. The role of technology is to support that work in an authentic 21st century context.

The West Virginia Department of Education provides workshop materials, consultants, lodging, meals, breaks and a laptop computer for each teacher. All content for the Institute is imaged onto the computer and teachers are required to use the computers throughout the Institute. The LEA provides the county office representative with a notebook computer. WVDE requests that the LEA pay each participant not under contract during the Institute mileage and a daily stipend equal to the individual's daily rate of pay.

Comprehensive Plan for Increasing Student Achievement in Mathematics and Science

The West Virginia Department of Education's plan to increase the mathematics achievement of all students has evolved into the Comprehensive

Plan for Increasing Student Achievement in Mathematics and Science. The mathematics plan provided a structure for training math leadership teams in each of the 55 counties. Regional mathematics workshops were completed to promote and support the implementation of professional development initiatives. These regional meetings have since developed into RESA-Based County Mathematics Leadership Team meetings. The RESA meetings are held in conjunction with the Math/Science Consortium meetings. Advantages of the small group meetings are evident in the increased collaboration and opportunities to differentiate the professional development sessions based on individual county need.

In addition, the Statewide Administrative Mathematics Leadership Team which was formed to coordinate all professional development and programmatic initiatives in mathematics has evolved into the Mathematics Science (STEM) Community Advisory Committee. This advisory committee brings together public and private school educators, higher education, the private sector and community members to develop and gain consensus on a clear, single statewide vision that addresses what needs to happen to support mathematics and science education to prepare students for entry into postsecondary education and the 21st century workforce.

Differentiated Instruction Cadre

The Middle School Differentiated Instruction (DI) Project, originally funded by Titles I and II and the Office of Special Education for the purpose of building local capacity to support teachers in meeting the diverse learning needs of students in the general curriculum and general education settings, is now funded by Title II, the Office of Instruction and the Office of Special Programs, Extended and Early Learning. The cadre includes 20 special education teachers, and 27 general education teachers from grades 5-12, who are being trained in differentiated instruction and related instructional strategies, such as building a collaborative culture and co-teaching. Cadre members are divided into six cohorts, each led by a teacher leader. Each cohort meets four times a year to review portfolios, conduct book studies, and to study issues related to differentiated instruction. All members have been trained in the differentiation of content, process, and product, according to a student's interest, and in a readiness and learning profile, using a wide variety of research-based high-yield strategies. The training is built upon the work of the ASCD Cadre for Differentiated Instruction, led by Dr. Carol Ann Tomlinson, Associate Professor of Educational Leadership, The Curry School of Education, University of Virginia. The WVDE is in the process of studying several research/evaluation designs focused on differentiation, collaboration and co-teaching, as well as the impact of various models on student achievement. In October 2008, the WVDE will

collect documentation related to the professional development conducted by each DI cohort group September 2006 through August 2007. The focus of the Cadre during the 2007-2008 school year will be the delivery of supported and sustained professional development. The Cadre members designed and will use 13 professional development modules to support their work with other teachers in their schools, their LEAs and the RESAs. An evaluation design is being established for the next phase of the project which focuses on the implementation of differentiated instruction in middle and high school level classrooms across the state. During 2008–09, the DI Cadre will begin expanding to encompass teachers in grades K–4.

Health Literacy Programs

Health Education Assessment Project (HEAP)

During the 2006-2007 school year, the Office of Healthy Schools, Division of Student Support Services, planned and implemented the statewide Health Education Assessment Project (HEAP) as required by House Bill 2816. Assistance for this project was provided by the Office of Technology in making the assessment available online from December 2006 through May 2007 for all 6th and 8th grade students and high school health education students.

Health assessment categories and items were adopted from the State Collaborative on Assessment and State Standards (SCASS) Health Education Assessment Project which began in 1993, and those categories and items aligned to the West Virginia K-12 Health Education Content Standards and Objectives (CSOs). The pilot year for this assessment in West Virginia was 2003. The operational assessment (2006-2007) for all grade levels included questions inclusive of health education topics such as nutrition, physical activity, growth and development, informed use of alcohol, tobacco, and other drugs. The topic of "Injury Prevention" replaced the topic of "Mental Health" for 6th grade students and "Mental Health" replaced "Injury Prevention" for 8th grade and high school students.

All West Virginia counties including a total of 590 selected schools with 6th, 8th and high school students were eligible to participate in HEAP in 2006-2007. At the 6th grade level, 44 out of 55 counties participated in the HEAP assessment with 5,151 students completing. At the 8th grade level, 41 out of 55 counties participated with 4,481 students completing. At the high school level, 40 out of 55 counties participated with 6,876 students completing. Overall, the 16,508 students who completed the HEAP assessment represented only 30.5% of the total number of students at these grade levels who were eligible to participate in this assessment.

Looking at the tested items across all content areas and grade levels, the following topic areas had proficiency scores above 90%:

- Recognition of food groups
- Effects of physical activities on body systems
- Bicycle safety
- Proper storage of medications
- First aid and safety
- Dating Relationships and safety
- Safe methods of weight loss
- Long-term effects of tobacco use

The following topic areas had proficiency scores below 70%:

- Interpreting and understanding food labels
- Identifying types of nutrients in foods and benefits of those nutrients
- Identifying accurate sources of health information
- Understanding components of exercise and linking those components to individual fitness plans
- Recognizing the effects of stress on health
- Refusal skills
- Identifying and understanding the stages of human development
- Identifying risks associated with sexual activity
- Short– and long-term effects of alcohol and drugs
- Short-term effects of tobacco use
- Identifying and analyzing advertising techniques

Selected-response items used in the HEAP assessment are only one tool used to measure student progress in 21st century health literacy. In order to determine students' mastery of Health Education CSOs, multiple forms of assessments should be utilized. The WVDE office of Healthy Schools will continue to design teacher trainings that not only make use of HEAP data, but also include a variety of additional assessment materials/tools that teachers can use at the classroom level.

FITNESSGRAM

In October 2005, the West Virginia Board of Education revised Policy 2520.6 21st Century Physical Education 5-12 Content Standards and Objectives to require annual administration of the FITNESSGRAM in grades four through eight and high school physical education courses beginning with the 2006-2007 school year. Professional development training in the administration of the FITNESSGRAM was provided to over 900 physical education teachers in all 55 counties through RESAs and/or county-provided staff development offerings.

Throughout the 2006-2007 school year, 762 schools in all 55 counties administered the FITNESSGRAM. The assessment measures three components of health-related physical fitness that have been identified as important to overall health and function: (1) aerobic capacity, (2) body composition, and (3) muscular strength, endurance and flexibility. For each test category, the teachers reported the number of students tested and the number of students performing within the Healthy Fitness Zone as defined by the assessment.

The 2006-2007 FITNESSGRAM results indicated that a majority of West Virginia students are performing in the Healthy Fitness Zone. The results did suggest that there are some areas for individuals that might require additional attention. Additional results for this assessment can be found on page 170 of this report.

Health Services

All 55 county school districts provide basic and specialized health services to 281,297 students in 753 public schools requiring health care maintenance during the school day, in accordance with W. Va. State Code §18-5-22 and West Virginia Board of Education Policy 2422.7, Basic and Specialized Health Care Procedures. The goal of school health services is to allow students with basic and specialized health care needs to maintain their health needs during the school day so that they can fully participate in and benefit from the educational experience. Since the state's students outnumber the capacity of the 242 school nurses employed by the county school districts, it is becoming necessary for health service systems to begin utilizing the full spectrum of providers that include school nurses, contracted nursing services, school based health center mid-level providers and more. Health service needs are evaluated biannually by the West Virginia Department of Education Schools Nurse Needs Assessment.

High Schools for West Virginia's Future Taskforce

The High Schools for West Virginia's Future Taskforce was convened in February 2005, with approximately 70 participants. They investigated the compliance of West Virginia's high schools with NCLB legislation and the national importance on high school reform (Achieve, Inc). The taskforce reviewed a body of literature and research on the need to reform American high schools. Based upon the available information and assessment trend data, the taskforce made recommendations to the West Virginia State Board of Education with respect to policies, statutes and practices for all students achieving success in high school and postsecondary pursuits. Based on their recommendations, the taskforce then proposed a plan of action, *A Vision for Student Success, High Schools for West Virginia's Future* http://wvde.state.wv.us/hstw/vision.pdf.

As a result of this report, the West Virginia Board of Education formed a committee that prioritized the recommendations from the taskforce. The committee composed of four members of the State Board of Education and selected West Virginia Department of Education staff reviewed state code and policy that was changed to achieve the recommendations.

Some of these recommendations were addressed in Policy 2510, Assuring the Quality of Education: Regulations for Education Programs, which establishes the regulations for all programs that are designed to prepare students for the 21st century by improving the quality of teaching and learning in public schools and ensuring that equal educational opportunities exist for all students, including but not limited to: rigorous high quality, 21st century curriculum, engaging instructional strategies, experiential learning programs, support programs, personnel, instructional materials, supplies, equipment, technology integration and facilities (Revised/Effective July 7, 2008).

Specifically, Policy 2510 made the following changes in key areas:

Mathematics

- Four credits [effective 2008-2009 9th graders]
- Recommended Course Sequence for students in professional pathway and college-bound students in skilled pathway

Algebra I

Geometry

Algebra II

Trigonometry and Pre-Calculus

 College Transition math course for students not meeting benchmarks [effective 2011-2012]

Science

• Three credits [effective 2008-2009 – 9th graders]

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Physical Science --- 9<sup>th</sup> grade
Biology --- 10<sup>th</sup> grade
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Chemistry --- 11th grade

Social Studies

- Four credits
- Recommended Sequence

World Studies to 1900

U.S. Studies to 1900

20th and 21st Century

Civics for 21st Century

Reading/English Language Arts

• Four credits: English 9, 10, 11, and 12 [effective 2008-2009]

AP Courses

 Minimum of four AP Courses or the IB program must be offered in each high school

Concentrations

- A concentration is a series of courses students take beyond the core requirements that relate to their chosen career cluster and postsecondary goal (replaces career major requirement)
- Beginning in 2008-2009, the four concentration credits relate to Skilled Pathway students
- Concentration credits may be in mathematics and sciences; arts and humanities; social sciences; career/technical; or, other interest area
- Career/technical concentrations are defined by WVDE Division of Technical and Adult Education
- Concentrations other than career/technical are defined by local school system

Senior Year

- All West Virginia high school students be fully enrolled in a full day of high school and/or college credit bearing courses
- It is recommended that students complete a senior project that is equal in rigor and relevance to the senior year
- Effective 2008-2009

The WV Board of Education recently reconvened the High Schools for West Virginia's Future Taskforce to examine the work still to be done with high school improvement including support systems for students (extra

time/help, interventions, dropout prevention, etc.), the school day/year/calendar and transitions from middle grades to high school.

High Schools That Work (HSTW)

High Schools That Work is a school improvement initiative that is currently in 42 West Virginia high schools in 16 counties. HSTW has three primary goals:

- To increase the mathematics, science, communication, problem-solving and technical achievement and the application of learning for career-bound students to the national average of all students.
- To blend the essential content of traditional college-preparatory studies—mathematics, science and language arts—with quality vocational and technical studies, by creating conditions that support school leaders and teachers in carrying out the key practices.
- To advance state and local policies and leadership initiatives necessary to sustain a continuous school-improvement effort.

HSTW has identified a set of Key Practices that impact student achievement through development of multiple programs of study that prepare students for postsecondary studies and careers. These Key Practices provide direction and meaning to comprehensive school improvement:

- High Expectations Motivate more students to meet higher standards by integrating high expectations into classroom practices and by providing frequent feedback.
- 2. **Program of Study** Require each student to complete an upgraded academic core and a concentration.
- 3. **Academic Studies** Teach more students the essential concepts of the college-preparatory curriculum by encouraging them to apply academic content and skills to real-world problems and projects.
- 4. **Career/technical Studies** Provide more students access to intellectually challenging career/technical studies in high-demand fields that emphasize the higher-level academic and problem-solving skills needed in the workplace and in further education.
- Work-Based Learning Enable students and their parents to choose from programs that integrate challenging high school studies and workbased learning and that are planned by educators, employers and students.

- Teachers Working Together Provide cross-disciplinary teams of teachers time and support to work together to help students succeed in challenging academic and career/technical studies.
- 7. **Students Actively Engaged** Engage students in academic and career-technical classrooms in rigorous and challenging proficient-level assignments using research-based instructional strategies and technology.
- 8. **Guidance** Involve students and their parents in a guidance and advisement system that develops positive relationships and ensures completion of an accelerated program of study with an academic or career/technical concentration.
- Extra Help Provide a structured system of extra help to assist students in completing accelerated programs of study with high-level academic and technical content.
- 10. **Culture of Continuous Improvement -** Use data continually to improve school culture, organization, management, curriculum and instruction to advance student learning.

High Schools That Work believes everyone—teachers, schools, districts, local and state leaders—must work together to align policies, resources, initiatives, and accountability efforts to support high schools and middle grade schools as they adopt and implement comprehensive school improvement designs. The High Schools That Work program employs all of the effective schools research in program delivery: a clear functional mission statement, strong leadership, a plan for continuous improvement, qualified teachers, commitment to goals, flexible scheduling, and support for professional development. Schools that fully implement all of the Key Practices continue to show positive gains in student achievement.

Closing the Achievement Gap Professional Development Demonstration School Program

House Bill 4669, now W. Va. Code §18-2E-3g, mandated special demonstration professional development school projects for improving academic achievement for all children. The intent of this bill was to provide a special demonstration environment in the selected public schools to improve academic achievement. The selected schools work in collaboration with higher education, community organizations, and the state board to develop and implement strategies that may be replicated in other public schools with significant enrollments of disadvantaged, minority, and underachieving

students. Currently, there are ten counties with a total of 31 schools participating in the project. The successful components of this project will be replicated across the state.

Edvantia Inc. (2006) conducted a study of the professional development schools. Edvantia Inc. selected matching schools for each professional development school based on three criteria. All matching schools had (a) a similar school level, (b) percentage of black students (located within the same RESA) and (c) similar school size. Preliminary evaluation results showed that baseline data indicated significant differences between the professional development schools (PD) and matching schools on the majority of the survey instruments' subscales.

Three separate surveys were administered during the 2004–2005 school year: 1) the Measure of School Capacity for Improvement, (2) Perceptions of School Culture and (3) Continuous School I m p r o v e m e n t Questionnaires as dependent variables and the school as the independent variable.

Survey results indicated an overall significant difference between the professional development schools and the matching schools on equity in practice, expectations for student performance, differentiated instruction, coordinated curriculum and technical resources.

A comparison of 2003—2004 to 2005—2006 accountability reports of percent proficient in mathematics and reading/language arts for all subgroups in the professional development schools indicated the following findings:

- All subgroups measured showed greater gains in mathematics than in reading/language arts.
- The **Black** subgroup had the highest average increase in mathematics of all measured subgroups.
- The Black subgroup had higher average increases in reading/ language arts than all other measured subgroups.
- All measured subgroups' performances showed that the gap between Black, Economically Disadvantaged and Students with Disabilities subgroups and the subgroup of All students is closing for both reading/language arts and mathematics.

The increased student achievement and reduction of the achievement gap is a result of the work of school staff aided by Closing the Achievement Gap (CAG) Liaisons and WVDE employees assigned to the schools as school improvement specialists. The specialists were provided professional development around a research-based set of standards by Edvantia and the WVDE to prepare them to assist the schools in planning improvement, implementing those plans, measuring and studying the results and adjusting the plan from what the study revealed.

Mathematics Science Partnership Program

The Math Science Partnership (MSP) Program was created under the No Child Left Behind Act of 2001 (NCLB), which reauthorized the Elementary and Secondary Education Act (ESEA). The MSP Program is intended to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers. Partnerships between high-need school districts and the science, technology, engineering and mathematics (STEM) faculty in institutions of higher education are at the core of these improvement efforts. Other partners may include state education agencies, public charter schools or other public schools, businesses and nonprofit or for-profit organizations concerned with mathematics and science education.

The Mathematics Science Partnership Program is a formula grant program with the size of the individual state awards based upon student population and poverty rates. No state receives less than one half of one percent of the total appropriation. With these funds, each state is responsible for administering a competitive grant competition in which grants are made to partnerships to improve teacher knowledge in mathematics and science. Each partnership provides professional development to a cohort group of thirty classroom teachers. The teachers in each partnership include mathematics, science and special education teachers. The partnership develops an evaluation and accountability plan for the activities of the project. West Virginia has three partnerships that are completing the first three-year cycle of grants. Currently, there are nine active partnerships located across the state.

Medical Services

School-based health centers serve a vital role in our medically underserved state. These centers bring medical services to children where they attend school which alleviates transportation issues and other barriers to health care. Through a collaborative relationship with the West Virginia Bureau for Public Health, Division of Primary Care, 56 schools have agreements with primary health care agencies to deliver medical services to students in the school setting through school-based health centers. These centers are mainly funded through the Division of Primary Care, and the collection of fees for services and grants. The centers are staffed by medical providers, nurses, master's level mental health counselors and other health care clinicians. In 2006—2007, over 33,000 students were offered health care through the schoolbased health centers. With 80% of parents giving permission, these centers provided 26,400 students and staff with primary health services such as, but not limited to, physical exams, treatment for acute illnesses, immunizations, emergency care, diabetic management, asthma management, dental services and behavioral health counseling. During the 2006-2007 school year, there were over 67,000 student visits to the school health centers and almost 7,000 visits from school staff, area students, community and family members. The positive educational impact of school-based health centers comes through improved attendance by both students and staff and in improved performance due to improved health status. The medical services are evaluated annually by the WV School Health Technical Assistance and Evaluation Center at Marshall University.

Policy 2320, A Process for Improving Education: Performance-Based Accreditation System

This policy establishes an accountability system to determine the adequate yearly progress of West Virginia's 765 public schools and a system of education performance audits. The policy measures the quality of education and the preparation of 279,457 students based on the standards and measures of student, school and school system performance and processes for 55 counties. For the federal AYP requirement, the policy requires that all schools be held accountable for reading/language arts and mathematics results (grades 3-8 and 10) disaggregated by the federally required nine subgroups: All (students), Female, Male, White, Black, Hispanic, Native American, Asian, Economically Disadvantaged, Students with Disabilities, Migrant and Limited English Proficient.

In the 2004-2005 school year, all subgroups met the mathematics AYP requirement with the exceptions of 1) the secondary Hispanic and 2) the

middle school and secondary Students with Disabilities subgroups. In 2004-2005, all subgroups met reading AYP requirements with the exceptions of 1) the secondary Black, 2) elementary, middle, and high school Students with Disabilities and 3) the middle and high school Economically Disadvantaged subgroups.

In addition, the system of performance audits assists the West Virginia Board of Education, the Legislature, the Governor and the Process for Improving Education Council with ensuring that the high-quality educational standards and annual performance measures and progress are met by schools and school systems and that a thorough and efficient system of schools is provided. For the 2005-2006 school year, 92.73 percent of the school districts were issued Full Approval status; 7.27 percent of the districts received Non-approval status. The OEPA issued Exemplary Accreditation status to 9.89 percent of schools, Full Accreditation status to 80.88 percent of schools, Conditional Accreditation status to 7.49 percent of schools, Temporary Accreditation status to 1.60 percent of schools and Seriously Impaired status to 0.13 percent of schools. The Office of Education Performance Audits is supervised and monitored by the West Virginia Board of Education.

Reading First

The goals of West Virginia's Reading First project are to have students reading on grade level by the end of grade three and to reduce the special education referral rate for learning disabilities in the area of reading. Achievement of these goals will be accomplished by 1) developing and strengthening K-3 teachers' knowledge of the content of reading and the research-based skills and competencies essential in order to successfully teach reading; 2) using screening, diagnostic, progress monitoring and outcome measurement assessments to guide appropriate instruction and/or intervention; 3) providing immediate intervention to improve reading skills K-3; 4) incorporating technology as a tool for student instruction and educator professional development; and 5) building an infrastructure capacity to improve and sustain statewide reading achievement. Each of the 42 participating schools is monitored three to four times annually by the West Virginia Department of Education. Additionally, the Reading First program must submit an annual report to the United States Department of Education. This document includes a reporting of all schools, grades K-3, and their achievement in each of the five essential components (phonemic awareness, phonics, fluency, vocabulary and comprehension) by subgroup areas. WESTEST and DIBELS assessment results are reported to the USDOE for the fluency and comprehension components.

Ongoing studies indicate that 76 percent of Reading First schools met Adequate Yearly Progress (AYP) for 2007. Additionally, data from third grade WESTEST scores document proficiency gains for the Economically Disadvantaged, White, All and Students with Disabilities subgroups.

Reading/Language Arts Standards-Based Units

A revision to Policy 2510 resulted in the requirement for 90 minutes of daily instruction in reading/language arts in grades 5-8. This change prompted the need for teachers to better understand how to use the instructional block effectively for teaching the standards related to reading, writing, speaking, listening and viewing. In response to this identified need in the middle grades, a West Virginia Department of Education staff member assembled a team of middle level reading and language arts teachers to review the research related to the effective use of the 90-minute reading/language arts instructional block, backward design, literacy for higher student achievement and differentiated instruction. As a result of this collaboration, the team developed unit designs, lesson design templates and a training package for teachers.

During the 2004-2005 school year, the research team worked with a team of 18 teachers from across the state to develop standards-based units for reading/language arts in grades 5-8. During the summer of 2005, 150 teachers from the 10 counties represented by HB 4669 received training in the design of the units, as well as the strategies to be used within various units. Teachers are currently at various stages of implementing these units in their classrooms. In September 2005, a second design team of 20 teachers was assembled and they are currently designing 40 additional units that will be posted online by June 2006.

During the summer of 2006, English teachers from selected middle level schools and their feeder high schools received Advanced Placement (AP) vertical teaming training for two days. The middle level English teachers received an additional three days of training in selected units which served as the content for a Pre-Advanced Placement curriculum to be taught at the middle level. The goal is to bring rigor to the middle level English language arts classroom and to build a strong Advanced Placement English curriculum at the high school.

The Reading/Language Arts Standards-Based Units are housed on the Teach 21 Web site, http://wvde.state.wv.us/teach21/. Within these units, the CSOs reflect those that go into effect on July 1, 2008. The 21st Century Learning Skills and Technology Tools are also available on the Teach 21 Web site.

Response to Intervention

The West Virginia Response to Intervention (RTI) Project is designed to increase achievement for all students through a process that focuses on identifying students who need individualized and increasingly intensive intervention to acquire grade level skills. The training in an RTI process focused first on reading achievement for all students grades K-3 by supporting the implementation of a three-tier reading model. An ancillary goal of the project is to establish an appropriate method for identifying students with specific learning disabilities.

The project was established first in 2005-06 in 11 elementary schools. In 2006-2007, the project expanded to 36 elementary schools across the state. Each of those schools is now considered a demonstration school and is implementing a three-tier model reading instruction in the early grades that includes universal screening, the use of scientifically research-based reading instruction and intervention, continuous progress monitoring and the provision of additional instructional time for students who struggle. Schools have established common planning time wherein teachers meet to problem solve individual student difficulties. They conduct school-level book studies to increase their knowledge of research-based reading instructional practices.

In July 2007 four-person teams from every elementary school were trained in the model and in reading instruction within the model. Approximately 1,200 school personnel were trained.

Throughout the 2007-2008 school year, principals and teachers in these demonstration schools participated in a series of four professional development workshops designed to further extend their skills and knowledge relevant to instruction and intervention. Classroom teachers and interventionists will learn how to deeply analyze and use assessment data to form intervention groups and develop intervention lesson plans matched to individual student needs. They also will focus on improving the quality of their reading instruction through the use of explicit instructional routines and procedures.

RTI demonstration school administrators also participated in professional development that expands their leadership skills relevant to the implementation of the process. Principals will be provided regular opportunities to attend trainings, both face-to-face and Web-based, and to network with one another to problem solve and share ideas.

In subsequent years, the professional development protocol will be expanded to elementary schools across the state. Local trainers will be recruited from the 36 project schools to assist in capacity building and moving the instructional practices into all elementary schools.

Additionally, the RTI process has expanded to the upper elementary grades in the original pilot schools. Ten elementary schools will implement the tiered instruction model during the 2007-2008 school year in grades 4 and 5. Information gained from the initiative will assist the West Virginia Department of Education in its plan to move the model into middle schools beginning July 2010 and into high schools by July 2011.

In March 2008 information related to use of the Response to Intervention process in middle and high schools was provided to county administrators at the three–day County Leadership Team meeting and a webinar for upper elementary and middle school principals expanded on that on April 16, 2008. Professional development related to Tier II and III at the elementary level and forming literacy leadership teams at the middle schools will be provided during 2008—2009.

By June 2008, an evaluation of the RTI process will be in final design stage; and a schedule for data collection will be established. Of particular interest in the evaluation are achievement scores for 3rd graders on the WESTEST 2008 in schools that have been establishing the RTI process since September 2006, reduction in special education referrals, improvement in teacher knowledge of instructional practice for reading proficiency, and the impact on staffing and administrative practices.

During April 2007, Policy 2419 Regulations for the Education of Students with Exceptionalities, incorporated a timeline for establishing the RTI instruction framework to address achievement of all students across all schools. Elementary schools will have this process in place for use with special education selection by July 1, 2009; middle schools by July 1, 2010; high schools by July 1, 2011.

Responsible Students through School-Wide Positive Behavior Support Program (RS-SWPBS)

The RS-SWPBS Program strives to establish school climates where appropriate behavior is the norm. Research from the University of Oregon supports the dramatic reduction in the number of students removed from the classroom in elementary and middle schools when primary prevention strategies are in place, thereby increasing the time available for instruction. West Virginia

implemented the Positive Behavior Intervention System through a cadre of 97 teachers who work within 215 individual schools in 43 of the 55 districts to train teachers and other school staff. Currently, 19 cadre members remain active, and 98 schools that have been trained consider themselves to be actively using the PBS principles.

During the 2006-2007 school year, three counties participated in program evaluation to determine at what level of fidelity RS-SWPBS was being implemented within their schools. In Marion County Schools, ten schools were visited by the on-site evaluation team. At each school a School-wide Evaluation Tool (SET) was completed. One school (Barnes Alternative Learning Center) received *Exemplary* status, and eight schools received *Honorable Mention* status for program implementation. *Exemplary* status documents that 95% of the criteria for implementation have been met and the results associated with PBS can be expected. In Brooke County Schools, five on-site school visits were completed by the team. Two of the schools visited received *Honorable Mention* status. In McDowell County Schools, the review determined that *Respect and Protect* was being implemented rather than RS-SWPBS.

Program outcomes including reduction in suspensions and expulsions, reduction in other disciplinary actions that remove the student from the classroom and improvement of student achievement in schools implementing the program are being evaluated by Dr. John McLaughlin of Managing for Results, Inc.

At this time, no data are available that demonstrate the effectiveness of PBS in WV schools on achievement or behavior referrals. An analysis of available data on the context of referrals that take students out of class is being performed. When identified or generated, these data can be compared with achievement data in sites that are determined to be implementing with fidelity at a level that is associated with desired results.

School Nutritional Programs

The West Virginia Department of Education is the state administering agency for five United States Department of Agriculture (USDA) nutrition programs for children. Programs include the National School Lunch Program, School Breakfast Program, Child and Adult Care Food Program, Summer Food Service Program and the Special Milk Program. These programs assist sponsors to provide healthful, low-cost or free meals and snacks to children and functionally-impaired adults in a variety of settings,

including public and private schools, child care centers, residential institutions, shelters, family day care homes, summer camps and parks. In addition to providing nutritious meals and snacks, child nutrition programs promote lifelong healthful eating practices by integrating nutrition education, creating healthful learning environments and promoting nutrition in the community.

Child nutrition programs are intended to serve the nutrition needs of all children regardless of family income. Since the inception of the National School Lunch Act in 1946, Congress has affirmed the importance of sound nutrition to the health and welfare of children. Nutrition programs enhance learning and quality of life.

In West Virginia, the National School Lunch Program and the School Breakfast Program provide meals in every public school throughout the state. The National School Lunch Program qualifies 115,335 economically disadvantaged students, 41 percent of the total state school population, for free meals and 28,593 economically disadvantaged students, 10 percent of the total state school population, for reduced price meals. The Summer Food Service Program provides food services for economically disadvantaged students at 478 sites in West Virginia, including 11 colleges and universities, six community action agencies, four day care centers, 37 local school districts, four governmental agencies, one homeless shelter, 13 religious organizations and 20 residential camps and service agencies.

Child Nutrition Programs are audited annually in accordance with the United States Office of Management and Budget (OMB), Circular A-133, Additionally, the West Virginia Department of Education, Office of Child Nutrition monitors each program sponsor in accordance with federal and state program requirements.

Special Education Project to Reduce the Number of Misidentified Minority Students

Disproportionality refers to comparisons made between groups of students by race/ethnicity who are identified for special education and related services. Where students from a particular racial or ethnic group are identified either at a greater or lesser rate than all other students, that group may be said to be disproportionately represented in special education. The Individuals with Disabilities Education Act (IDEA 2004) requires states to examine data disaggregated by race and ethnicity to determine if significant discrepancies

are occurring in identification, placement and/or disciplinary actions. The statute requires that where a determination of disproportionality is found, the West Virginia Department of Education (WVDE) must provide for review, and if appropriate, revision of the district's policies, practices and procedures to ensure students are being appropriately identified for special education.

Disproportionate representation is defined as a risk ratio of 2.0 or higher for any racial/ethnic group consisting of 10 or more students in special education and related services and/or within a specific disability category. The Office of Assessment and Accountability (OAA) analyzed 2004-2005 child count data to determine potential disproportionality for the state and individual districts. A total of fourteen (14) districts emerged as potentially disproportionate in either the total number of students in special education or the number of students eligible in a specific disability category based on the weighted risk ratio method.

The OAA addresses the disproportionate representation of minority students in special education through its Continuous Improvement Focused Monitoring Process utilizing the district's self-assessment. The self-assessment includes an indicator whereby districts evaluate their status (compliant or non-compliant) related to the appropriate identification of students in particular racial/ethnic groups for special education. When a district has been determined to be disproportionate, the district must utilize a rubric developed by the OAA to review its policies, procedures and practices related to the identification of minority students for special education. The monitoring staff conducts a thorough review of each district's self-assessment upon submission. evidence of inappropriate identification is found, the district must submit an improvement plan to correct the deficiency within one year. Included in this review is an examination of the disproportionality indicator, the improvement plan and all supporting documentation. If a district's improvement plan is not approved, technical assistance may be provided, including professional development and/or an on-site review to verify the appropriateness of the district's identification, evaluation and eligibility processes. Corrective activities or sanctions may be required.

In 2006-2007, eight districts emerged as potentially disproportionate. Utilizing a draft rubric provided by the National Center for Culturally Responsive Education Systems (NCCRES), each district conducted the review of its policies, procedures and practices to determine whether the disproportionality was a result of inappropriate identification of students for special education and related services. The OAA reviewed and scored the rubrics and notified each district of its compliance status on the Self-Assessment Indicator 4.19. If a district was determined non-compliant, an improvement plan was required to

be submitted with the district's self-assessment. The districts are required to submit a progress report on those improvement plans on or before November 15, 2007.

Through the examination of disaggregated data, professional development needs have been identified in the following areas: identification and implementation of research-based interventions for students with academic, behavioral and/or emotional deficits, non-discriminatory assessment instruments and practices and a culturally responsive school climate.

The OAA will pilot a file review checklist in four (4) districts during the fall of 2007 to ensure districts are appropriately referring, evaluating and identifying minority students for special education. The checklist will be conducted on files of students across all racial and ethnic groups who have been referred to the Student Assistance Team (SAT) and are currently receiving services in general and special education settings. The analysis of these data will assist the OAA in determining whether discriminatory practices in referral, evaluation or the identification of students for special education may be occurring in the districts.

Special Education Reading Project (SERP)

The goal of the Special Education Reading Project (SERP) is to develop and deliver statewide teacher professional development to address the needs of struggling readers in the elementary grades. The objectives of the project include training in basic literacy content (i.e., five essential components of reading) and how to make instructional adaptations that increase student academic performance.

Staff from the Offices of Special Programs, Extended and Early Learning participated in training and then trained cadre members in the SERP. The cadre is comprised of reading specialists, special education teachers, West Virginia Department of Education staff and invited representatives from higher education. Teams from each Regional Education Service Agency (RESA) consist of two special education teachers, two regular education teachers and other Regional Education Service Agency personnel for a total of thirty-two teachers. Four of the RESA teams provided SERP training to teachers within their RESAs. A total of 186 teachers were trained in basic literacy through the SERP. Additional training sessions are scheduled for 2007.

The SERP will be used during 2008–2009 as the framework for targeted training to elementary special education teachers to augment professional development associated with the Reading First grant.

Special Education Services

The West Virginia Department of Education (WVDE) provides federal and state funding to all 55 counties, the West Virginia Schools for the Deaf and Blind, institutional Education Programs and the Regional Education Service Agencies (RESAs) for the purpose of implementing the Individuals with Disabilities Education Act (IDEA 2004) and West Virginia Code. Special education services are provided by 3,322 special education teachers to approximately 50,000 students identified as students with disabilities. The West Virginia Department of Education, Office of Special Programs, Extended and Early Learning and the Office of Assessment and Accountability provide oversight of IDEA implementation, focusing equally on compliance with the statute's provisions and on improving results for students with disabilities.

Schools and counties are accountable for the achievement of students with disabilities. This is typically measured through performance on state assessments, graduation with a regular diploma and progress toward reaching goals on Individual Educational Programs (IEP). The West Virginia Department of Education is additionally responsible to the United States Department of Education's Office of Special Education Programs (OSEP) to ensure that progress is demonstrated in reaching rigorous and measurable targets for 20 indicators included in the federally required State Performance Plan. These targets include, among others, increased graduation rate, decline in the dropout rate, increased percentage of students with disabilities achieving mastery in content areas as measured on the WESTEST and Alternate Assessment, and transition planning that results in postsecondary education, employment and independent living.

On the 2007 WESTEST, 42 percent of Students with Disabilities achieved proficiency in reading, an increase of one percent from 2006. Forty- two percent of the Students with Disabilities achieved proficiency in mathematics, an increase of one percent from 2006. *The State Performance Plan 2005-2011* submitted to OSEP on December 2, 2005, projects that 77 percent of the Students with Disabilities subgroup will achieve mastery in reading in the spring 2011 testing and 76 percent of the subgroup will achieve mastery in mathematics at that time.

The West Virginia Board of Education's Policy 2419: *Regulations for the Education of Students with Exceptionalities* was substantially revised in April 2007 to incorporate a timeline for establishing a response to intervention process not only to identify students as learning disabled but also to ensure early intervention services are in place in all elementary schools. Results from RTI pilot schools and from the Reading First schools,

foundation for the RTI system, indicate a reduction in referrals to special education because of increased reading proficiency. All elementary schools must have in place by July 1, 2009 an RTI process based upon a three-tiered instruction and intervention model. Middle schools must be in compliance with policy by July 1, 2010 and high schools by July 1, 2011.

Students who are deaf and hard of hearing rely on the expertise of educational interpreters to access the general curriculum. The WVBE revised its Policy 5202 Licensure of Professional and Paraprofessional Personnel in August 2006 to include a classification for Paraprofessional Certification-Educational Interpreter which becomes effective July 1, 2008. This new classification carries with it a requirement that the Educational Interpreter has achieved a 3.0 on the Educational Interpreter Performance Assessment (EIPA) before the 2008-2009 school year and a 3.5 or higher by school year 2010—2011. These scores are required before the certificate is awarded. This ensures that students requiring an Educational Interpreter will have comprehensive understanding of the Content Standards and Objectives being taught in the general or special education classroom. West Virginia currently has approximately 90 educational interpreters who are being prepared to take the exam so that they can move into the new paraprofessional classification. There are approximately 478 students who are deaf and hard of hearing and may need the services of Educational Interpreters.

Students identified with significant cognitive disabilities receive instruction on the Extended Standards (Policy 2520.16), which were approved by the West Virginia Board of Education in early 2006 and are linked with the West Virginia Content Standards and Objectives. These standards and the Alternate Performance Task Assessment (APTA), which measures student mastery of the extended standards, received full approval in the U.S. Department of Education's comprehensive peer review of the state's assessment system. In May 2007, 1,761 students took the APTA exam. Students achieved an average 10 percentage point gain across grades in both reading and math from 2006 to 2007.

Taskforce on Elementary LEP Education

The Taskforce was launched in the spring of 2006, based on recommendations from Title III Directors and upon the growing number of Limited English Proficient students across the state. There are approximately 1,000 elementary limited English proficient students in West Virginia. The Taskforce, consisting of various state and county stakeholders, established as its goals 1) the development of online and written resources describing best

practices for elementary administrators and teachers of limited English proficient students and 2) official guidance documents on issues such as delivering an uninterrupted reading block for English Language Learners, teaching Content English as a Second Language (ESL) and Sheltering Instruction in the classroom.

As a result of their efforts, the Taskforce published a Toolkit and several guidance documents in 2007. They are available at http://wvconnections.k12.wv.us/toolkit.html and http://wvconnections.k12.wv.us/guidance.html.

Title I—NCLB

Federally-funded compensatory education programs in West Virginia operate under Public Law 107-110, known as the No Child Left Behind Act of 2001 (NCLB). Title I is the largest single program of federal aid for elementary and secondary education. Title I funding impacts the ability of districts to implement and accomplish the two missions of the United States Department of Education: enforcing equity and promoting excellence in education. The purpose of Title I is to ensure that all children have a fair, equal and significant opportunity to obtain a high quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and assessments. Currently, all 55 districts receive Title I funding to serve 368 public schools and 24 private schools within the state. The programmatic breakdown is 326 elementary schools, 48 middle schools and four high schools.

Review and evaluation of WESTEST data indicate that Title I schools are making steady gains in achievement. Of the 368 public schools that receive Title I funding, 90.22% were at or above the standard for meeting adequate yearly progress (AYP). Trend assessment data for individual schools is available for the years 2004-2007 on the following Web site, https://wveis.k12.wv.us/nclb/private/nclbdata07/trend data.cfm?cn=999.

Title I School Improvement—NCLB

West Virginia Title I schools, which have been identified for improvement under the requirements of the No Child Left Behind Act, receive specific technical assistance in identifying needs and implementing research-based strategies to close the specific achievement gaps causing the school to be identified for improvement. School improvement teams receive training in identifying needs, creating change, curriculum, instruction, school effectiveness,

and in creating support systems necessary to close the achievement gap between subgroups.

In 2004-2005, West Virginia had 37 Title I schools identified for improvement. For the 2005-2006 school year, there were 36 schools identified for improvement and in the 2006-2007 school year, there were 25 schools identified for improvement. A list of identified schools and the sanctions is available on the West Virginia Achieves Web site, http://wvde.state.wv.us/wvachieves/resources.html.

According to NCLB §1003, four percent of each state's Title I, Part A funding must be allocated for the purpose of carrying out the state educational agency's statewide system of technical assistance and support for schools identified for improvement. For the 2005-2006 school year, 26 local education agencies (LEAs) and 36 schools identified for improvement received this funding. For the 2006—2007 school year, 18 LEAs and 22 schools identified for improvement received this funding.

A review of spring 2006-2007 WESTEST data indicated that 16 of 34 schools (47 percent) made increases in reading; 16 of 34 schools (47 percent) made increases in mathematics; and 23 of 34 schools (67 percent) made an increase in at least one or both, reading and mathematics.

University of Kansas Learning Strategies in Writing

The University of Kansas Learning Strategies in Writing Program is being systematically used in 13 counties across the state in an effort to improve writing and reading skills of all participating students in the 14 pilot middle schools. A three-year research project, 2005-2008, is designed to measure the effects of the program on results of the West Virginia Writing Assessment. The initiative is organized by the Regional Education Service Agencies (RESAs) and funded by the Office of Special Programs, Extended and Early Learning. Both general and special education teachers have participated in training and implementation of the Writing Program. The program is evaluated through data collected from annual pre- and post-writing samples, WESTEST scores, and self-reporting by trainers, teachers and administrators of pilot schools. Evaluation results have been shared with Dr. Don Deshler, University of Kansas, upon completion of each year of the project.

Outcomes from the first year (2005—2006) indicated that 3823 students participated, 419 of those were students with disabilities. Results from this year reflect that the percent of students (7th grade) achieving mastery or above on the WV Writing Assessment increased in 10 of 14 schools. The range of increase was between 1 and 16 percent.

Outcomes from the second year (2006-07) indicated 3671 students participated, 348 of those were students with disabilities. Results from this year reflect that the percent of students (7^{th} grade) achieving mastery or above on the WV Writing Assessment increased in 8 of 15 schools. The range of increase was between 2 and 18 percent.

In conclusion, although these results are based upon different cohorts of 7th graders, achievement gains in writing are demonstrated in the data from pilot schools participating in the program. According to teacher reports, the impact of the program is directly affected by the degree of administrative support, monitoring implementation for fidelity and teacher commitment to the project.

The unpredictable nature of implementation and inconsistent achievement trends has resulted in the Office of Special Programs (OSP) removing support for the project at the state level.

West Virginia Phonemic Awareness Statewide Project

In 2001, the West Virginia Department of Education initiated the Phonemic Awareness Project. The purpose of this early literacy initiative is to increase the number of students reading on grade level by emphasizing the importance of phonemic awareness as an early teachable reading skill. Focusing on early literacy skills at the first grade and kindergarten levels, school-based teams are trained to implement intensive phonological awareness intervention for students who have low early literacy skills and to provide daily phonemic awareness instruction to K-1 students. The results of project evaluation data indicate that intensive phonological awareness instruction provided to children at risk for reading problems was an effective means for enhancing literacy skills. Subsequent evaluation information continues to validate the success of this intervention.

Funding and coordination of the project is provided by the Office of Special Programs, Extended and Early Learning. Approximately 200 schools throughout West Virginia are currently implementing the program including all Reading First Schools and RTI Demonstration schools. The *WVDE Task Force to Improve Results for Students in High Need Populations: A Strategic Plan* includes a recommendation to expand the WVDE Phonemic Awareness Project to all elementary schools by 2010. In order to obtain full implementation, training sessions will be offered to schools in designated RESAs during the next two summers. Training for schools in RESAs I, II, III and IV was provided in summer 2007. A technical assistance document is available to assist schools in implementation of the project.

West Virginia Reading Excellence Accelerates Deserving Students (READS)

In 1998, the West Virginia Legislature enacted House Bill 4306 to initiate a competitive grant program for K-4 reading. West Virginia READS was established to provide an extended instructional time program to address achievement difficulties that may prevent students from performing at grade level in kindergarten through grade four. Thirty competitive grants of \$10,000 are available to elementary schools in West Virginia to provide summer school opportunities for students who exhibit reading difficulty. Priorities for awarding grants include schools that have test scores below the state standards and schools that receive federal funds for the improvement of reading. Applicants are encouraged to include a strong component addressing kindergarten and first grade at-risk students.

The project serves an average of 950 students each summer in 30 elementary schools. Results of pre- and post-assessments indicate overall student growth in reading achievement during the summer intervention. Each grant application must include an evaluation component requiring the school to discuss in measurable terms how the project will be evaluated and how the goals and objectives were met in reference to the West Virginia Content Standards and Objectives. A final report with evaluation data must be submitted by each school at the completion of the program.

The West Virginia State Personnel Development Grant (Building Bridges to Literacy)

In September 2007, the OSP received a five-year State Personnel Development Grant (SPDG). This grant provides for professional development and other supports for general and special education teachers working with children and youth with disabilities to assist them in acquiring reading skills Pre-K through grade 12. and to offer a foundation for improved outcomes in demonstrated knowledge, graduation, transition to positive postsecondary options and a quality of life equivalent to that of their peers without disabilities. The grant incorporates research-based and established training programs, an emphasis on the specifics of providing interventions at Tiers II and III within a Response To Intervention (RTI) process, the sequence for building a transition reading course for high school seniors who do not achieve mastery on the 11th grade WESTEST, and strengthening the state infrastructure to increase the number of special education teachers seeking National Board Certification. This five-year grant will provide professional development opportunities for teachers from September 2007 through August 2012.

West Virginia Test of English Language Learning (WESTELL)

As required by NCLB and West Virginia Board of Education Policy 2417, the WESTELL assessment was first implemented as an operational test in 2004-2005 to measure the English language proficiency of the state's limited English proficient (LEP) students. In 2007, the WESTELL was administered to approximately 1,400 Limited English Proficient students in 35 counties. Data analyses of test scores have resulted in statewide training modules to assist schools with a) an understanding of the Interpretation Guide and score reports, b) using WESTELL data to inform instruction of LEP students and c) providing meaningful information to parents regarding students' English language development. The American Institute of Research (AIR) provides strong evidence of reliability for making judgments about student performance of limited English proficient students and school improvement based on WESTELL.

Highly Qualified Personnel

Alternative Routes to Certification

The No Child Left Behind Act (NCLB) requires that all teachers in Title I schools meet requirements to be highly qualified by the end of the 2005-2006 school year. NCLB did not address the requirements for special education teachers who teach the core academic subjects named in the law. The reauthorization of IDEA in 2004 gave specific direction to states regarding the requirements for all special education teachers to be considered highly qualified in their special education assignments.

West Virginia's WVEIS system is currently (January 2006) collecting information on the number of teachers in all assignments who have achieved highly qualified status. The total is, therefore, not known. In the 2004-2005 school year, 20 percent of special education teachers were not licensed to teach in their primary assignment. The need for alternate routes to certification was clear so that special education teachers could attain both licensure and highly qualified status as appropriate. Both IDEA and NCLB provide for a teacher to be identified as highly qualified if the teacher is enrolled in an alternative route to certification. That status is retained for three years while the teacher completes the program.

The West Virginia Board of Education approved a West Virginia Department of Education alternate route to certification program for special education teachers in July 2005. This 21-credit-hour program addresses the need for special educators teaching in a core academic subject to be certified in that subject. The credit hours can be met through coursework, professional

development, or an internship. There are currently no evaluation models in place to measure the success of the program. Participation and certification data will be available through the Office of Professional Preparation.

Highly Qualified Internship

The Highly Qualified Internship is a means by which special education teachers are paired with content area advisors. The special education teacher will earn six credits for the year-long internship; these hours may be applied to a 21-hour alternative certification program in the content areas. This program will lead to more teachers being highly qualified in reading and mathematics. More information on these alternative routes to certification is available at http://wvde.state.wv.us/teachwv/altroute internshp.html. No evaluation studies have been conducted on this project. Participation data are available through the Office of Professional Preparation.

Highly Qualified Teachers

The West Virginia Department of Education has developed a link to the West Virginia Department of Education Web site, http://wvde.state.wv.us/certification, to assist teachers in making a determination about their status as a highly qualified general education or special education teacher. Using a series of "yes/no" questions that mirror the No Child Left Behind Act, Highly Qualified Teacher criteria, a West Virginia teacher can determine his/her highly qualified status. In addition, for those special education teachers who may be assigned to teach a core academic subject, alternative routes to certification have been developed by the West Virginia Department of Education. These routes provide reasonable options for meeting the definition of highly qualified by utilizing previously completed coursework and state-approved professional development.

In the 2005-2006 school year, 91.7% of core academic subjects were taught by highly qualified teachers. During the 2006-2007 school year, 90.9% of courses were taught by highly qualified teachers. However, in 2006-2007, only 76.4% of special education courses were taught by highly qualified teachers. More specific data can be found at http://wweis.k12.wv.us/teacher_credentials/highly_credentialed_2007_report_select.cfm?monitor=hqt2007.

National Board Certification

The performance standards are based on The National Board for Professional Teaching Standards (NBPTS) policy statement, **What Teachers Should Know and Be Able to Do**, and the **Five Core Propositions**, http://www.nbpts.org/pdf/coreprops.pdf. The standards are written by practicing classroom teachers, development experts, and national educational leaders in each respective disciplinary field. The standards are widely disseminated for public review, approved by the NBPTS Board of Directors and made available online at no charge. There have been more than 150 studies, reports and papers commissioned on the National Board certification process. Studies show that National Board Certified Teachers (NBCT) scored higher on teaching expertise than teachers who sought, but did not achieve National Board Certification. Other attributes include 1) having an extensive knowledge of subject matter; 2) having the ability to adapt and improvise instruction; 3) being able to formulate lessons that are challenging and engaging; and 4) promoting academic achievement.

In West Virginia, about one-third of the state's National Board Certified Teachers teach in Title I eligible schools, which often have students who face the most challenges. In 2009, 74 additional West Virginia teachers earned certification from the National Board for Professional Teaching Standards, bringing the total number of NBCT teachers in West Virginia to 494. This total represents a 41 percent increase in the number of NBCT teachers from school year 2006-2007 (291 NBCTs) to school year 2008-2009.

Teach West Virginia

Teach West Virginia is a teacher recruitment and retention Web site that aims to increase the number of highly-qualified educators in West Virginia by offering helpful information to prospective teacher candidates about the educator preparation, certification, employment, and professional development processes. The educator preparation section features a listing of all approved personnel preparation programs in West Virginia, information about career switcher programs (for example, Troops to Teachers and Transition to Teaching), alternative routes to certification, and substitute teaching.

The certification section features all of the West Virginia state requirements for educator certification, application, form submission, and the Praxis examination. This section also provides a link where users may check their certification status online. The Ways to Grow section features information about advanced credentials (NBPTS), e-learning, the Model Classrooms Project, the Classroom Assessment Network, and state tuition reimbursement. In addition, the Web site features one section devoted to the promotion of Global 21 and the West Virginia Professional Teaching Standards.

Teach West Virginia is a product of the West Virginia First Class grant awarded to the West Virginia Department of Education by the Claude Worthington Benedum Foundation. Teach West Virginia launched in December 2009, and may be accessed at www.teachwv.com.

Integration of Instructional Technology Projects

Title II D—Enhancing Education Through Technology (EETT) NCLB

This federally-funded program in West Virginia has been available to all 55 counties under the formula or competitive sections of the program. The EETT competitive program has focused on providing schools with Technology Integration Specialists (TIS). This program was evaluated by a federally-funded, three-year U.S. Department of Education research and evaluation grant. During that time of intensive study, comparison schools were used to research the TIS intervention for student achievement. Results show the success of the model professional development and the gains in student achievement (http://wvde.state.wv.us/evaluation).

21st Century Tools for 21st Century Schools

The new *Tools for Schools* legislation was known as the elementary/middle school Basic Skills/Computer Education (BS/CE) program and the secondary level SUCCESS (Student Utilization of Computers in Curriculum for the Enhancement of Scholastic Skills) program. The elementary/middle school program provides approximately 446 elementary schools and 130 middle schools

in the state with the hardware and software to improve basic content knowledge and skills using technology. The West Virginia BS/CE Program goals are to improve students' skills in reading, writing, mathematics, and technology literacy, as well as to provide timely quality professional development for teachers integrating the program in content areas. West Virginia's BS/CE program has had a positive impact on student achievement, as was detailed in a study released by researchers from Columbia and Hofstra Universities. The program continues to evolve with the changing content standards and objectives to meet Policy 2510.14—21st Century Learning Skills and Technology Tools (http://wvde.state.wv.us/policies/p2520.14 ne.doc).

The secondary program provides the technology tools to prepare students in West Virginia's approximately 300 secondary schools to succeed in college, other types of post-secondary education, or to obtain gainful employment. The goal of the initiative is to enhance the curriculum through instructional technology and to develop 21st century skills for students resulting in improved student achievement. Staff development is critical to the successful implementation of technology. Appropriate opportunities for staff development are provided through the *Tools for Schools* statewide contracts.

In May 1999, the West Virginia Department of Education entered into a contract with MGT of America, Inc., to conduct research into the effectiveness of SUCCESS and to assess the degree to which the program objectives are being achieved. The study commended Governor Cecil H. Underwood, the West Virginia Legislature, and the West Virginia Department of Education for "establishing the vision for SUCCESS and then implementing the initiative in a positive manner" (MGT, 2000, p. 1-17). The study found, "the SUCCESS Initiative has impacted many secondary students in a positive way" (MGT, 2000, p. 4-4), citing that through the integration of technology into the curriculum, students experienced increased learning capacity and development of specific work place skills. The programs have expanded on the basis of solid research and evaluation and changed to meet the new policies and to provide 21st century learning environments.

Digital Divide

The Digital Divide data provides statistics regarding the technology implementation status in West Virginia schools. The information is used to develop the school/district strategic plan which incorporates technology integration. The results are also used for the State Educational Technology Plan to address areas

of professional development, implementation, bandwidth and integration practices to advance student achievement. The 21st century technology utilization must be evident or there will not be the advanced changes needed to prepare students for the future (http://access.k12.wv.us/techplan/WV%20State%20Tech%20Plan.pdf). The statistics and goals for improvement for student-computer ratio is found on page 44 of the plan.

West Virginia Learns E-learning Platform

WV Learns is the statewide learning platform used to provide professional development, house online courses for educators and for K-12 students, provide end-of-course testing and "proof of knowledge" learning opportunities for employees in the health areas dealing with students. The e-learning platform allows teachers to develop a classroom work space for specific face-to-face online resources.

West Virginia is one of nine states and nine public broadcasting stations developing a state specific E-Learning for Educators program. The program is a result of a United States Department of Education grant to the West Virginia Department of Education and West Virginia Public Broadcasting from the Ready to Teach program. This technology initiative's mission is to provide a successful, sustainable program to address statewide teacher quality needs via Internet-based professional development courses for teachers.

E-Learning for Educators will allow e-learning instructors and e-learning course developers to receive professional development via e-learning courses to meet high priority needs for West Virginia school teachers, with a particular emphasis on teachers from eligible at-risk schools and districts.

West Virginia Virtual School (WVVS)

The West Virginia Virtual School helps bridge the barriers of time, distance, and inequities for all West Virginia students by providing access to educational resources that may not otherwise be available. West Virginia Virtual School began with three middle school students and has grown to serving over 6,000 students. There are currently approximately 600 students enrolled in the WVVS Spanish program. Rockman et al, a national research firm specializing in educational research, has studied the effectiveness of the West Virginia Virtual School Spanish program. The results may be reviewed at http://wvde.state.wv.us/evaluation.

E-rate Funding

Bandwidth is a necessity to provide 21st century learning resources, online courses, research, multi-way communications, collaboration, project-based learning and equity of access. West Virginia participates in the federal E-rate program that provides cost discounts for eligible educational locations. West Virginia participates on a statewide basis to provide Internet access and internal connections for all schools in the state. While almost all schools have a T-1 communications line, all schools will improve to advance towards a 1-to-1 access with adequate bandwidth for a world-class learning environment.

21st Century Partnerships for Instructional Technology Tools and Professional Development

West Virginia has partnered with Intel (http://wvde.state.wv.us/intel), Oracle, Verizon Foundation (http://wvde.state.wv.us/sas) to provide 21st century instructional technology tools, resources and professional development for teachers and administrators. See the links for details of the enormous opportunities and implementation status.

techSteps

The West Virginia Department of Education (WVDE) has searched for quality 21st century learning and assessment of technology literacy. Having reviewed *The Assessment of 21st Century Skills: The Current Landscape*, it is evident that a multiple choice test will not provide evidence in a 21st century learning environment of technology literacy. After months of searching for the appropriate program and with input from a national advisory committee, the WVDE has partnered with SchoolKit to implement techSteps. TechSteps is a comprehensive program that provides planning, teaching, professional development and assessing K-8 technology literacy in an integrated, 21st century context for 21st century learning on a statewide basis. Beginning with 13 pilot districts in Fall of 2007, the program will be moved to all K-8 schools in the Fall of 2008.

The progress in implementing the Instructional Technology Initiatives described above include:

In early evaluations, Basic Skills/Computer Education attributed an

11 percent improvement in reading and mathematics to the computer interventions.

- Only 79 secondary schools have met the 1:3 computer to student ratio.
 102 did not meet the ratio.
- 406 elementary/middle schools have met the 1:5 computer to student ratio. 184 did not meet the ratio.
- **E-Learning** is currently being implemented as a result of a federal grant.
- Three years of data provided positive findings regarding the impact of
 Enhancing Education through Technology. Student Utilization
 of Computers in Curriculum for the Enhancement of Scholastic
 Skills (SUCCESS) effectiveness study has cited that through the
 integration of technology into the curriculum, students experienced
 Increased learning capacity and development of specific work place
 skills.
- Preliminary results for West Virginia Virtual School indicated substantial gains in the number of participating students and a positive impact on student learning.
- **E-rate** is providing necessary discounts for schools to purchase telecommunications lines.
- The West Virginia Department of Education is partnering with Edvantia and federal evaluators to provide feedback on the quality of **techSteps** implementation and resulting best practices. This will be in addition to the data collected on the individual students for evidence of learning technology literacy.

School System Expectations

21st Century Skills

Educators and the general public recognize that a gap often exists between the technologies and learning skills that children actively employ daily outside of the classroom and those in which they participate within their classrooms. "Information and communication technologies are raising the bar on the competencies needed to succeed in the 21st century, and they are compelling us to revisit many of our assumptions and beliefs" (p. 4, 21st Century Literacy Summit, 2002).

A survey of 800 registered voters taken between September 10-12, 2007, by *Public Opinion Strategies* and *Peter D. Hart Research Associates* indicates that American voters want more than basic skills taught in our schools. Almost nine in 10 voters (88%) believe that 21st century skills can and should be part of the curriculum. Six in 10 voters say that our schools are not keeping pace with changing educational needs; 80% of polled voters stated that the things that students need to learn today are different from 20 years ago.

As of June 2005, 68% of American adults (approximately 137 million) use the internet. Certain groups continue to lag behind in internet use, including those 65 years of age and older, African-Americans, and those with less education (Pew Internet & American Life Project, 2005).

- 29% of adults who have not graduated from high school have internet access while 89% of college graduates have access.
- 57% of African-Americans go online compared with 70% of whites. Americans living with a disability and those who are not native English speakers are also less likely to have internet access.
- 38% of disabled Americans have access to the internet (Pew study, 2002).
- 53% of internet users have high-speed connection at home, up from 21% of users in 2002.

While technology integration and use are critical to 21st century learning, literacy is seen as the fundamental gateway skill for learning core content, acquiring 21st century skills, and performing in a job. In a survey of registered voters (Public Opinion Strategies and Peter D. Hart Research Associates, 2007), reading comprehension ranked highest in importance among voters polled. Voters expressed support for a broad range of 21st century skills including computer and technology skills (71%), critical thinking and problem solving (69%), written communications (58%), oral communications (56%), lifelong learning and self-direction (50%), creativity and innovation (43%), media literacy (42%), and global awareness (42%). Surprisingly, these voters' views of how well our schools are teaching these skills is very low. For example, when asked if they would give American schools a 9 or 10, on a scale of 1-10 with 10 being the highest score, in teaching a skill such as reading comprehension, only 10% of the 800 voters polled assessed the schools as 9 or 10. Thus, we might conclude that public confidence in what schools currently teach as adequately preparing students for living in the 21st century is low. There is a perceived gap between what skills the public believes that students need to learn and what skills the schools are currently teaching.

In November 2005, West Virginia became the second state to be accepted into the Partnership for 21st Century Skills. This broad-based public-private partnership was founded through the efforts of the United States Department of Education, eight business organizations, and two individuals. The initiative was originally created in response to the ever increasing gap between the knowledge and skills most students learn in school and those required to be successful in today's workplace and as integral members of communities.

Preparing students to meet the challenges of the 21st century requires a pedagogically combined effort. The six key elements to the 21st century education are learning skills, core subjects, 21st century content, 21st century context, 21st century assessment, and 21st century learning tools. A co-requisite to the six key elements is expertise in specific 21st century skills. These skills encompass information and communication, thinking and problem-solving, and interpersonal and self-direction. Completing the skills set are financial, economic, and business literacy, global awareness, and civic literacy.

Implementation of the 21st century structure for meeting the critical elements of the partnership application has defined 40 initiatives that need to be addressed at the state and local levels. A work plan detailing the initiatives will be followed over the next five years. An evaluation plan has been designed to measure the success of implementing the defined critical elements within the state school system.

Framework for High Performing School Systems

The Framework for 21st Century School Systems (http://wvde.state.wv.us/frameworks) represents a major initiative to describe practices that will bring both equity and quality to the process of developing graduates prepared for the 21st century.

The *Framework* is intended to achieve three specific purposes: 1) to provide a guide for equity and quality by transforming local school systems to "learning for all" organizations, 2) to help focus leadership and technical assistance activities of state, regional, and local educational agencies, and 3) to provide a unified approach and common language for school system improvement in West Virginia. The four pillars of the *Framework* are curriculum management, instructional practices, school effectiveness, and student/parent support. The *Framework* supports culturally responsive teaching but appropriate resources must be provided and professional development must occur to incorporate these teaching concepts into a system wide approach.

The *Framework* was developed by a 100 member committee of West Virginia Department of Education and Regional Education Service Agency staff

in a series of nine development sessions. It was reviewed by experts in school and school system improvement and by West Virginia superintendents of schools attending the annual summer Superintendents' Leadership Institute.

No two school systems are alike, nonetheless, all students deserve the same high quality educational experience wherever they attend school. The West Virginia Board of Education and the West Virginia Department of Education commit to responding to the varied needs of the 55 schools systems through the *Framework*. The Department has also completed the development of the *Framework for High Performing Schools and Classrooms* at the elementary, middle, and high school programmatic levels.

School Safety

W. Va. State Code §§16-9A-4; 16-9A-9; 17A-1-4; 18-2-5; 18-2-5Aa; 18-2-7b; 18-2-9; 18-2-33; 18-2C-1 et seq; 18-5-1; 18-5-13; 18-16-1; 18A-1-1; 18A-5-1; 60A-1-101; 60A-7-11a; 61-2-25; 61-7-2; W. Va. Const. Art. XII, §2 and West Virginia Board Policy 4373, Student Code of Conduct have been developed and approved to set the requirements for the conduct of students in West Virginia schools in order to ensure a nurturing and orderly, safe, and drug/violence/harassment-free learning environment that supports student academic achievement and personal/social development. Additionally, this policy defines the identification process for classifying schools as Persistently Dangerous Schools; this process began in 2003. To date, West Virginia has not identified any schools as persistently dangerous. Studies show schools that are free from threat of physical harm and engage students in the teaching and learning process show increases in school achievement (Moore & Ralph, 2000).

West Virginia Online Five Year Strategic Plans

The West Virginia Department of Education has designed and implemented an online five-year strategic planning process for school and school district systemic planning. The planning process encourages the incorporation of 21st century skills as desired outcomes of the goals and objectives of the plan. All members of the educational "team" are expected to plan collaboratively and strategically for progress toward a 21st century model of learning for all, and to take the appropriate and necessary action to institutionalize the plan throughout the system.

The plan unifies various federal and state planning requirements in a process designed to improve the equity and quality of student achievement. An important component of the planning process is the review of student perform-

ance data disaggregated by subgroups. Such data analysis enables schools and school districts to establish priorities for the goals, objectives, performance benchmarks (i.e. targets for improvement), and actions taken to raise the performance of all students while closing the achievement gaps existing between student subgroups. Annual reviews by the West Virginia Department of Education are completed to analyze and approve the online five-year strategic plans.

Beyond School Programs

The **beyond school** indicators deal with teaching and learning, as well as with the learning environment during the time the child is outside the school system. The learning environment literature addresses school system expectations and school safety.

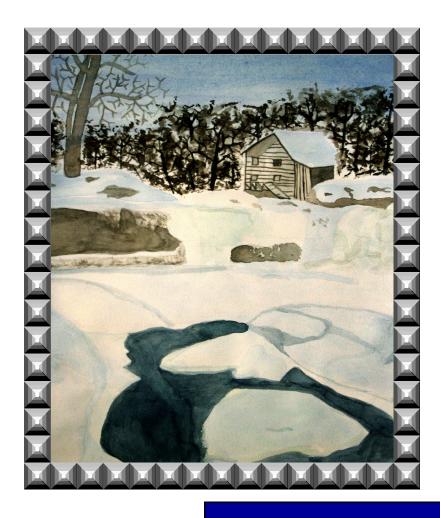
To date, the West Virginia Department of Education has worked to provide statewide leadership to close the achievement gap during the **beyond school** time frame with extracurricular programs through the 21st Century Community Learning Centers Program.

21st Century Community Learning Center Programs

The West Virginia Department of Education has called for the creation of local community learning centers operated beyond the school day. The 37 centers (35 counties) provide academic enrichment opportunities for 40,694 children, particularly students who attend high poverty and low performing schools, through the federal 21st Century Community Learning Centers Program. Additionally, this program offers literacy and other educational services to families of participating children. The programs are delivered before school, after school, and during the summer months.

To date, West Virginia has five cohorts receiving funding for proposals that provide academic opportunities for these children and their families. Cohorts A and B include 18 projects, Cohorts C and D fund 13 projects, and Cohorts E and F fund 6 projects. Each application requires a local, state and federal evaluation component. Additionally, the West Virginia Department of Education monitors each program as per the 21st Century Community Learning Centers federal application requirements.

Recommendations



Tracy Gregory

Richwood High School Nicholas County

RECOMMENDATIONS

The recommendations for improving student performance are based on review and consideration of systemic initiatives, WVDE programs, policy changes, task forces, revised frameworks, 21st Century Partnership, and analysis of overall reading/language arts and mathematics results from international assessments such as PIRLS, national assessments including NAEP, ACT, ACT EXPLORE, ACT PLAN, SAT, CTE, and HSTW, as well as state assessment results of WESTEST 2. In addition, seminal and current research in education, and review of non-assessment performance indicators including Advanced Placement, Attendance Rate, Dropout Rate, Graduation Rate, and CTE Postsecondary Placement for students in West Virginia were considered.

Assessment & Monitoring

- 1. Develop a school and school system performance profile that exceeds AYP expectations and that incorporates 21st century assessments.
- 2. Complete the development of WESTEST 2 aligned to more rigorous 21st century CSOs.
- 3. Complete the development of an on-line Writing Assessment for grades 3-11 that is incorporated into WESTEST 2 Reading/Language Arts scores.
- 4. Develop *College Readiness Standards for English and Math* that are aligned with the WESTEST 2 assessment in order to generate a college readiness score.
- Develop and implement a College Readiness Index that includes WESTEST 2 college readiness score, ACT PLAN and ACT EXPLORE performance and that may be used in high schools to determine course placement.
- 6. Develop and maintain a monitoring system for tracking student achievement that evaluates the effectiveness of special education and Title I services that are included within self-assessment systems.
- 7. Develop and maintain a monitoring system to track achievement growth of identified gifted students.
- 8. Develop and implement an on-line IEP that effectively utilizes existing electronic data to monitor student progress.
- Develop a criteria for identifying students who need a modified WESTEST 2 assessment in order to generate the need for administration of a separate type of assessment tool.
- 10. Develop an outcome-based monitoring tool for determining the effectiveness of RTI implementation in each school.
- 11. Develop electronically-based Webinars/Webcasts for subject specific teachers to learn about effectively utilizing ACT PLAN and ACT EXPLORE data.

- 12. Develop an on-line *SAT* and *ACT Writing Guide* for 11th grade students designed to increase student performance scores.
- 13. Develop an on-line *ACT Math Guide for Students* to move scores from the 16-19 range to 20-23 range.
- 14. Establish and implement an 8th grade technology assessment to ensure technology literacy for all students prior to entering high school.
- 15. Develop and monitor the regular use of the *Mathematics Program Review Process*.
- 16. Implement and maintain a monitoring tool for evaluating the quality of Pre-K programs.

Instruction

- 1. Develop and implement an on-going process for reviewing existing CSOs in order to ensure continued inclusion of 21st century skills.
- 2. Modify Policy 2510 to increase graduation requirements, but also to maintain flexibility in meeting the individual student needs.
- 3. Modify Policy 2510 to require weighting of AP & IB courses for those students who take the AP or IB exam.
- 4. Develop an on-line guide for middle and high schools to support the increased reading achievement of struggling adolescent readers.
- 5. Develop and implement a comprehensive plan for improving math and science achievement in grades pre-K through 12.
- 6. Develop electronic on-line units of instruction to support course content acquisition in math: Algebra I, geometry, and 7th and 8th grade math.
- Develop electronic on-line units of instruction to support course content acquisition in science: new content course requirements including chemistry, conceptual chemistry, biology and conceptual biology.
- 8. Develop electronic on-line units of instruction to support course content acquisition in social studies: new content course requirements including civics, and at least one unit of instruction in social studies grades 4-12.
- 9. Develop a math college transition course.
- 10. Continue the development of *Instructional Guides* in all subject areas to support **Project-Based Learning**.
- 11. Increase the number of students enrolled in Pre-K programs.
- 12. Develop a comprehensive World Language Program for grades Pre-K through 12.
- 13. Develop a comprehensive fine and performing arts program for students Pre-K through 12 that increases student participation and/or enrollment.

- 14. Develop an on-line *Program of Studies Document* that defines career pathways to postsecondary education for all CTE concentrations.
- 15. Provide and ABE/Middle College program in all community and technical colleges.

Closing the Achievement Gap for Subgroups

- 1. Establish and maintain a *Commission for Improved Results* to provide:
 - a. Recommendations and concerns from all stakeholders: students teachers, administrators and parents related to the establishment of programs, practices and policies to support increased achievement for students at risk;
 - Review and support the recommendations of the Pre-K through 12 Literacy Advisory Council, and;
 - c. Comprehensive Web site for improved student achievement that provides the latest research, recommended practices and resources for all stakeholders.
- 2. Adjust the funding formula from adjusted enrollment to net enrollment in order to support intervention without identification and labeling.
- 3. Develop an infrastructure for parent involvement in each county.
- 4. Increase the enrollment of at-risk students and all students in AP & IB courses through monitoring of enrollment that is disaggregated by subgroup.

Highly Qualified Educators

- 1. Develop and implement comprehensive professional development initiatives that support teacher leaders and principal leadership.
- 2. Develop math and science specializations for elementary teachers.
- 3. Develop a comprehensive professional development plan for implementing Project-based Learning in all schools and in high schools by 2012.
- 4. Develop, implement and maintain a TEACH 21 Web site to support 21st century instruction and learning.

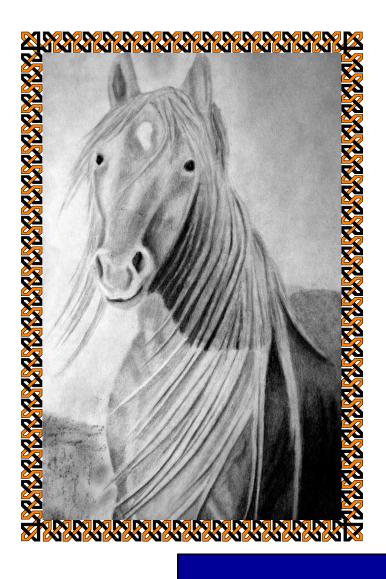
Technology Integration into Instruction

- 1. Develop and implement structures that increase access to hardware, software, and technical support that include the following:
 - a. Computer ratios of 1-3 in secondary schools and 1-5 in elementary schools;
 - b. TIS staff in all schools;
 - c. 10 mb of bandwidth in all schools;

- d. Comprehensive professional development initiatives that support the integration of technology resources into instruction: SAS, Thinkfinity, Intel, Think.com techSteps, Riverdeep, Odyssey, and Writing Roadmap 2.6
- 2. Increase the student access to computers for all students in all schools.
- 3. Increase the enrollment in and access to virtual school courses.

This report provides baseline information that may be used to measure progress and performance of student subgroups in West Virginia. The conclusions and recommendations are meant for consideration as educators, policy makers, and community leaders develop, plan, and strive to improve educational opportunities for all children in West Virginia public schools.

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Appendices



Appendix A

WESTEST Trend Data 2004-2008 **2004—2008 WESTEST Reading/Language Arts (aggregate of performance for Grades 3-8 and 10)**: Shows the (1) percentage of students in each performance level by subgroup; (2) percentage of students **At or Above Mastery** level by subgroup; and (3) the change in performance from 2007 to 2008 by subgroup.

Table 1: 2004—2008 WESTEST Reading/Language Arts

		WES	TEST RLA S	ubgroup Im	pact Data F	WESTEST RLA Subgroup Impact Data Percent at Distinguished for Grades 3-8 and 10	istinguishe	ed for Grade	s 3-8 and 1	0		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	8.15	10.19	6.24	8.34	2.85	7.30	6.82	22.98	3.73	0.85	3.36	18.71
2005	8.13	10.11	6.25	8.34	2.79	5.47	10.43	20.52	3.88	0.83	5.17	23.08
2006	8.63	10.70	9.65	8.83	3.39	5:35	7.24	24.39	4.21	0.99	8.16	7.38
2007	7.43	62.6	80'9	8.07	3.29	4.82	8.18	21.53	3.80	1.07	0.00	6.36
2008	8.21	10.10	6.40	8.40	3.54	4.51	7.59	22.65	3.98	1.05	0.00	5.13
Change 07-08	0.78	0.31	0.32	0.33	0.25	-0.31	-0.59	1.12	0.18	-0.02	0.00	-1.23
		WEST	EST RLA SL	ubgroup Im	oact Data Pe	WESTEST RLA Subgroup Impact Data Percent at Above Mastery for Grades 3-8 and 10	ove Maste	ry for Grad	es 3-8 and	10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	25.74	29.03	22.65	26.21	15.57	22.61	26.14	36.49	18.56	5.66	13.45	25.03
2005	26.99	30.43	23.72	27.46	17.50	18.78	23.31	38.55	19.90	5.96	13.79	31.98
2006	27.71	31.23	24.35	28.14	19.00	23.62	26.32	36.75	20.94	6.82	16.33	16.57
2007	27.59	30.61	24.43	27.89	18.65	22.18	28.93	39.24	20.67	7.30	22.58	18.94
2008	27.41	30.77	24.20	27.85	19.51	22.04	24.14	36.80	20.67	6.68	14.29	18.08
Change 07-08	-0.18	0.16	-0.23	-0.04	0.86	-0.14	-4.79	-2.44	0.00	-0.62	-8.29	-0.86

Table 1: 2004—2008 WESTEST Reading/Language Arts (continued)

		>	estest RL	A Subgroup	Impact Dai	WESTEST RLA Subgroup Impact Data Percent at Mastery for Grades 3-8 and 10	t Mastery f	or Grades 3	-8 and 10			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	43.34	44.10	42.65	43.26	47.15	43.90	42.05	29.21	46.13	26.46	57.98	33.60
2002	43.75	44.19	43.34	43.55	48.85	48.82	44.79	29.89	47.06	28.55	56.90	30.57
2006	43.84	43.76	43.91	43.64	49.27	46.86	42.76	26.93	47.37	30.18	44.90	42.32
2007	45.73	45.09	44.41	44.51	50.46	49.01	36.48	28.63	48.35	31.59	41.94	42.49
2008	44.44	44.62	44.26	44.14	50.45	49.80	42.76	31.55	48.04	31.08	14.29	46.69
Change 07-08	-1.29	-0.47	-0.15	-0.37	-0.01	0.79	6.28	2.92	-0.31	-0.51	-27.65	4.20
		WEST	est rla su	abgroup Imp	oact Data Pe	WESTEST RLA Subgroup Impact Data Percent at Partial Mastery for Grades 3-8 and 10	ırtial Maste	ery for Grad	es 3-8 and	10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	17.58	13.88	21.03	17.13	26.57	20.33	20.45	9.24	23.63	41.51	21.01	16.73
2002	16.44	12.76	19.94	16.05	24.71	19.64	17.79	8.30	22.08	41.25	18.97	9.31
2006	15.68	12.17	19.01	15.32	22.70	17.62	19.74	10.60	21.24	40.93	22.45	24.55
2007	15.39	12.33	19.31	15.56	22.29	19.69	20.75	9.23	21.22	40.28	25.81	24.90
2008	16.12	12.51	19.57	15.82	21.95	18.58	18.62	7.58	21.56	41.42	57.14	23.08
Change 07-08	0.73	0.18	0.26	0.26	-0.34	-1.11	-2.13	-1.65	0.34	1.14	31.33	-1.82

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Table 1: 2004—2008 WESTEST Reading/Language Arts (continued)

			WESTEST RLA Su	LA Subgroul	p Impact Da	bgroup Impact Data Percent at Novice for Grades 3-8 and 10	at Novice fo	ır Grades 3-{	3 and 10			
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	5.19	2.80	7.43	5.06	7.87	5.86	4.55	2.08	7.95	25.52	4.20	5.93
2002	4.69	2.51	6.75	4.61	6.15	7.30	3.68	2.73	7.07	23.42	5.17	5.06
2006	4.15	2.13	6.07	4.07	5.64	6.55	3.95	1.32	6.24	21.09	8.16	9.19
2007	3.85	2.18	2.77	3.96	5.31	4.30	5.66	1.38	5.95	19.75	89.6	7.31
2008	3.83	2.00	2.58	3.79	4.55	5.07	06'9	1.42	5.75	19.76	28.57	7.02
Change 07-08	-0.02	-0.18	-0.19	-0.17	-0.76	0.77	1.24	0.04	-0.20	0.01	18.89	-0.29
		WESTE	EST RLA Sul	bgroup Impa	act Data Per	WESTEST RLA Subgroup Impact Data Percent At or Above Mastery for Grades 3-8 and 10	Nbove Mast	: ery for Grad	des 3-8 and	10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	77.24	83.32	71.54	77.81	65.57	73.80	75.00	89.88	68.42	32.97	74.79	77.34
2005	78.87	84.73	73.31	79.35	69.15	73.07	78.53	88.97	70.84	35.33	75.86	85.63
2006	80.17	85.69	74.91	80.61	71.66	75.83	76.32	88.08	72.52	37.98	66.39	66.27
2007	80.76	85.49	74.92	80.48	72.40	76.01	73.58	89.40	72.83	39.97	64.52	67.79
2008	80.06	85.49	74.86	80.39	73.49	76.35	74.48	91.00	72.69	38.81	25.00	69.91
Change 07-08	-0.70	0.00	-0.06	-0.09	1.09	0.34	06:0	1.60	-0.14	-1.16	-39.52	2.12

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Figure 1: 2004—2008 WESTEST Reading/Language Arts Subgroup Impact Data Percent At or Above Mastery for ■ 2005 **2008 ≥** 2006 ■ 2004 ■ 2007 Students with Disabilities 18.85 76.98 86.75 85.28 76.58 WESTEST Reading/Language Arts 2004-2008 **Subgroup Performance Gap Comparison Economically Disadvantaged** 69.27 8.27 72,52 48.07 24.89 94.87 4.27 Black 99.17 ST.69 ZS.29 90.08 94.08 ₹ 71.08 Grades 3-8 and 10 78.87 42.77 90 80 70 9 20 40 30 20 10 0

 * Due to low N sizes, some subgroups' results are not graphically displayed within Figure 1. Instead, those results are numerically presented within Table 1.

2004-2008 WESTEST MATHEMATICS (aggregate of performance for Grades 3-8 and 10): Shows the (1) percentage of students in each performance level by subgroup; (2) percentage of students **At or Above Mastery** level by subgroup; and (3) the change in performance from 2007 to 2008 by subgroup.

Table 2: 2004-2008 WESTEST Mathematics

		WESTEST MATHEMATICS	4ATHEMA	TICS Subgro	oup Impact	Data Percer	S Subgroup Impact Data Percent at Distinguished for Grades 3-8 and 10	guished for	Grades 3-8	and 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	4.77	4.20	5.31	4.81	1.46	4.20	6.21	25.12	1.99	69'0	0.85	20.26
2005	6.50	5.88	60.7	85'9	2.71	5.04	9.82	26.35	3.18	1.22	3.45	27.64
2006	7.72	7.10	8.30	7.81	3.04	5.64	7.28	32.56	3.97	1.62	4.08	12.07
2007	7.91	7.03	8.44	7.84	3.36	2.07	8.70	32.31	4.09	1.79	89.6	12.60
2008	7.91	7.29	8.49	8.01	3.75	2.07	5.52	30.23	4.11	1.82	0.00	10.00
Change 07-08	0.00	0.26	90'0	0.17	0.39	00.0	-3.18	-2.08	0.02	6.03	-9.68	-2.60
		WESTEST MATHEMATICS	IATHEMAT		up Impact l	Jata Perceni	Subgroup Impact Data Percent at Above Mastery for Grades 3-8 and 10	Mastery fo	r Grades 3-{	3 and 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	17.84	17.62	18.08	18.24	9.30	14.89	15.82	29.63	11.80	4.42	9.32	21.59
2005	20.50	20.48	20.52	20.94	10.96	17.38	18.40	32.26	14.58	5.50	13.79	29.27
2006	21.55	21.64	21.47	21.99	13.00	18.13	14.57	29.36	16.05	99'9	18.37	19.31
2007	22.93	21.65	22.15	22.33	13.71	18.92	26.09	30.19	16.47	7.34	25.81	18.56
2008	21.81	21.77	21.86	22.21	14.28	18.36	20.69	31.45	16.38	6.88	14.29	16.62
Change 07-08	-1.12	0.12	-0.29	-0.12	0.57	-0.56	-5.40	1.26	-0.09	-0.46	-11.52	-1.94

Table 2: 2004-2008 WESTEST Mathematics (continued)

		WESTEST	WESTEST MATHEMA'		group Impa	ct Data Per	IICS Subgroup Impact Data Percent at Mastery for Grades 3-8 and 10	tery for Gr	ades 3-8 an	od 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	45.20	46.94	43.60	45.50	41.32	43.82	45.20	33.68	44.10	23.37	38.98	31.66
2005	46.16	47.71	44.68	46.27	46.14	43.13	46.63	31.07	46.72	27.41	46.55	31.10
2006	46.18	47.50	44.92	46.28	45.93	48.10	51.66	28.92	47.38	29.92	38.78	39.37
2007	45.71	47.44	44.45	45.98	46.83	46.00	38.51	29.77	47.22	31.37	32.26	38.62
2008	45.62	47.03	44.27	45.71	46.38	46.30	47.59	27.10	46.87	30.24	14.29	39.73
Change 07-08	-0.09	-0.41	-0.18	-0.27	-0.45	0:30	9.08	-2.67	-0.35	-1.13	-17.97	1.11
	W	WESTEST MATHEMATICS	THEMATI		ıp Impact D	ata Percent	Subgroup Impact Data Percent at Partial Mastery for Grades 3-8 and 10	Mastery fo	r Grades 3-	8 and 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	25.07	25.39	25.46	25.18	37.17	30.73	26.55	9.49	32.57	42.71	41.53	21.46
2005	21.06	21.00	21.12	20.59	31.21	26.93	18.40	7.98	27.28	39.85	27.59	9.55
2006	19.56	19.57	19.54	19.11	29.21	21.18	19.21	8.06	25.30	38.67	36.73	20.66
2007	18.99	19.62	19.18	18.96	28.18	24.51	18.01	6.36	25.08	36.88	29.03	22.22
2008	19.51	19.64	19.39	19.06	27.84	24.24	19.31	9.81	25.25	37.79	28.57	26.08
Change 07-08	0.52	0.02	0.21	0.10	-0.34	-0.27	1.30	3.45	0.17	0.91	-0.46	3.86

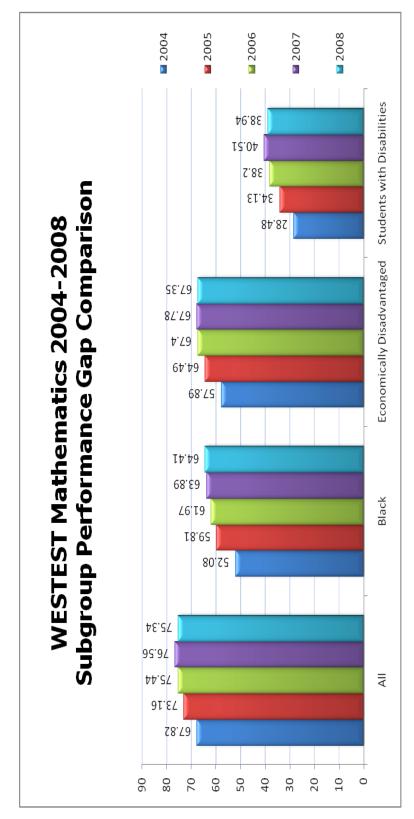
* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Table 2: 2004-2008 WESTEST Mathematics (continued)

		WESTES	T MATHEN	1ATICS Sut	group Imp	act Data Pe	WESTEST MATHEMATICS Subgroup Impact Data Percent at Novice for Grades 3-8 and 10	vice for Gra	des 3-8 and	d 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	7.11	5.31	7.55	6.27	10.75	98.9	6.21	2.08	9.54	28.82	9.32	5.03
2005	5.77	4.92	65.9	5.62	8.98	7.51	6.75	2.14	8.24	26.02	8.62	2.44
2006	5.00	4.19	5.77	4.81	8.82	6.94	7.28	1.10	7.30	23.13	2.04	8.60
2007	4.46	4.26	5.79	4.89	7.93	5.50	8.70	1.38	7.14	22.62	3.23	7.99
2008	5.15	4.27	5.99	5.01	7.75	6.04	06'9	1.42	7.40	23.26	57.14	7.57
Change 07-08	0.69	0.01	0.20	0.12	-0.18	0.54	-1.80	0.04	0.26	0.64	53.91	-0.42
	WE	WESTEST MATHEMATICS Subgroup Impact Data Percent At or Above Mastery for Grades 3-8 and 10	THEMATIC	Subgroup	Impact Da	ta Percent /	At or Above	B Mastery	or Grades 3	3-8 and 10		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	67.82	68.76	66.99	68.55	52.08	62.91	67.23	88.43	57.89	28.48	49.15	73.51
2005	73.16	74.08	72.29	73.79	59.81	65.56	74.85	89.88	64.49	34.13	63.79	88.01
2006	75.44	76.24	74.68	76.08	61.97	71.88	73.51	90.84	67.40	38.20	61.22	70.74
2007	76.56	76.12	75.03	76.14	63.89	66.69	73.29	92.27	67.78	40.51	67.74	69.78
2008	75.34	76.10	74.62	75.93	64.41	69.73	73.79	88.78	67.35	38.94	25.00	66.35
Change 07-08	-1.22	-0.02	-0.41	-0.21	0.52	-0.26	0:20	-3.49	-0.43	-1.57	-42.74	-3.43

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Figure 2: 2004—2008 WESTEST Mathematics Subgroup Impact Data Percent At or Above Mastery for Grades 3-8 and 10



* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 2. Instead, those results are numerically presented within Table 2.

2004—2008 WESTEST Social Studies (aggregate of performance for Grades 3-8): Shows the (1) percentage of students in each performance level by subgroup; (2) percentage of students **At or Above Mastery** level by subgroup; and (3) the change in performance from 2007 to 2008 by subgroup.

Table 3: 2004—2008 WESTEST Social Studies

		WESTEST SOCIAL ST	OCIAL ST	UDIES Suk	group Imp	act Data Pe	**UDIES Subgroup Impact Data Percent at Distinguished for Grades 3-8	tinguishe	d for Grade	ss 3-8		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	EP
2004	5.92	5.30	6.53	6.07	1.81	3.91	4.76	19.48	2.65	1.44	1.77	14.94
2005	92'9	5.72	7.36	6.72	2.10	5.01	4.14	22.07	2.94	1.50	5.26	23.29
2006	6.93	6.24	7.59	7.09	2.66	4.70	4.55	21.92	3.20	1.96	2.17	7.29
2007	98.9	20'9	7.62	7.04	2.51	3.93	6.52	19.90	3.29	2.20	3.23	5.75
2008	6.79	80.8	12.23	10.48	3.71	26'9	8.97	27.03	5.58	3.06	14.29	6.39
Change 07-08	-0.07	2.01	4.61	3.44	1.20	3.04	2.45	7.13	2.29	98.0	11.06	0.64
	Λ	WESTEST SOCIAL ST		JDIES Sub	group Impa	act Data Pe	JDIES Subgroup Impact Data Percent at Above Mastery for Grades 3-8	ove Master	r y for Grad	es 3-8		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	23.11	22.62	23.60	23.59	13.05	21.65	19.05	34.02	15.86	8.00	14.16	24.54
2005	25.34	24.86	25.79	25.86	14.92	19.21	25.52	34.76	18.19	9.29	14.04	32.71
2006	25.82	25.30	26.31	26.28	16.41	21.61	24.24	38.45	18.71	10.18	19.57	18.98
2007	25.64	24.92	26.32	26.14	16.46	19.76	25.36	36.19	18.49	11.24	19.35	20.81
2008	25.87	31.55	32.19	32.53	20.81	27.88	27.59	35.06	25.41	14.31	0.00	23.13
Change 07-08	0.23	6.63	2.87	6:39	4.35	8.12	2.23	-1.13	6.92	3.07	-19.35	2.32

Table 3: 2004—2008 WESTEST Social Studies (continued)

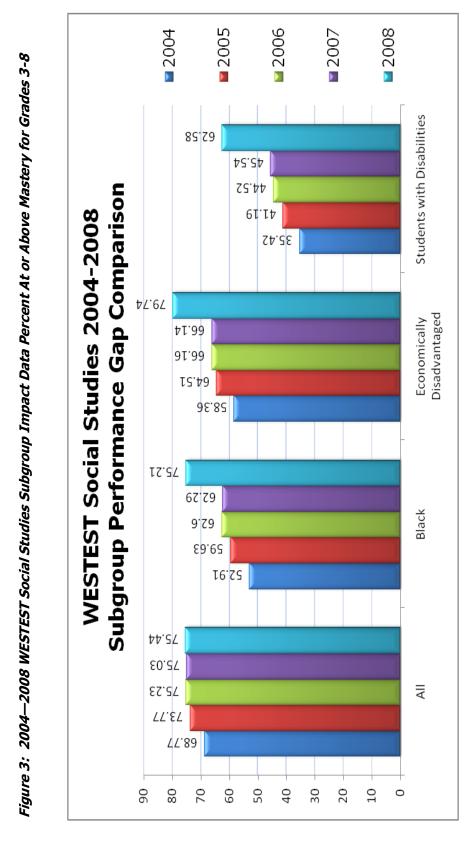
		WESTES	WESTEST SOCIAL	STUDIES	Subgroup I	Impact Data	STUDIES Subgroup Impact Data Percent at Mastery for Grades 3-8	Mastery fo	or Grades 3-	φ		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	39.72	42.22	37.39	39.87	38.05	40.36	46.26	30.45	39.86	25.98	43.36	31.71
2005	41.87	44.47	39.42	41.89	42.60	44.15	42.07	30.48	43.39	30.39	40.35	29.41
2006	42.48	44.81	40.27	42.50	43.53	44.26	46.21	27.82	44.26	32.39	26.52	37.63
2007	42.53	44.85	40.32	42.52	43.31	47.79	40.58	31.22	44.36	32.10	38.71	39.29
2008	42.78	46.57	40.63	43.19	50.68	46.60	48.97	30.79	48.75	45.22	14.29	45.44
Change 07-08	0.25	1.72	0.31	0.67	7.37	-1.19	8.39	-0.43	4.39	13.12	-24.42	6.15
	7	WESTEST SOCIAL STU	OCIAL STU		group Impa	act Data Per	DIES Subgroup Impact Data Percent at Partial Mastery for Grades 3-8	iial Maste	ry for Grade	ss 3-8		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	28.86	28.25	29.42	28.16	43.65	31.28	27.21	14.81	38.09	54.26	37.17	25.91
2002	24.09	23.51	24.63	23.45	37.12	29.00	27.59	11.45	32.35	49.58	38.60	12.94
2006	22.99	22.44	23.51	22.41	34.43	27.56	23.48	10.89	31.15	47.89	19.57	32.20
2007	23.31	23.00	23.60	22.70	34.98	26.45	26.09	11.19	31.35	47.62	32.26	29.97
2008	22.98	12.23	12.53	11.89	21.36	15.72	11.03	5.89	17.28	29.94	57.14	20.41
Change 07-08	-0.33	-10.77	-11.07	-10.81	-13.62	-10.73	-15.06	-5.30	-14.07	-17.68	24.88	-9.56

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Table 3: 2004—2008 WESTEST Social Studies (continued)

		WESTE	WESTEST SOCIAL		Subgroup	Impact Dat	STUDIES Subgroup Impact Data Percent at Novice for Grades 3-8	Novice for	r Grades 3-	œ		
	ΙΑ	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	2.36	1.62	3.06	2.30	3.44	2.79	2.72	1.23	3.55	10.32	3.54	2.90
2005	2.14	1.44	2.81	2.09	3.25	2.63	69.0	1.24	3.14	9.23	1.75	1.65
2006	1.78	1.21	2.32	1.72	2.96	1.88	1.52	0.92	2.68	7.59	2.17	3.90
2007	1.66	1.16	2.14	1.60	2.73	2.06	1.45	1.49	2.50	6.84	6.45	4.19
2008	1.58	1.56	2.41	1.91	3.43	2.84	3.45	1.22	2.98	7.48	28.57	4.63
Change 07-08	-0.08	0.40	0.27	0.31	0.70	82.0	2.0	-0.27	0.48	0.64	22.12	0.44
	×	WESTEST SOCIAL STUD	CIAL STUI		oup Impac	t Data Perc	IES Subgroup Impact Data Percent At or Above Mastery for Grades 3-8	oove Mast	ery for Gra	des 3-8		
	All	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	68.77	70.14	67.52	69.53	52.91	65.92	70.07	83.95	58.36	35.42	59.29	71.19
2005	73.77	75.05	72.56	74.47	59.63	68.38	71.72	87.31	64.51	41.19	59.65	85.41
2006	75.23	76.36	74.17	75.87	62.60	70.56	75.00	88.19	66.16	44.52	78.26	63.90
2007	75.03	75.85	74.26	75.70	62.29	71.48	72.46	87.31	66.14	45.54	61.29	65.84
2008	75.44	86.21	85.06	86.20	75.21	81.44	85.52	92.89	79.74	62.58	25.00	74.97
Change 07-08	0.41	10.36	10.80	10.50	12.92	96.6	13.06	5.58	13.6	17.04	-36.29	9.13

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.



* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 3. Instead, those results are numerically presented within Table 3.

2004—2008 WESTEST Science (aggregate of performance for Grades 3-8 and 10): Shows the (1) percentage of students in each performance level by subgroup; (2) percentage of students **At or Above Mastery** level by subgroup; and (3) the change in performance from 2007 to 2008 by subgroup.

Table 4: 2004—2008 WESTEST Science

		WESTES	T SCIENC	E Subgrou	p Impact [Jata Percen	t at Distin	guished fo	WESTEST SCIENCE Subgroup Impact Data Percent at Distinguished for Grades 3-8 and 10	and 10		
	IIV	Female	Male	White	Black	Hispanic	Nat.Am.	Asian	ED	QMS	Migrant	LEP
2004	8.10	6.34	62'6	8.32	2.05	00'2	8.05	24.39	3.96	2.03	3.36	18.76
2005	6.62	29.7	11.49	88.6	3.10	6.72	9.32	23.63	90'9	2.55	5.17	28.19
2006	6.33	7.30	11.26	9:26	3.18	6.31	6.58	26.58	4.75	2.61	6.12	7.85
2007	9.51	7.58	11.59	9:90	3.26	29'9	10.06	24.47	5.17	2.86	00'0	8.16
2008	10.20	5.99	7.57	86.9	2.39	4.85	4.17	18.35	3.15	1.91	0.00	3.72
Change 07-08	0.69	-1.59	-4.02	-2.92	-0.87	-1.82	-5.89	-6.12	-2.02	-0.95	0.00	-4.44
		WESTES	T SCIENC	E Subgroup	o Impact D	ata Percent	: at Above	Mastery ք	WESTEST SCIENCE Subgroup Impact Data Percent at Above Mastery for Grades 3-8 and 10	3 and 10		
	IIV	Female	Male	White	Black	Hispanic	Nat.Am.	Asian	ED	QMS	Migrant	LEP
2004	28.72	27.73	29.68	29.36	15.81	24.25	29.31	36.65	21.34	10.70	21.01	26.16
2005	31.40	30.81	31.95	32.02	18.57	25.57	37.27	40.38	24.71	12.79	15.52	33.67
2006	31.20	30.64	31.73	31.88	18.12	27.37	36.18	36.88	24.40	12.69	22.45	21.75
2007	31.33	30.90	32.22	32.21	20.04	25.30	34.59	38.94	25.05	14.52	38.71	23.27
2008	31.88	25.14	26.58	26.38	16.36	21.71	25.00	38.12	18.77	10.94	0.00	20.54
Change 07-08	0.55	-5.76	-5.64	-5.83	-3.68	-3.59	-9.59	-0.82	-6.28	-3.58	-38.71	-2.73

Table 4: 2004—2008 WESTEST Science (continued)

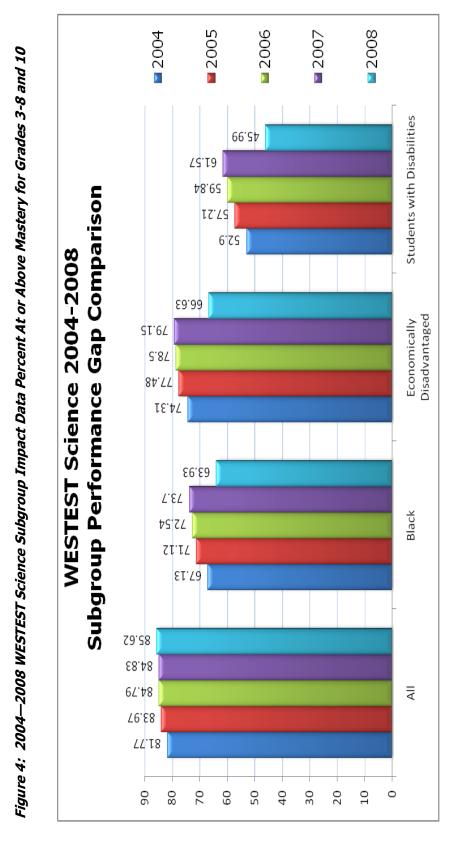
	_	WEST	WESTEST SCIENC	NCE Subgi	roup Impac	ct Data Perc	cent at Mas	tery for Gr	E Subgroup Impact Data Percent at Mastery for Grades 3-8 and 10	d 10		
All Female Male		Male	\longrightarrow	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
44.94 48.45 41.62		41.62		44.80	49.27	47.29	45.40	29.71	49.01	40.17	50.42	36.33
42.95 46.11 39.96		39.96		42.71	49.45	46.59	40.99	26.37	47.71	41.87	58.62	28.19
44.26 47.26 41.40		41.40		43.98	51.25	47.03	40.13	28.90	49.36	44.53	42.86	43.50
43.99 46.99 40.70		40.70		43.47	50.40	48.87	42.77	28.83	48.93	44.18	35.48	43.95
43.54 45.25 40.41		40.41		42.69	45.18	44.45	47.50	33.41	44.71	33.13	25.00	42.11
-0.45 -1.74 -0.29		-0.29		-0.78	-5.22	-4.42	4.73	4.58	-4.22	-11.05	-10.48	-1.84
WESTEST SCIENCE Subgroup Impact Data Percent at Partial Mastery for Grades 3-8 and 10	WESTEST SCIENC	SCIENC	- 44	: Subgroup	ı Impact Dö	ata Percent	at Partial I	Mastery fo	r Grades 3-8	3 and 10		
All Female Male		Male		White	Black	Hispanic	Nat. Am	Asian	ED	SWD	Migrant	LEP
15.36 15.21 15.50		15.50	-	14.83	26.76	17.13	14.94	6.82	21.40	35.50	21.85	14.13
13.56 13.35 13.76		13.76		13.07	23.63	16.25	11.18	7.84	18.79	32.72	17.24	8.11
12.93 12.89 12.96		12.96		12.45	22.39	16.23	14.47	5.76	18.06	31.25	24.49	21.30
13.03 12.80 12.94		12.94		12.38	22.13	15.94	11.32	6.60	17.77	30.56	19.35	20.00
12.39 22.59 23.35		23.35		22.41	33.97	26.84	17.50	9.18	31.02	47.58	62.50	30.36
-0.64 9.79 10.41		10.41		10.03	11.84	10.90	6.18	2.58	13.25	17.02	43.15	10.36

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.

Table 4: 2004—2008 WESTEST Science (continued)

		WESTE	WESTEST SCIENC	Subgrou	p Impact Da	CE Subgroup Impact Data Percent at Novice for Grades 3-8 and 10	at Novice	for Grades	3-8 and 10			
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	5.86	2.27	3.41	5.69	6.11	4.34	2.30	2.43	4.29	11.59	3.36	4.62
2005	2.47	2.08	2.85	2.32	5.25	4.88	1.24	1.78	3.73	10.07	3.45	1.83
2006	2.28	1.91	2.64	2.13	5.07	3.06	2.63	1.88	3.44	8.92	4.08	5.59
2007	2.14	1.73	2.55	2.04	4.17	3.21	1.26	1.17	3.08	7.86	6.45	4.63
2008	1.99	1.02	2.10	1.54	2.10	2.14	5.83	0.94	2.35	6.42	12.50	3.27
Change 07-08	-0.15	-0.71	-0.45	-0.50	-2.07	-1.07	4.57	-0.23	-0.73	-1.44	6.05	-1.36
	W	estest sc i	IENCE Sub	group Impa	act Data Pe	WESTEST SCIENCE Subgroup Impact Data Percent At or Above Mastery for Grades 3-8 and 10	Above Ma	stery for G	irades 3-8 a	and 10		
	IIA	Female	Male	White	Black	Hispanic	Nat. Am.	Asian	ED	SWD	Migrant	LEP
2004	81.77	82.52	81.09	82.48	67.13	78.53	82.76	90.75	74.31	52.90	27.73	81.24
2005	83.97	84.57	83.40	84.61	71.12	78.87	87.58	90.37	77.48	57.21	22.81	90.06
2006	84.79	85.20	84.39	85.42	72.54	80.71	82.89	92.36	78.50	59.84	31.25	73.11
2007	84.83	85.47	84.51	85.58	73.70	80.85	87.42	92.23	79.15	61.57	74.19	75.37
2008	85.62	76.38	74.55	76.05	63.93	71.02	76.67	88.88	66.63	45.99	25.00	66.37
Change 07-08	0.79	-9.09	-9.96	-9.53	-9.77	-9.83	-10.75	-2.35	-12.52	-15.58	-49.19	-9.00

* To ensure consistency in data across all five years, calculations were tabulated using the same mathematical methodology.



* Due to low N sizes, some subgroups' results are not graphically displayed within Figure 4. Instead, those results are numerically presented within Table 4.

WESTEST 2008Subgroup Performance Gap Comparisons

Percentage of Students Performing At or Above Mastery for Grades 3-8 and 10—2008			
WESTEST Assessment	White Subgroup	Black Subgroup	Performance Gap
Reading/Language Arts	80.39	73.49	6.9
Mathematics	75.93	64.41	11.52
Social Studies	86.20	75.21	10.99
Science	76.05	63.93	12.12

Percentage of Students Performing At or Above Mastery for Grades 3-8 and 10—2008			
WESTEST Assessment	All Subgroup	Economically Disadvantaged (ED) Subgroup	Performance Gap
Reading/Language Arts	80.06	72.69	7.37
Mathematics	75.34	67.35	7.99
Social Studies	75.44	79.74	4.3*
Science	85.62	66.63	18.99
*The ED subgroup outperformed the All subgroup in Social Studies in 2008			

Percentage of Students Performing <i>At or Above Mastery</i> for Grades 3-8 and 10—2008			
WESTEST Assessment	All Subgroup	Students with Disabilities (SWD) Subgroup	Performance Gap
Reading/Language Arts	80.06	38.81	41.25
Mathematics	75.34	38.94	36.40
Social Studies	75.44	62.58	12.86
Science	85.62	45.99	39.63

WESTEST 2004-2008 Findings:

All Subgroup <i>At or Above Mastery</i>				
	2004-2007	2007-2008	2004-2008	
Reading/Language Arts (RLA)	Overall increase (3.52%) in student performance year-to-year from 2004 to 2007	Slight decrease (-0.70%) in the percentage of students performing at this level	Total increase (2.82%) in student performance from 2004 through 2008	
Mathematics	Increase (8.74%)in student performance year-to-year from 2004 through 2007	Small decrease (-1.22%) in the percentage of stu- dents performing at this level	Total increase (7.52%) in student performance from 2004 through 2008	
Social Studies	Small, but consistent, increases in performance from 2004 through 2006 (6.46% total)—slight decrease from 2006 to 2007 (-0.20%)	Slight increase (0.41%) in the percentage of students performing at this level	Total increase (6.67%) in student performance from 2004 through 2008	
Science	Small, but consistent, increases (3.06% total) in student performance year-to-year	Slight increase (0.79%) in the per- centage of students performing at this level	Total increase (3.85%) in student performance from 2004 through 2008	

RLA—8 out of 10 **All** students were **At or Above Mastery** in 2008 Mathematics—7 out of 10 **All** students were **At or Above Mastery** in 2008 Social Studies—7 out of 10 **All** students were **At or Above Mastery** in 2008 Science—8 out of 10 **All** students were **At or Above Mastery** in 2008

Black Subgroup At or Above Mastery			
	2004-2007	2007-2008	2004-2008
Reading/Language Arts (RLA)	Made small, but consistent, increases (6.83% total) in performance from year-to-year	Increased (1.09%) the percentage of students performing at this level	Despite overall, consistent yearly increases, the Black subgroup continues to perform below their White subgroup peers (73.49% to 80.39% respectively)—a gap of 6.90%
Mathematics	Made small, but consistent, increases (11.81% total) in performance from year-to-year	Small increase (0.52%) in the percentage of students performing at this level	Despite consistent yearly increases, this subgroup continues to perform below their White subgroup peers (64.41% to 75.93% respectively)—a gap of 11.52%
Social Studies	Small, but consistent increases (9.69% total) 2004 through 2006slight decrease (-0.31) between 2006 and 2007.	Significant increase (12.92%) in the percentage of students performing at this level between 2007 and 2008	Despite the increase in 2008 performance, the Black subgroup continues to perform below the White subgroup (75.21% to 86.20% respectively)—a gap of 10.99%
Science	Small, but consistent, increases (6.57% total) in performance from 2004 through 2007	Significant decrease (-9.77%) in the per- centage of students per- forming at this level between 2007 and 2008	With the decrease in performance between 2007 and 2008, the Black subgroup continues to perform significantly below the White subgroup (63.93% to 76.05% respectively)—a gap of 12.12 %

RLA—7 out of 10 **Black** students were **At or Above Mastery** in 2008 Mathematics—6 out of 10 **Black** students were **At or Above Mastery** in 2008 Social Studies—7 out of 10 **Black** students were **At or Above Mastery** in 2008 Science—6 out of 10 **Black** students were **At or Above Mastery** in 2008

Economically Disadvantaged (ED) Subgroup *At or Above Mastery*

	2004-2007	2007-2008	2004-2008
Reading/Language Arts (RLA)	Made small, but consistent, increases (4.41% total) in performance from year-to-year	Slight decrease (-0.14%) in the percentage of students performing at this level by	Despite the small increases from 2004 through 2007, the ED subgroup continues to perform below the All subgroup (72.69% to 80.06% respectively)—a gap of 7.37%
Mathematics	Made small, but consistent, increases (9.89% total) in performance year-to-year	Small decrease (-0.43%) in the percentage of students performing at this level	Despite small increases from 2004 through 2007, this subgroup continues to perform below the All subgroup (67.35% to 75.34% respectively)—a gap of 7.99%
Social Studies	Made consistent increases (7.80% total) in performance from 2004 through 2006—slight decrease (-0.02%) in 2007	Significant increase (13.60%) in the percentage of students performing at this level between 2007 and 2008	With the significant increase in performance in 2007-2008, the ED subgroup performed above the All subgroup (79.74% to 75.44% respectively)
Science	Made consistent increases (4.84% total) in performance year-to-year	Significant decrease (-12.52) in the percentage of students performing at this level between 2007 and 2008	Given the significant decrease in performance in 2007-2008, the ED subgroup performed significantly below the All subgroup (66.63% to 85.62% respectively)—a gap of 18.99%

RLA—7 out of 10 **ED** students were **At or Above Mastery** in 2008 Mathematics—6 out of 10 **ED** students were **At or Above Mastery** in 2008 Social Studies—8 out of 10 **ED** students were **At or Above Mastery** in 2008 Science—6 out of 10 **ED** students were **At or Above Mastery** in 2008

Students with Disabilities (SWD) Subgroup At or Above Mastery

	2004-2007	2007-2008	2004-2008
Reading/Language Arts (RLA)	Made small, but consistent, increases (7.0% total) in performance year-to-year	Small decrease (-1.16%) in the percentage of students performing at this level	Despite consistent increases in student performance from 2004 through 2007, the SWD subgroup continues to perform significantly below the All subgroup (38.81% to 80.06% respectively)—a gap of 41.25%
Mathematics	Consistent increases (12.03% total) in performance year-to-year	Small decrease (-1.57%) in the per- centage of students performing at this level	Despite the consistent increases in student performance from 2004 through 2007, the SWD subgroup continues to perform significantly below the All subgroup (38.94% to 75.34% respectively)—a gap of 36.40%
Social Studies	Consistent increases (10.12% total) in performance year-to-year	Significant increase (17.04%) in the percentage of students performing at this level between 2007 and 2008	Despite the significant increase in student performance in 2008, the SWD subgroup continues to perform below the All subgroup (62.58% to 75.44% respectively)—a gap of 12.86%
Science	Consistent increases (8.67% total) in performance year-to-year	Significant decrease (-15.58) in the per- centage of students per- forming at this level between 2007 and 2008	The SWD subgroup continues to perform significantly below the All subgroup (45.99% to 85.62% respectively)—a gap of 39.63%

RLA—4 out of 10 **SWD** students were **At or Above Mastery** in 2008 Mathematics—4 out of 10 **SWD** students were **At or Above Mastery** in 2008 Social Studies—6 out of 10 **SWD** students were **At or Above Mastery** in 2008 Science—4 out of 10 **SWD** students were **At or Above Mastery** in 2008





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