

**Joint Legislative Committee on Performance
Evaluation and Expenditure Review (PEER)**

Report to
the Mississippi Legislature



The Common Core State Standards: Mississippi's Adoption and Implementation

Over the last thirty years, concern has mounted regarding the quality of this nation's education system. The U. S. is losing ground to other countries and many students are ill-prepared for college-level work at the completion of high school. In Mississippi, public school students have had a history of poor performance on national tests and a large percentage of students must enroll in remedial courses once they begin college. Recognizing this fact, on August 20, 2010, members of the Mississippi Board of Education unanimously adopted the Common Core State Standards for English language arts and mathematics to be taught in Mississippi's public schools.

The Common Core State Standards (CCSS) are generally agreed-upon core competencies that reflect the preparation students need to be college- and career-ready. The standards specify what students should be able to understand and be able to do at a particular grade level, but not the means and materials with which the students will interact for the purpose of achieving that outcome. The standards were developed by work teams composed of experts in education and related fields who represented numerous states and organizations.

At the state level, the Mississippi Department of Education (MDE) is responsible for supporting local districts' implementation of the CCSS by developing frameworks and assessments and by providing professional development opportunities for educators. Local school boards are responsible for adopting an instructional management system and selecting or developing curricula and resources for the districts' teachers.

Local districts will administer online assessments to evaluate students' understanding of learning concepts required by the CCSS. The cost for administering and grading the assessments is projected to be approximately \$2.5 million more in 2015 than costs under the state's current statewide assessment program. One factor affecting the increase in assessment costs is an increase in the number of assessments to be administered (i. e., mid-year as well as end-of-year).

According to MDE, Mississippi's school districts will be more limited by the number of devices (e. g., computers) they have to administer the assessments than by information technology infrastructure (e. g., WiFi capability). According to the department's staff, districts that do not have adequate technological capabilities can rely on paper tests for the assessments during the 2014-2015 school year.

January 6, 2014

PEER: The Mississippi Legislature's Oversight Agency

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms, with one Senator and one Representative appointed from each of the U. S. Congressional Districts and three at-large members appointed from each house. Committee officers are elected by the membership, with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, special investigations, briefings to individual legislators, testimony, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, and the agency examined.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

PEER Committee
Post Office Box 1204
Jackson, MS 39215-1204

(Tel.) 601-359-1226
(Fax) 601-359-1420
(Website) <http://www.peer.state.ms.us>

The Mississippi Legislature

Joint Committee on Performance Evaluation and Expenditure Review

PEER Committee

SENATORS
NANCY ADAMS COLLINS
Vice Chair
KELVIN E. BUTLER
Secretary
VIDET CARMICHAEL
THOMAS GOLLOTT
GARY JACKSON
SAMPSON JACKSON II
PERRY LEE



REPRESENTATIVES
RAY ROGERS
Chair
RICHARD BENNETT
KIMBERLY CAMPBELL BUCK
BECKY CURRIE
STEVE HORNE
MARGARET ELLIS ROGERS
PERCY W. WATSON

TELEPHONE:
(601) 359-1226

FAX:
(601) 359-1420

Post Office Box 1204
Jackson, Mississippi 39215-1204

Max K. Arinder, Ph. D.
Executive Director

www.peer.state.ms.us

OFFICES:
Woolfolk Building, Suite 301-A
501 North West Street
Jackson, Mississippi 39201

January 6, 2014

Honorable Phil Bryant, Governor
Honorable Tate Reeves, Lieutenant Governor
Honorable Philip Gunn, Speaker of the House
Members of the Mississippi State Legislature

On January 6, 2014, the PEER Committee authorized release of the report entitled **The Common Core State Standards: Mississippi's Adoption and Implementation.**

A handwritten signature in black ink that reads "Ray Rogers".

Representative Ray Rogers, Chair

This report does not recommend increased funding or additional staff.

Table of Contents

Letter of Transmittal	i
Executive Summary	
Introduction	1
Authority	1
Purpose and Scope.....	1
Method	2
Description and Development of the Common Core State Standards	3
What organizations were the driving forces behind the Common Core State Standards initiative?.....	3
Why did the National Governors Association and the Council of Chief State School Officers and their partners initiate the Common Core State Standards initiative?	4
What process did the National Governors Association and the Council of Chief State School Officers follow in developing the Common Core State Standards?	9
What are the Common Core State Standards?.....	14
Are the Common Core State Standards “internationally benchmarked?”	17
Mississippi’s Adoption of the Common Core State Standards.....	20
When did the State Board of Education adopt the Common Core State Standards and what was the basis for the board’s decision?	20
Did the State Board of Education seek public comment or input regarding the adoption and implementation of the Common Core State Standards?.....	25
Did the State Board of Education adopt the Common Core State Standards to secure federal funding for state education programs?	26
Mississippi’s Implementation of the Common Core State Standards.....	29
What are the phases of implementation for Common Core State Standards?	29
What responsibilities do the State Board of Education, Department of Education, and local school boards and districts have regarding the implementation of the Common Core State Standards?	30
What curriculum and teaching materials will be used by classroom teachers to provide lessons based on the Common Core State Standards?	32
What training and professional development opportunities regarding Common Core State Standards are available for educators?	36
How will students’ performance be assessed and how much will such assessment cost?	40
Do districts have the technological capabilities to administer the online student assessments for the Common Core State Standards?	43

Table of Contents (continued)

How does Mississippi's Statewide Longitudinal Data System relate to the adoption and implementation of the Common Core State Standards and how will the system's education-related information be utilized?	46
The Status of Other States' Adoption and Implementation of the Common Core State Standards	52
What is the status of other states' adoption and implementation of the Common Core State Standards and related legislation?	52
Conclusion: Frequently Asked Questions about Common Core State Standards	55
Summary	55
Frequently Asked Questions and Responses Regarding Common Core State Standards	55
Appendix A: Common Core State Standards, College- and Career-Readiness Standards, English Language Arts Work Team	63
Appendix B: Common Core State Standards, College- and Career-Readiness Standards, Mathematics Work Team	64
Appendix C: Common Core State Standards, College- and Career-Readiness Standards, English Language Arts Feedback Team	65
Appendix D: Common Core State Standards, College- and Career-Readiness Standards, Mathematics Feedback Team	66
Appendix E: Common Core State Standards, K-12 Standards, English Language Arts Work Team	68
Appendix F: Common Core State Standards, K-12 Standards, English Language Arts Feedback Team	71
Appendix G: Common Core State Standards, K-12 Standards, Mathematics Work Team	72
Appendix H: Common Core State Standards, K-12 Standards, Mathematics Feedback Team	75

Table of Contents (continued)

Appendix I:	Common Core State Standards, Validation Committee Members	77
Appendix J:	Common Core State Standards, Mathematics and Language Arts Feedback Form Comments	79
Appendix K:	Individuals Who Wrote Letters of Support for the State's Race to the Top Grant Submission.....	83
Appendix L:	Mississippi Department of Education Common Core State Standards Webinars as of December 5, 2013.....	84
Appendix M:	CCSS, In-Person Training Sessions	85
Appendix N:	Partnership for Assessment of Readiness for College and Careers Member States, as of November 26, 2013.....	89
Appendix O:	Smarter Balanced Assessment Consortium, as of November 26, 2013	90
Appendix P:	Mississippi Representatives on PARCC Item Review Committee	91
Appendix Q:	Mississippi Educator Leader Cadre Members.....	93

List of Exhibits

1.	CCSSO/NGA Common Core State Standards Process	10
2.	Tentative Timeline for Reviewing and Adopting the Common Core State Standards, February 19, 2010	23
3.	Standards Adoption and Implementation Responsibilities	31
4.	Mississippi Department of Education Office of Instructional Enhancement Office of Curriculum and Instruction Framework Revision Process	33
5.	Tentative Timeline for Adoption of Materials Aligned to the Common Core State Standards	36
6.	Mississippi Teachers' and Administrators' Responses to Fall 2012 Survey on CCSS Implementation	39
7.	Statewide Longitudinal Data System, Governing Board Members	49

The Common Core State Standards: Mississippi's Adoption and Implementation

Executive Summary

Introduction

On August 20, 2010, the Mississippi Board of Education adopted the Common Core State Standards for English language arts and mathematics to be taught in Mississippi's public schools. The Common Core State Standards are a generally agreed-upon set of core competencies that reflect the needed preparation for entering two- and four-year colleges. The standards clearly specify what students should be able to understand and be able to do at a particular grade level, but not the means and materials with which the students will interact for the purpose of achieving that educational outcome.

Legislators and their constituents have questioned the board's adoption of the standards and potential costs associated with their implementation. Legislators requested PEER to review the state's adoption of the standards and their potential impact on Mississippi students, parents, teachers, and school districts.

Description and Development of the Common Core State Standards

The leaders behind the Common Core State Standards initiative were the National Governors Association (NGA), through its Center for Best Practices, and the Council of Chief State School Officers (CCSSO), in partnership with Achieve, Inc.; ACT; and the College Board. The sponsoring organizations convened groups of experts to develop the standards for English language arts and mathematics. As with any process involving individuals with differing opinions and solutions for solving a problem, the end result was standards developed from the consensus of those involved.

The English language arts standards are divided into reading, writing, speaking and listening, and language strands for conceptual clarity. The English language arts standards also include a literacy component that is a shared responsibility within the school and include expectations for reading, writing, speaking and listening, and language applicable to history/social studies, science, and technical subjects.

The mathematics standards stress conceptual understanding of key ideas while continually returning to organizing principles to structure those ideas. Proponents believe that the result is a substantially focused and coherent approach to learning mathematics as a problem-solving process.

Common Core State Standards (CCSS) were “internationally benchmarked” in the sense that through a process of consulting selected state and international models to find common elements that mark the educational standards of world leading systems, the development team arrived at a competitive definition of the competency base needed to become college- and career-ready on an international scale.

Mississippi’s Adoption of the Common Core State Standards

Members of the Mississippi Board of Education unanimously adopted the Common Core State Standards based on the recognition that Mississippi, in spite of reform efforts, has continued its history of poor performance on the National Assessment of Educational Progress and the American College Test and still has unacceptably high levels of enrollment in remedial postsecondary courses. Common Core State Standards represent a bold step in remediating tolerated deficiency in preparing students for college- and career-readiness.

Although federal Race to the Top grant competition guidelines did not specifically require states to adopt the CCSS, evidence suggests that the Mississippi Department of Education believed that adoption of such standards would strengthen the state’s application for grant funds. While not a mandate, the Race to the Top guidelines contained a clear incentive for states to consider participating in the raising of K-12 standards in the nation as a whole. Although the department stated in its grant application submission its intent to adopt the CCSS, the U.S. Department of Education did not award Mississippi a Race to the Top grant.

Regarding public comment and input, the Board of Education met all requirements of the Mississippi Administrative Procedures Act (MISS. CODE ANN. Section 25-43-1.101 [1972]) for public comment prior to adoption of the CCSS. Also, the department’s staff conducted regional meetings in August 2013 to inform and seek comments from the general public regarding the standards.

Mississippi's Implementation of the Common Core State Standards

Responsibilities for Implementation

Regarding state and local school district responsibilities for implementing the Common Core State Standards, the Board of Education is responsible for adopting standards based on recommendations of the Department of Education's staff. The department is responsible for supporting local districts' implementation efforts and local school district boards are responsible for adopting an instructional management system and selecting or developing curricula for classroom teachers.

State law and Board of Education policy require local school districts to implement an instructional management system that has been adopted by the school board and that includes, at a minimum, the competencies and objectives required in frameworks approved by the Board of Education. The frameworks guide school districts in developing curriculum locally, with districts determining curriculum resources to be used by classroom teachers.

Training and Professional Development for Teachers

To address the skills development needs of current and future classroom teachers for implementing CCSS, Mississippi received a \$40,000 grant from the Partnership for Assessment of Readiness for College and Careers (PARCC) to provide professional development to higher education faculty related to postsecondary courses and teacher preparation on the standards. Also, the Mississippi Legislature included \$400,000 in the department's FY 2013 appropriation for CCSS professional development.

Since adoption of the standards, the Department of Education has conducted 147 in-person training seminars for teachers and administrators. However, the department does not assess participants' competencies following the completion of a webinar or in-person training seminar. Classroom teachers and administrators may not have a complete understanding of the standards or teaching strategies necessary to deliver classroom instruction necessary for students to succeed on the assessments.

Student Assessments and Related Costs

To assess students' understanding of learning concepts required by the CCSS, local school districts will administer mid-year and end-of-year online assessments developed by PARCC. The cost for administering and grading the assessments in English language arts and mathematics is

projected to be approximately \$2.5 million more in 2015 than costs under the state's current statewide assessment program. One factor affecting the increase in assessment costs is an increase in the number of assessments to be administered versus those presently used by the state and local school districts.

Districts' Technological Readiness

The Department of Education collected information from the state's school districts regarding the districts' technological capabilities in comparison to what would be needed to administer the new online assessments.

According to the department's analysis of this information, Mississippi's school districts will be more limited by the number of devices (e. g., computers) they have to administer assessments than by information technology infrastructure (e. g., WiFi capability). Also, according to the department's staff, districts that do not have adequate technological capabilities can rely on paper tests for the assessments during the 2014-2015 school year.

Other States' Adoption and Implementation of the Common Core State Standards

Only four states (Alaska, Nebraska, Texas, and Virginia) have not officially adopted the Common Core State Standards. No state that has adopted the standards has reversed its adoption, although four states have enacted laws requiring formal reviews of the standards.

For More Information or Clarification, Contact:

PEER Committee
P.O. Box 1204
Jackson, MS 39215-1204
(601) 359-1226
<http://www.peer.state.ms.us>

Representative Ray Rogers, Chair
Pearl, MS

Senator Nancy Collins, Vice Chair
Tupelo, MS

Senator Kelvin Butler, Secretary
McComb, MS

The Common Core State Standards: Mississippi's Adoption and Implementation

Introduction

Authority

The PEER Committee reviewed the Common Core State Standards and Mississippi's adoption of such standards. The Committee acted in accordance with MISS. CODE ANN. Section 5-3-51 et seq. (1972).

Purpose and Scope

The National Governors Association and the Council of Chief State School Officers, in partnership with Achieve, Inc.; ACT; and the College Board developed the Common Core State Standards in 2009. This is a set of educational standards for kindergarten through twelfth grade in English language arts and mathematics designed to ensure that students graduating from high school are prepared to enter two- and four-year college programs or the workforce.

On August 20, 2010, the Mississippi State Board of Education adopted the Common Core State Standards for English language arts and mathematics to be taught in Mississippi's public schools. Following the board's action, the Department of Education began working with local school districts and schools to implement the standards.

Legislators and their constituents have questioned the board's adoption of the standards and potential costs associated with their implementation. Legislators requested the PEER Committee to review the state's adoption of the standards and their potential impact on Mississippi students, parents, teachers, and school districts.

Method

During the course of this review, PEER:

- interviewed staff of the Council of Chief State School Officers;
- interviewed Department of Education staff;
- interviewed the executive director of the Mississippi School Boards Association;
- interviewed the executive director of the Mississippi Association of School Superintendents;
- interviewed selected local school districts' superintendents;
- interviewed a representative of Mississippi Professional Educators;
- interviewed a representative of Parents for Public Schools;
- interviewed a representative of The Parents' Campaign;
- interviewed representatives of regional education service agencies;
- reviewed documents of the Mississippi Department of Education; and,
- conducted a literature search regarding the Common Core State Standards.

Description and Development of the Common Core State Standards

This chapter will address the following questions:

- What organizations were the driving forces behind the Common Core State Standards initiative?
- Why did the National Governors Association and the Council of Chief State School Officers and their partners initiate the Common Core State Standards initiative?
- What are the Common Core State Standards?
- What process did the National Governors Association and the Council of Chief State School Officers follow in developing the Common Core State Standards?
- Are the Common Core State Standards “internationally benchmarked?”

What organizations were the driving forces behind the Common Core State Standards initiative?

The leaders behind the Common Core State Standards initiative were the National Governors Association, through its Center for Best Practices, and the Council of Chief State School Officers, in partnership with Achieve, Inc.; ACT; and the College Board.

The Common Core State Standards initiative was jointly led by the National Governors Association (NGA), working through its Center for Best Practices, and the Council of Chief State School Officers (CCSSO), in partnership with Achieve, Inc.; ACT; and the College Board. Following are brief descriptions of each of these organizations.

- Founded in 1908 and headquartered in Washington, DC, the **National Governors Association** is a bipartisan organization of the nation's governors. The mission of the organization is to promote visionary state leadership, share best practices, and speak with a unified voice on national policy. NGA's Center for Best Practices serves as a consulting firm for governors and their key policy staff. The mission of the NGA Center is to develop and implement innovative solutions to public policy challenges.
- The **Council of Chief State School Officers** is a nationwide, nonpartisan, and nonprofit membership organization. The council's mission is to assist chief

state school officers (i. e., state education superintendents) in achieving the vision of an American education system that enables all children to succeed in school, work, and life. Headquartered in Washington, DC, the council provides support to school officers in the areas of education workforce, education data and information systems, innovative teaching techniques, and advocacy, as well as standards, assessment, and accountability.

- Founded in 1996 by a bipartisan group of state governors and corporate leaders, **Achieve, Inc.**, is a non-profit organization dedicated to supporting standards-based education reform efforts across the states. Governed by a board of directors consisting of four state governors and four corporate executives, Achieve provides technical assistance to states on the design, development, adoption, implementation, and communications of their college- and career-ready standards, assessments, curriculum, and accountability systems.
- Originally founded in 1959 as “American College Testing,” **ACT** is a private nonprofit corporation that administers a college admissions and placement test and provides other assessment, research, information, and program management services for education and workforce development.
- Founded in 1900, the **College Board** is a not-for-profit membership organization originally begun to expand access to higher education. The College Board’s college-readiness initiatives promote curricula, assessment tools, and resources that help K-12 students prepare for the academic rigors of higher education.

These organizations are funded through dues, federal grants, contracts, and contributions from foundations and corporations.

Why did the National Governors Association and the Council of Chief State School Officers and their partners initiate the Common Core State Standards initiative?

Evidence suggests that the Common Core State Standards initiative has, from its inception, been attuned to reaching consensus on what educators at every level can agree are the core competencies that must be attained in K-12 education to allow U.S. students to be competitive in world markets.

The primary driving force behind what is now the Common Core State Standards initiative is a concern that has been growing over the last thirty years that the quality of education in the United States is losing ground to other nations and a belief that U. S. students are ill-prepared for

college-level work at the completion of high school. A brief history of those concerns may be found in the following sections.

National Commission on Excellence in Education

As early as 1981, there was evidence of a growing recognition that our educational institutions at all levels are “being eroded by a rising tide of mediocrity” and that we are rapidly losing ground as leaders in world education.

In 1981, then-U. S. Secretary of Education T. H. Bell created the National Commission on Excellence in Education. Secretary Bell directed the commission to examine the quality of education in the United States and to make a report within eighteen months of its first meeting. In its report entitled *A Nation At Risk*, released in 1983, the commission opined regarding education in the United States:

Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. . . We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments.

The report presents findings in the areas of content (i. e., curriculum), expectations (i. e., the level of knowledge, abilities, and skills that high school and college graduates should possess), and time (i. e., portions of a day focused on schoolwork, homework, and study). The report makes the following recommendations for improving education in the United States:

- Graduation requirements should be strengthened so that all students establish a foundation in five new basics: English, mathematics, science, social studies, and computer science.
- Schools and colleges should adopt higher and measurable standards for academic performance.
- The amount of time students spend engaged in learning should be significantly increased.
- The teaching profession should be strengthened through higher standards for preparation and professional growth.

The commission's 1983 report is often cited as the origin of current education reform efforts.

National Education Summit on High Schools

In a 2005 National Education Summit on High Schools, thirteen states launched the American Diploma Project Network by adopting college- and career-ready policies that were clearly precursors to the broader Common Core State Standards initiative.

In 2005, Achieve sponsored, in partnership with the National Governors Association, the National Education Summit on High Schools. Forty-five governors, along with corporate chief executive officers and leaders from both K-12 and higher education, attended the conference. Summit participants were presented with a dismal assessment regarding the preparation of high school students for postsecondary success in a competitive global economy. The participants agreed that states needed to raise their expectations and achievements for high school.

At the conclusion of the summit, Achieve and thirteen states launched the American Diploma Project Network and committed to adopt the following college- and career-ready policies:

- aligning high school academic content standards in English and mathematics with the demands of college and careers;
- establishing graduation requirements that require all students to complete a college- and career-ready curriculum;
- developing statewide high school assessment systems anchored to college- and career-ready expectations; and,
- creating comprehensive accountability and reporting systems that promote college- and career-readiness for all students.

Presently, the American Diploma Project Network includes thirty-five states, educating approximately 85% of the nation's students.

States' Alignment Efforts

By 2008, sixteen states were able to report progress on aligning their state education standards through participation in the American Diploma Project, demonstrating the feasibility of bringing the states together on the idea of using uniform core standards to enhance educational achievement nationally.

In July 2008, Achieve released a report entitled *Out of Many, One: Toward Rigorous Common Core Standards From the Ground Up* in which the organization detailed the

efforts of sixteen states to align state education standards through their participation in the American Diploma Project. The report noted that students throughout the country often meet state standards, pass state tests, and complete state-required courses only to be placed in remedial courses once they enroll in college.

From 2002 to 2004, Achieve and its partners worked with representatives from the K-12 education, postsecondary education, and business communities in five selected states to identify the English and mathematics knowledge and skills high school graduates need for success in college and careers. Through discussions with these representatives and further research, Achieve developed college- and career-ready benchmarks for English and mathematics. In English, the twenty-two core benchmarks focused not only on literature and writing, but also on reasoning, logic, and communication skills. In mathematics, the thirty-four core benchmarks included number sense and numerical operations, algebra, geometry, data interpretation, statistics and probability, and mathematical reasoning.

The report analyzed English and mathematics standards in the sixteen states and rated the strength of each state's standards alignment with the core content benchmarks developed by the American Diploma Project (ADP). The report noted that an ADP core benchmark could be defined as "common" if at least seventy-five percent of the states included it in their standards with an alignment rating of at least "good" or better. Of the twenty-two ADP core benchmarks in English, all but one could be defined as "common." Of the thirty-four ADP core benchmarks in mathematics, all but three could be defined as "common."

Achieve makes the following observations in concluding its 2008 report:

States have demonstrated leadership in developing rigorous standards in English and mathematics that will prepare all high school graduates for college, careers and life. When states use college- and career-readiness as their goal, not only does the rigor of their individual state standards increase, but a common core of English and mathematics among the states emerges. This common core reflects the demands of the real world in which high school graduates will find themselves, a world of ever-increasing complexity and expectation that is not bound by state lines.

The common core does not mean that every state has identical standards but it does reflect the reality that there is a fundamental core of knowledge in English

and mathematics that all graduates must know to succeed in college and careers. State leadership has demonstrated that a voluntary, state-led effort towards a common core for all students is possible—and desirable—and well within reach.

Benchmarking Report

In 2008, the National Governors Association and the Council of State School Officers outlined a series of action steps that would allow state education leaders to bring their systems to international competitiveness.

In 2008, the National Governors Association, the Council of Chief State School Officers, and Achieve released a report entitled *Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education*, which noted that American education has not adequately responded to the challenges of a changing and competitive global economy. The report stated that American fifteen-year-olds ranked 25th in math and 21st in science achievement on the most recent international assessment conducted in 2006.

The report also stated that the U. S. was rapidly losing its historic edge in educational attainment. In 1995, the U. S. was tied internationally for first in college and university graduation rates, but had fallen to 14th by 2006. That same year, the U. S. had the second-highest college dropout rate of twenty-seven countries. The report observed that state leaders were already engaged in efforts to raise standards, advance teaching quality, and improve low-performing schools. The report encouraged state leaders to take the following actions to focus their states' efforts on policy areas that have high impact on student performance and a high potential for best practice learning:

- *Action 1:* Upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive.
- *Action 2:* Leverage states' collective influence to ensure that textbooks, digital media, curricula, and assessments are aligned to internationally benchmarked standards and draw on lessons from high-performing nations and states.
- *Action 3:* Revise state policies for recruiting, preparing, developing, and supporting teachers and school leaders to reflect the human capital practices of top performing nations and states around the world.
- *Action 4:* Hold schools and systems accountable through monitoring interventions and support to ensure consistently high performance, drawing upon international best practices.

- *Action 5:* Measure state-level education performance globally by examining student achievement and attainment in an international context to ensure that, over time, students are receiving the education they need to compete in the 21st century economy.

What process did the National Governors Association and the Council of Chief State School Officers follow in developing the Common Core State Standards?

The National Governors Association and the Council of Chief State School Officers followed a two-stage process in leading forty-eight states in the development of the Common Core State Standards. Stage One drew on an evidence-based approach to identify the knowledge and skills that students should obtain by the end of their K-12 education. Stage Two broke that knowledge and skills into the math and English standards for each grade level that would allow students to reach those end-of-high-school expectations.

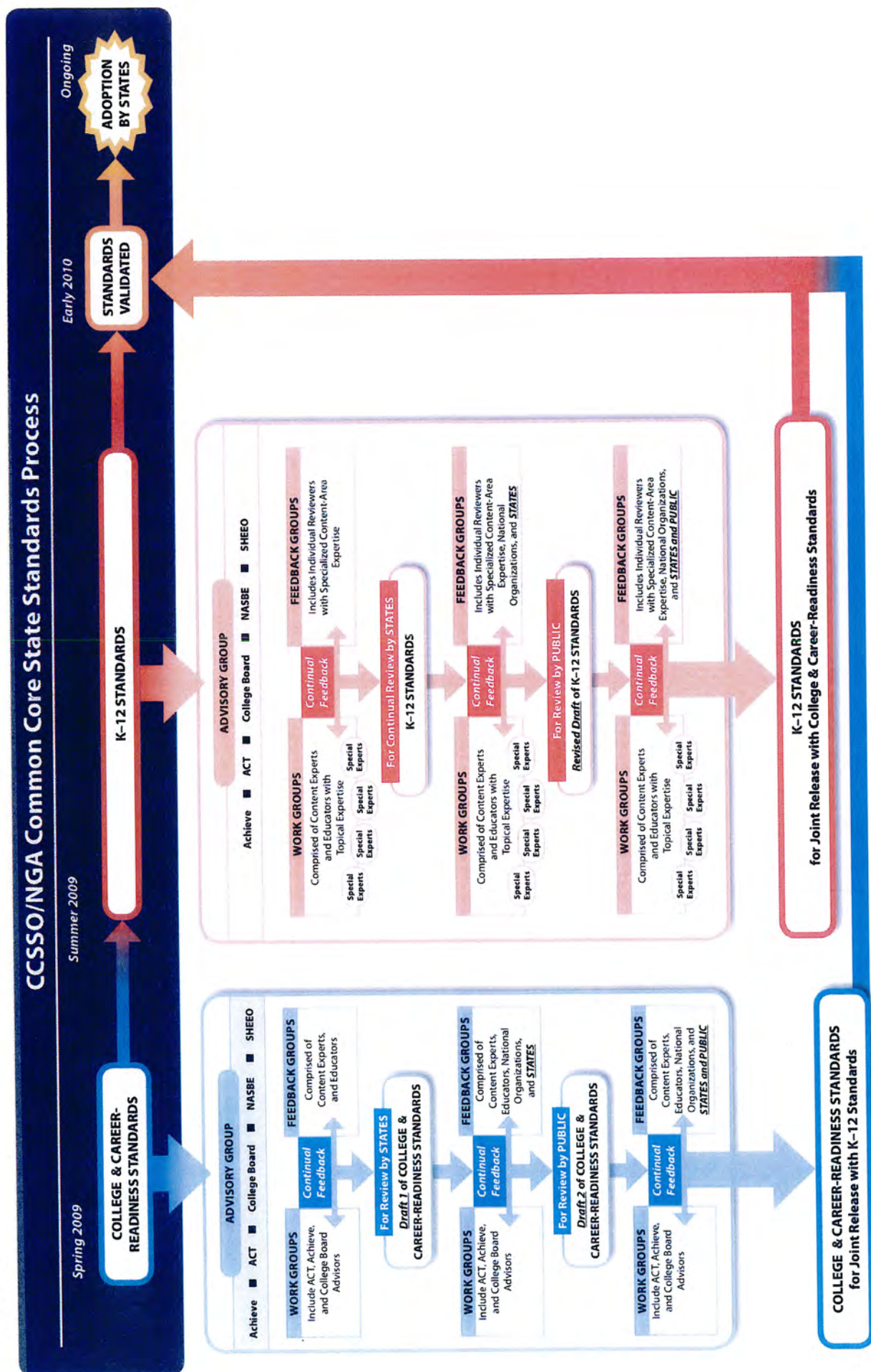
In June 2009, NGA and CCSSO enlisted forty-eight states, two territories, and the District of Columbia to participate in the Common Core State Standards initiative. (Alaska and Texas chose not to participate in the initiative.) Governors and key education officials in the states signed memoranda of agreement committing their states to a “state-led process that will draw on evidence and lead to development and adoption of a common core of state standards (common core) in English language arts and mathematics for grades K-12.”

The Common Core State Standards were written in two phases involving standards for college and career readiness--i. e., knowledge and skills that students should obtain by the end of their K-12 education--and standards for each grade level that would lead to reaching those end-of-high-school expectations. Exhibit 1, page 10, presents the flow of the Common Core State Standards development process.

NGA and CCSSO established the following criteria to be followed in developing the college- and career-readiness standards that laid the foundation for the K-12 standards.

- *Rigorous*--The standards were to include high-level cognitive (e. g., reasoning, justification, synthesis, analysis, and problem-solving) demands by asking students to demonstrate deep conceptual understanding through the application of content knowledge and skills to new situations.
- *Clear and Specific*--The standards were to provide sufficient guidance and clarity so that they were teachable, learnable, and measurable, as well as clear and understandable to the general public.

Exhibit 1



SOURCE: Indiana Department of Education.

- *Teachable and Learnable*--The standards were to provide sufficient guidance for the design of curricula and instructional materials. The standards were to be reasonable in scope, instructionally manageable, and to promote depth of understanding.
- *Measurable*--Student attainment of the standards was to be observable and verifiable so that the standards could be used to develop broader assessment frameworks.
- *Coherent*--The standards were to convey a unified vision of the big ideas and supporting concepts within a discipline and reflect a progression of learning that was meaningful and appropriate.
- *Grade-by-Grade Standards*--The standards were to have limited repetition across the grades or grade spans to help educators align instruction to the standards.
- *Internationally Benchmarked*--The standards were to be informed by the content, rigor, and organization of high-performing countries so that all students were prepared for succeeding in a global economy and society.

As illustrated in the following sections, the sponsoring organizations developed the Common Core State Standards by convening education and other experts to develop the standards for English language arts and mathematics. As with any process involving individuals with differing opinions and solutions for solving a problem, the end result was standards developed from the consensus of those involved. This process is not unlike that used by Mississippi and other states to develop their own academic standards.

Development of College- and Career-Readiness Standards

In 2009, the work teams received comment from expanded feedback groups and further opened the development process to public comment before finalizing the draft of the college- and career-readiness standards.

In the summer of 2009, two work teams, one for English language arts and one for mathematics, worked on a draft of the college- and career-readiness standards. Members of the two work teams largely consisted of staff of Achieve, the College Board, and ACT. (See Appendices A and B, pages 63 and 64, for the members of the work teams.) Assisting the two work teams were two feedback teams whose members--i. e., content experts--were to offer research-based input on draft documents produced by the work teams. (See Appendices C and D, pages 65 and 66, for members of the feedback teams.)

Using comments from the feedback teams, the work teams produced a draft of the college- and career-readiness standards in July 2009. The work teams then invited comments on the draft standards from representatives of the states and national organizations in August 2009. Using comments from these expanded feedback groups, the work teams revised the draft standards. The work teams made drafts of the college- and career-readiness standards available for public comments during September and October 2009. According to NGA and CCSSO, the organizations received opinions of more than 1,000 individuals during the public comment phase. Using an iterative process, the work teams shared more refined drafts of the standards with larger audiences before finalizing the college- and career-readiness standards in October 2009.

Development of K-12 Standards

The K-12 standards development teams also used feedback groups and public comment as a part of their development process. The feedback groups represented a broad range of stakeholder interests, including those with expertise in education and those with whom consumer interests were a primary concern.

The K-12 standards development process had a parallel structure to the college- and career-readiness standards development process, with work teams drafting the standards and receiving input from outside experts and practitioners. On November 10, 2009, NGA and CCSSO announced the members of the work and feedback teams and stated that the teams for the K-12 standards were composed of “individuals representing multiple stakeholders and a range of expertise and experience in assessment, curriculum design, cognitive development, early childhood, early numeracy, child development, English-language acquisition and elementary, middle, and postsecondary education.” The K-12 standards for English language arts were to be aligned with the college- and career-readiness standards previously developed by other work teams. (See Appendices E, F, G, and H, pages 68 through 76, for the members of the K-12 work and feedback teams.)

Using an iterative process, the work teams shared more refined drafts of the K-12 standards with larger audiences before releasing the draft standards for public comment on March 10, 2010. According to NGA and CCSSO, almost 10,000 individuals completed online surveys and provided feedback regarding the K-12 standards. Survey participants primarily identified themselves as K-12 teachers, parents, school administrators, and postsecondary faculty members or researchers. Using comments received during the feedback phase, the K-12

standards work teams revised the standards and issued the final draft of the standards in June 2010.

Validation of the Standards

A twenty-nine-member validation committee nominated by the states and national organizations found that the Common Core State Standards met expectations as a basis for increasing student performance to college- and career-readiness levels in seven critical areas of need.

On September 24, 2009, NGA and CCSSO announced the formation of a Validation Committee for the Common Core State Standards initiative. The committee was tasked with reviewing and verifying the standards development process and the resulting evidence-based college- and career-readiness standards. Members of the validation committee were nominated by the states and national organizations, with a group of six governors and six chief state school officers in the participating states selecting the final committee membership. The twelve-member selection committee chose twenty-nine individuals from the United States and other countries to serve as members of the validation committee. (See Appendix I, page 77, for members of the validation committee.)

The Validation Committee conducted its initial meeting in December 2009 in Washington, DC. The committee met for a second time in April 2010 to discuss the strengths and areas for additional consideration in the publicly released K-12 standards. In May 2010, the committee received an embargoed copy of the final content of the Common Core State Standards. According to NGA and CCSSO, the Validation Committee found the standards to be:

- reflective of the core knowledge and skills in English language arts and mathematics that students need to be college- and career-ready;
- appropriate in terms of their level of clarity and specificity;
- comparable to the expectations of other leading nations;
- informed by available research or evidence;
- the result of processes that reflect best practices for standards development;
- a solid starting point for adoption of cross-state common core standards; and,
- a sound basis for eventual development of standards-based assessments.

What are the Common Core State Standards?

The Common Core State Standards are a generally agreed-upon set of core competencies in English language arts and mathematics that reflect the needed preparation for entering two- and four-year colleges. The standards clearly specify what students should be able to understand and be able to do at a particular grade level, but not the means and materials with which the students will interact for the purpose of achieving that educational outcome.

The Common Core State Standards are a single set of educational standards for kindergarten through twelfth grade in English language arts and mathematics that are designed to ensure that students graduating from high school are prepared to enter two- and four-year college programs or the workforce. The standards draw on international models, research, and input from numerous sources, including state departments of education, scholars, assessment developers, professional organizations, educators from kindergarten through college, and parents, students, and other members of the public.

English Language Arts Standards

The English language arts standards are divided into reading, writing, speaking and listening, and language strands for conceptual clarity. The English language arts standards also include a literacy component that is a shared responsibility within the school and include expectations for reading, writing, speaking and listening, and language applicable to history/social studies, science, and technical subjects.

The K-12 grade-specific standards for English language arts define end-of-year expectations and a cumulative progression designed to enable students to meet college- and career-readiness expectations no later than the end of high school. The English language arts standards are divided into reading, writing, speaking and listening, and language strands for conceptual clarity. The key features for each strand include:

- *reading*--text complexity and the growth of comprehension;
- *writing*--text types, responding to reading, and research;
- *speaking and listening*--flexible communication and collaboration;
- *language*--conventions, effective use, and vocabulary.

In addition to grade-specific requirements, the English language arts standards include a literacy component. The standards state that instruction in reading, writing,

speaking and listening, and language should be a shared responsibility within the school. The K-5 standards include expectations for reading, writing, speaking and listening, and language applicable to a range of subjects, including, but not limited to, English language arts. The grades 6-12 standards are divided into two sections, one for English language arts and the other for history/social studies, science, and technical subjects. This division recognizes the place of English language arts teachers in developing students' literacy skills while at the same time recognizing that teachers in other areas must have a role in this development as well. (From this point, references in this report to "English language arts" also include the literacy component of the standard.)

According to the standards, part of the motivation behind the interdisciplinary approach to literacy promulgated by the standards is extensive research establishing the need for college- and career-ready students to be proficient in reading complex informational text independently in a variety of content areas. To this end, the English language arts standards include a reading framework for the various grades. For example, in grade 4, the standards call for elementary curriculum materials to reflect a mix of 50% literary and 50% informational text, including reading in English language arts, science, social studies, and the arts. By grade 8, the standards reflect a mix of 45% literary (fiction, poetry, and drama) and 55% informational text (essays, speeches, opinion pieces, biographies, and journalism). By grade 12, the standards require a mix of 30% literary and 70% informational text.

The English language arts standards also include a writing framework for the various grades. For example, in grade 4, the standards call for elementary curriculum materials to reflect a mix of 30% in writing to persuade, 35% writing to explain, and 35% writing to convey an experience. By grade 12, the standards reflect a mix of 40% writing to persuade, 40% writing to explain, and 20% writing to convey an experience.

The English language arts standards include a section entitled *What is Not Covered by the Standards*, with the following limitations noted.

- The standards define what all students are expected to know and be able to do, not how teachers should teach.
- While the standards focus on what is most essential, they do not describe all that can or should be taught.
- The standards do not define the nature of advanced work for students who meet the standards prior to the end of high school.
- The standards set grade-specific standards, but do not define the intervention methods or materials necessary

to support students who are well below or well above grade-level expectations.

- The standards do not define the full range of supports appropriate for English language learners and for students with special needs.
- While the English language arts and content area literacy components are critical to college- and career-readiness, they do not define the whole of such readiness.

Mathematics Standards

The Common Core State Standards approach to mathematics standards is to stress conceptual understanding of key ideas while continually returning to organizing principles to structure those ideas. Proponents believe that the result is a substantially focused and coherent approach to learning mathematics as a problem-solving process.

According to the standards, for over a decade research studies of mathematics education in high-performing countries have pointed to the conclusion that the mathematics curriculum in the United States must become substantially more focused and coherent in order to improve mathematics achievement in this country. The resulting mathematics standards developed through the NGA and CCSSO initiative endeavor to stress conceptual understanding of key ideas while continually returning to organizing principles such as place value or the properties of operations to structure those ideas. The grade-specific standards define what students should understand and be able to do in their study of mathematics.

The NGA and CCSSO mathematics standards are based on the following Standards for Mathematical Practice, which describe varieties of expertise that mathematics educators should seek to develop in their students.

- *Make sense of problems and persevere in solving them.* Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution.
- *Reason abstractly and quantitatively.* Mathematically proficient students make sense of quantities and their relationships in problem situations.
- *Construct viable arguments and critique the reasoning of others.* Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments.
- *Model with mathematics.* Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace.

- *Use appropriate tools strategically.* Mathematically proficient students consider the available tools when solving a mathematical problem.
- *Attend to precision.* Mathematically proficient students try to communicate precisely to others.
- *Look for and make use of structure.* Mathematically proficient students look closely to discern a pattern or structure.
- *Look for and express regularity in repeated reasoning.* Mathematically proficient students notice if calculations are repeated and look both for general methods and for shortcuts.

For each grade level, the mathematics standards state that instructional time should focus on specific areas of learning. For example, the standards state that in grade 2 that instructional time should focus on: (1) extending understand of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes. The high school mathematics standards encompass the conceptual categories of number and quantity, algebra, functions, modeling, geometry, and statistics and probability.

Are the Common Core State Standards “internationally benchmarked?”

Common Core State Standards were “internationally benchmarked” in the sense that through a process of consulting selected state and international models to find common elements that mark the educational standards of world leading systems, the development team arrived at a competitive definition of the competency base needed to become college- and career-ready on an international scale.

As stated on page 8, the National Governors Association, the Council of Chief State School Officers, and Achieve released a report in 2008 addressing the state of education in the United States and the need to benchmark education for success. The report stated that in American education, “benchmarking” means “comparing performance outcomes or setting performance targets (or ‘benchmarks’).” The report stated that the American Productivity and Quality Center¹ defines “benchmarking” as the “practice of being humble enough to admit that someone else has a better process and wise enough to learn how to match or even surpass them.”

The report noted that state leaders were engaged in efforts to raise standards, advance teaching quality, and improve low-performing schools. The report contends that international benchmarking provides an additional tool for

¹The *American Productivity and Quality Center*, a non-profit organization, is a proponent of business benchmarking, best practices, and knowledge management research.

making that process more effective, offering insights and ideas that cannot be garnered solely from looking within and across state lines. The report notes that if state leaders want to ensure that their citizens and their economies remain competitive, they must look beyond America's borders and benchmark their education systems with the best in the world.

Regarding the Common Core State Standards being "internationally benchmarked," the English language arts and mathematics standards include bibliographies noting the sources used by the work teams in developing the standards. The English language arts standards address the international benchmarking issue by stating that "in the course of developing the standards, the writing team consulted numerous international models, including those from Ireland, Finland, New Zealand, Australia (by state), Canada (by province), Singapore, the United Kingdom, and others." The standards further state that the following patterns emerged from international standards and influenced the design and content of the English language arts standards:

- *Other nations pay equal attention to what students read and how they read.* The standards follow the spirit of international models by setting explicit expectations for the range, quality, and complexity of what students read along with more conventional standards describing how well students must be able to read.
- *Students are required to write in response to sources.* In international assessment programs, students are confronted with a text or texts and asked to gather evidence, analyze readings, and synthesize content.
- *Writing arguments and writing informational/explanatory texts are priorities.* The standards follow international models by making writing arguments and writing informational/explanatory texts the dominant modes of writing in high school to demonstrate readiness for college and career.

Following the development of the Common Core State Standards, Achieve (see page 4) created technical briefs that compared the standards to existing English language arts and mathematics of the following states, national organizations, and countries:

- California and Massachusetts mathematics standards;
- California and Massachusetts English language arts standards;
- National Council of Teachers of Mathematics Focal Points;
- National Mathematics Advisory Panel recommendations;

- National Assessment of Educational Progress;
- Frameworks in Mathematics;
- National Assessment of Educational Progress Framework in Reading and Writing;
- Singapore mathematics standards;
- Japan mathematics standards; and,
- Alberta, Canada, and New South Wales, Australia, English language arts standards.

Each technical brief presents Achieve's major and detailed findings and concludes with the organization's observation regarding the similarities or differences between the Common Core State Standards and those of the states, national organizations, and countries analyzed.

Mississippi's Adoption of the Common Core State Standards

This chapter will address the following questions:

- When did the State Board of Education adopt the Common Core State Standards and what was the basis for the board's decision?
- Did the State Board of Education seek public comment or input regarding the adoption and implementation of the Common Core State Standards?
- Did the State Board of Education adopt the Common Core State Standards to secure federal funding for state education programs?

When did the State Board of Education adopt the Common Core State Standards and what was the basis for the board's decision?

On August 20, 2010, the Mississippi Board of Education adopted the Common Core State Standards, the predominant driving force of which was an increasing recognition that Mississippi, in spite of reform efforts, has continued its history of poor performance on the National Assessment of Educational Progress and the American College Test and still has unacceptably high levels of enrollment in remedial postsecondary courses. Common Core State Standards represent a bold step in remediating tolerated deficiency in preparing Mississippi's K-12 students for college- and career-readiness.

The state Board of Education's decision to adopt the Common Core State Standards was based on several factors. Mississippi students have had a history of poor performance on national tests, such as the National Assessment of Educational Progress (NAEP) and the American College Test (ACT). For example, in 2012:

- 53% of Mississippi students taking the ACT college entrance test met the English college-readiness benchmark, while nationally 67% of students tested met the benchmark;
- in mathematics, 21% of Mississippi students taking the ACT met the college-readiness benchmark, while nationally 46% met the benchmark; and,
- in reading, 34% of Mississippi students tested met the college-readiness benchmark, while nationally 52% met the benchmark.

According to the Department of Education, Mississippi also has had a large percentage of students enrolling in remedial postsecondary courses, prompting postsecondary

education personnel to encourage the Board of Education to take action to improve the state's academic standards.

Memorandum of Agreement Regarding Common Core State Standards

In the spring of 2009, former Governor Haley Barbour and former State Superintendent of Education Hank Bounds signed a formal memorandum of agreement with NGA and CCSSO committing Mississippi to align its standards to common core standards and support a state-led effort to develop such standards.

In the spring of 2009, former Governor Haley Barbour and former State Superintendent of Education Hank Bounds signed a formal memorandum of agreement (MOA) with NGA and CCSSO committing Mississippi “to a state-led process that will draw on evidence and lead to development and adoption of a common core of state standards (common core) in English language arts and mathematics for grades K-12.” The MOA noted that NGA and CCSSO, as the coordinators for the project, would facilitate the development of standards that were:

- fewer, clearer, and higher, to best drive effective policy and practice;
- aligned with college and work expectations, so that all students are prepared for success upon graduating from high school;
- inclusive of rigorous content and application of knowledge through high-order skills, so that all students are prepared for the 21st century;
- internationally benchmarked, so that all students are prepared for succeeding in our global economy and society; and,
- research- and evidence-based.

The MOA stated that the goal of the initiative was to develop a “true common core of state standards that are internationally benchmarked.” The MOA called for an implementation timeline not to exceed three years for states adopting the common core standards directly or by fully aligning their state standards with the common core standards.

The MOA noted that the “effort is voluntary for states” and states that adopt the common core standards may choose to include additional state standards beyond the common core of standards. The MOA required states that choose to align their standards to common core standards to agree to ensure that the common core represents at least 85% of the state's standards in English language arts and mathematics. (On February 2, 2010, NGA and CCSSO officials clarified that any state that adopted the Common Core State Standards adopted “the whole thing, not just

parts of it.” The 85% requirement meant that states could add 15% of their own material to supplement the standards.)

The MOA further stated that the parties to the agreement supported a state-led effort to develop a common core of state standards. The agreement noted, however, that there is an appropriate federal role in supporting the state-led effort. The agreement said that the federal government can provide key financial support for the effort to develop a common core of state standards and associated student assessments. The agreement specifically mentioned potential federal support of the effort in the form of Race to the Top grants. The agreement further said that the federal government could incentivize states by providing states with greater flexibility in the use of existing federal funds to implement the standards. The agreement concluded by stating that the federal government could possibly revise and align existing federal education laws based on lessons learned from states’ international benchmarking efforts and from federal research.

The Board of Education’s Adoption of the Standards

During the state Board of Education’s meeting of February 19, 2010, a board member who had attended the National Association of State Boards of Education’s Southern Regional Conference made a report to the board on the Common Core State Standards initiative and an MDE official presented an overview of the standards and provided a tentative timeline for reviewing and adopting the standards. The board unanimously gave final approval to the Common Core State Standards on August 20, 2010.

Following the state officials’ signing of the MOA, Mississippi’s Department of Education staff, like education staff in other participating states, began engaging in informal dialogue internally and with educators outside the department regarding the development of the standards. Specifically, from September 2009 through April 2010, the department’s curriculum staff discussed the concepts of the standards with a mathematics professor at the University of Mississippi, a math specialist from the Gulfport School District, and an English language arts content specialist and former curriculum coordinator for South Pike School District.

On January 11-12, 2010, MDE’s Director of Curriculum and Instruction and a State Board of Education member attended the National Association of State Boards of Education’s (NASBE) Southern Regional Conference that focused on the development, adoption, and implementation of the Common Core State Standards. During the State Board of Education’s February 19, 2010, meeting, the board member who attended the conference made a report to the board on the Common Core State Standards initiative and expressed her belief that

“Mississippi needs all of our students to be well prepared and ready to compete with not only their American peers, but with students from around the world.” During the board meeting, a Department of Education official presented the board with an overview of the standards and provided the board with a tentative timeline for reviewing and adopting the standards. (See Exhibit 2, below.) The board did not take any action regarding the standards during the meeting.

Exhibit 2: Tentative Timeline for Reviewing and Adopting the Common Core State Standards, February 19, 2010

March 1-15	Anticipated window for release of the standards by NGA/CCSSO
	Recruit 8-10 committee members for each grade band (K-2, 3-5, 6-8, 9-12) per content area
March 15 - April 30	Have MDE consultants to review standards for alignment to current standards
May 24-28 or June 1-4	Conduct stakeholder meeting to review standards and any recommended additions; stakeholders will also provide input on the schedule of implementation
June 7- July 9	Conduct external review
July 15-16	Possibly present to the State Board of Education for approval to begin APA process
July/August	Conduct a separate review with post secondary faculty (15-20) per content area
September	Possibly present to the State Board of Education for final approval

SOURCE: Mississippi Department of Education.

According to the Department of Education’s staff, Dr. Lynn House, who at that time served as Deputy State Superintendent, met with superintendents throughout the state from May to June 2010 to provide an overview of the Common Core State Standards and the tentative timeline for adoption. During its June 25, 2010, meeting, the State Board of Education unanimously adopted the Common Core State Standards for English language arts and mathematics as “temporary rule to become effective immediately based on finding of imminent peril to public welfare in the loss of substantial federal funds from the Race to the Top Grant.” The board’s adoption of the

standards was subject to the state's Administrative Procedures Act provisions (see page 25). Consistent with its statutory authority in MISS. CODE ANN. Section 37-1-3 (2) (a) (1972) to adopt a "course of study to be used in the public school districts," during its August 20, 2010, meeting, the Board of Education unanimously adopted the Common Core State Standards for English language arts and mathematics, making those the state's adopted standards for those subject areas.

The Department of Education has incorporated the board's adoption of the Common Core State Standards into the department's five-year strategic plan. For example, the department's goal of ensuring that all students exit the third grade reading on grade level includes "transition to an educational system focused on using Common Core State Standards (CCSS) as the benchmark for student success and the criteria for promotion/retention."

Another strategic goal of the department is to have "60% of students scoring proficient/advanced on the assessments of the Common Core State Standards by 2016 with incremental increases of 3% each year thereafter."

Subsequent to Mississippi and other states adopting the Common Core State Standards, the Thomas B. Fordham Institute, an education reform advocacy organization, reviewed Mississippi's English language arts and mathematics academic standards that were in effect prior to the board's adoption of the Common Core State Standards. With regard to the state's previous English language arts standards, the Fordham Institute described them as "mysterious" and "characterized by complicated and repetitive prose in which content and skills are mostly disconnected from one another, making it difficult to identify the expectations for students." The Fordham Institute concluded its analysis of Mississippi's previous English language arts standards by declaring them "among the worst in the country" and opining that the Common Core State Standards were significantly superior to the state's previous standards in that subject area.

The institute noted that the high school material covered much of the essential content, including science, technology, engineering and mathematics (STEM)-ready content. The Fordham Institute concluded its analysis of Mississippi's previous mathematics standards by declaring them to be "mediocre" and opining that the Common Core State Standards were significantly superior to the state's previous standards in that subject area.

Did the State Board of Education seek public comment or input regarding the adoption and implementation of the Common Core State Standards?

The State Board of Education met all requirements of the Mississippi Administrative Procedures Act (MISS. CODE ANN. Section 25-43-1.101 [1972]) for public comment prior to adoption of the Common Core State Standards. Also, the department's staff conducted regional meetings in August 2013 to inform and seek comments from the general public regarding the standards.

Compliance with Administrative Procedures Act Requirements

As required by the state's Administrative Procedures Act, the Department of Education filed both the board's proposed and adopted Common Core State Standards with the Secretary of State for public comment.

MISS. CODE ANN. Section 25-43-1.101 et seq. (1972) is known as the Mississippi Administrative Procedures Act (APA). MISS. CODE ANN. Section 25-43-3.103 (1) (1972) states "at least twenty-five (25) days before the adoption of a rule an agency shall cause notice of its contemplated action to be properly filed with the Secretary of State for publication in the administrative bulletin." The Secretary of State's administrative bulletin serves as the official notice to the general public of proposed rules and regulation changes by state agencies. As documented by the Secretary of State's records, Department of Education staff filed the proper APA forms with the Secretary of State on June 25, 2010, notifying the general public of the temporary rule adopted by the Board of Education on that date regarding the Common Core State Standards.

MISS. CODE ANN. Section 25-43-3.104 (1) (1972) states: "for at least twenty-five (25) days after proper filing with the Secretary of State of the notice of proposed rule adoption, an agency shall afford persons the opportunity to submit, in writing, argument, data and views on the proposed rule." During the board's August 20, 2010, meeting, Department of Education staff presented to the board comments made by educators and others regarding the board's proposed adoption of the Common Core State Standards. (See Appendix J, page 79.) During the public review period, no groups or persons made requests of MDE for information regarding the Common Core State Standards. After considering the comments made by educators and others, the board unanimously adopted the English language arts and mathematics Common Core State Standards without any changes from those that it had previously adopted as a temporary rule on June 25, 2010.

Presentations at Regional Meetings

In an effort to inform and seek comments from parents and the general public regarding the standards, the Department of Education's staff conducted eight regional meetings during August 2013.

Following the board's adoption of the Common Core State Standards and implementation planning efforts by department and local district staff, the Department of Education, in partnership with the Mississippi Parent-Teacher Association and the Mississippi Library Commission, held eight public meetings in August 2013 to inform parents and community members about the standards. The meetings were held in Jackson, Oxford, Meridian, Cleveland, Natchez, Biloxi, Hattiesburg, and Hernando.

In an effort to inform the public of the regional meetings, Dr. Lynn House, who at that time served as Interim State Superintendent, emailed local school district superintendents and encouraged them to assist the department by "getting the word out to your parents in whatever way works for you." The regional meetings consisted of an explanatory presentation by Dr. House and Pete Smith, Department of Education Director of Legislation and Communications, followed by a question-and-answer period. According to the department's staff, approximately 841 individuals attended the regional meetings.

Did the State Board of Education adopt the Common Core State Standards to secure federal funding for state education programs?

Although the Race to the Top grant competition guidelines did not specifically require the states to adopt the Common Core State Standards, evidence suggests that the department believed that adoption of the Common Core State Standards would strengthen the state's Race To the Top application for grant funds. While not a mandate, the Race to the Top guidelines contained a clear incentive for states to consider participating in the raising of K-12 standards in the nation as a whole. States were free to pursue the raising of standards independently, if they so chose.

On February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA), designed to stimulate the economy, support job creation, and invest in critical sectors, including education. The ARRA provided \$4.35 billion for the Race to the Top Fund, a competitive grant program designed to encourage and reward states that were creating the conditions for education innovation and reform. Recipients of the grants were required to address the following four education reform areas:

- adopting standards and assessments that prepare students to succeed in college and the workplace to compete in the global economy;
- building data systems that measure student growth and success and inform teachers and principals about how they can improve instruction;
- recruiting, developing, rewarding, and retaining effective teachers and principals, especially where they are needed most; and,
- turning around lowest-achieving schools.

Of the grant application's six selection criteria, two address standards and assessment and data systems to support instruction. The application notes that a state could receive a maximum of forty points if the state "is working toward jointly developing and adopting a common set of K-12 standards. . .that are supported by evidence that they are internationally benchmarked and build toward college and career readiness by the time of high school graduation." The application also notes that a state could receive twenty-four points for "fully implementing a statewide longitudinal data system."

During the latter part of May 2010, the Mississippi Department of Education finalized its Race to the Top submission package for phase two of the competition, which had a June 1 deadline. Although the Board of Education had not adopted the Common Core State Standards at the time the department submitted its grant application to the U. S. Department of Education, the department stated the following with regard to educational standards in Mississippi:

MS is ready to move the bar higher by further increasing the intellectual rigor demanded of MS students. As a result, MS will adopt the CCSSO and NGA Common Core State Standards (CCSS) and aligned assessments by participating in Partnership for Assessment of Readiness for College and Career (PARCC)...MS is committed to embracing intellectual rigor to create a world-class educational system for all MS students. To accomplish this task, MS will adopt higher standards and aligned assessments with an emphasis on providing the professional support for educators in the state to ensure that all MS students are competent, creative, innovative and ready for the 21st Century workforce.

The department's grant application submission included twenty-three letters of support from Mississippi elected officials, high school and postsecondary educators, representatives of education advocacy organizations, and

corporate executives. (See Appendix K, page 83, for a list of individuals who wrote letters of support for inclusion in the Department of Education's Race to the Top grant submission package.)

Although the Race to the Top grant competition guidelines did not specifically require states to adopt the Common Core State Standards, the department believed that adoption of those standards would strengthen the state's application. Consistent with the department's stated intention in its grant submission application, the Board of Education had adopted the Common Core State Standards on June 25, 2010, as a "temporary rule to become effective immediately based on finding of imminent peril to public welfare in the loss of substantial federal funds from the Race to the Top Grant" (see page 23).

The U. S. Department of Education awarded the Race to the Top grants in two phases, with the submission deadline for phase one grants being January 19, 2010, and the submission deadline for phase two grants being June 1, 2010. On March 29, 2010, Secretary of Education Arne Duncan announced that Delaware and Tennessee were awarded grants in the first phase of the Race to the Top competition. On August 24, 2010, Secretary Duncan announced that nine states—Florida, Georgia, Hawaii, Maryland, Massachusetts, New York, North Carolina, Ohio, and Rhode Island—and the District of Columbia won grants in the second phase of the Race to the Top competition. Thus, despite the Mississippi Department of Education's submission of a grant application during phase two of the Race to the Top competition, the U. S. Department of Education did not award Mississippi a grant.

Mississippi's Implementation of the Common Core State Standards

This chapter will address the following questions:

- What are the phases of implementation for Common Core State Standards?
- What responsibilities do the State Board of Education, Department of Education, and local school boards and districts have regarding the implementation of the Common Core State Standards?
- What curriculum and teaching materials will be used by classroom teachers to provide lessons based on the Common Core State Standards?
- What training and professional development opportunities regarding Common Core State Standards are available for educators?
- How will students' performance be assessed and how much will such assessment cost?
- Do districts have the technological capabilities to administer the online student assessments for the Common Core State Standards?
- How does Mississippi's Statewide Longitudinal Data System (SLDS) relate to the adoption and implementation of the Common Core State Standards and how will the SLDS's education-related information be utilized?

What are the phases of implementation for Common Core State Standards?

Implementation of the Common Core State Standards generally falls into three categories: Phase One--standards adoption/implementation, Phase Two--assessment development, and Phase Three--assessments linked to accountability systems. Mississippi is currently in the implementation process and moving into the assessment development phase.

According to Michael Q. McShane, a research fellow in education policy studies at the American Enterprise Institute, implementation of the Common Core State Standards generally falls into the following three categories:

- *Phase One: Standards Adopted*--After adoption of the Common Core State Standards, states will need to ensure that teachers are prepared, instructional materials are aligned, and schools and systems have the technological capacity to implement the standards.

- *Phase Two: Assessments Developed*--States will need to develop the capability and infrastructure to administer tests and then collect and analyze the data they produce; to pilot tests as a check that textbooks, resources, and professional development are aligned with the standards; and to prepare the public to understand new test results.
- *Phase Three: Assessments Linked to Accountability Systems*--Common Core State Standards assessments become the determinants for state, district, and school accountability systems and teacher evaluation initiatives.

Mississippi is currently well into Phase One of the implementation process and moving into Phase Two with the development and field testing of student assessments (see page 42).

What responsibilities do the State Board of Education, Department of Education, and local school boards and districts have regarding the implementation of the Common Core State Standards?

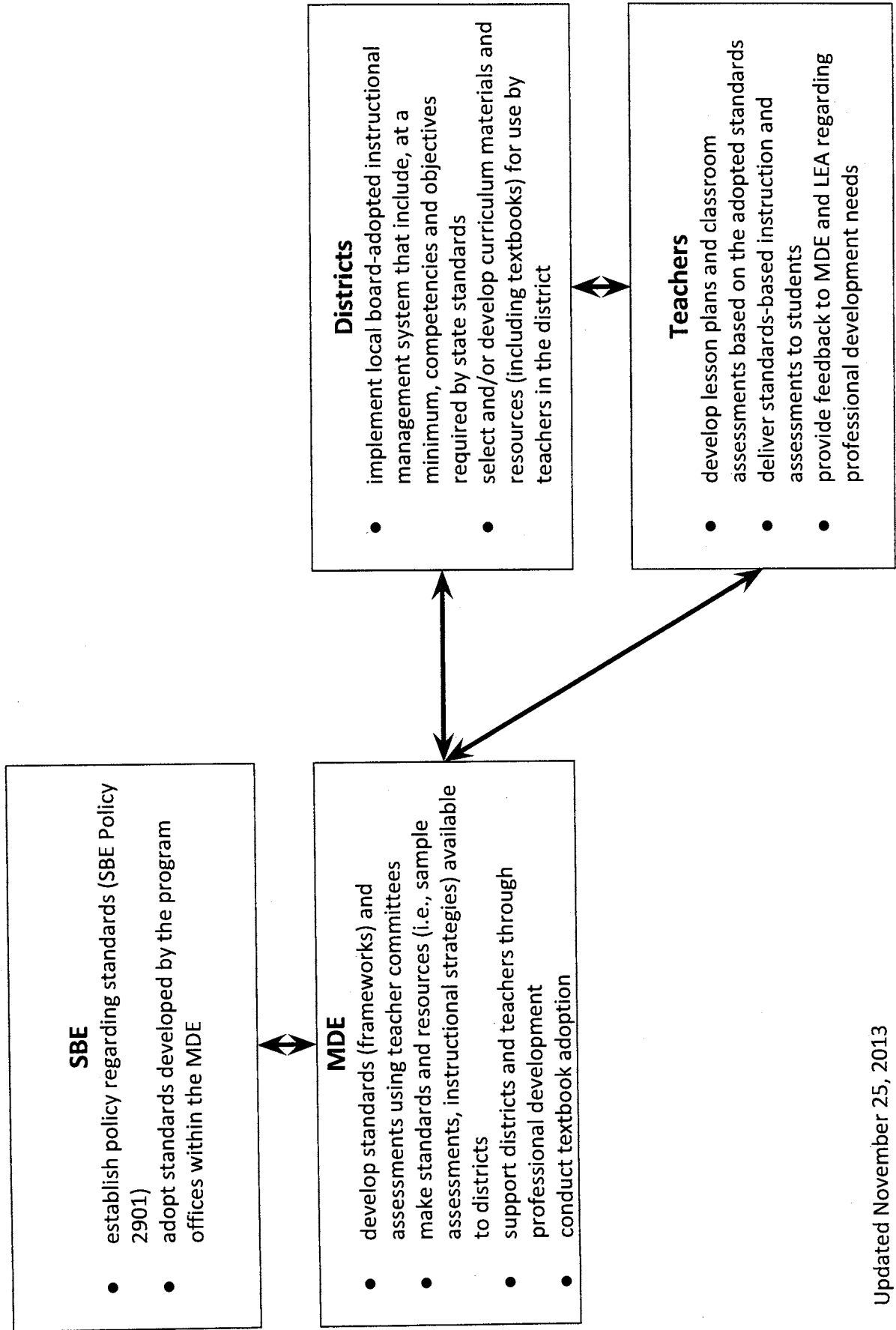
Regarding state and local school district responsibilities for implementing the Common Core State Standards, the State Board of Education is responsible for adopting standards based on recommendations of MDE staff, the department is responsible for supporting local districts' implementation efforts, and local school district boards are responsible for adopting an instructional management system and selecting or developing curricula for classroom teachers.

As illustrated in Exhibit 3, page 31, responsibilities for adopting and implementing new state education standards are shared among the Board of Education, Department of Education staff, local school districts, and classroom teachers.

In summary, the Board of Education adopts standards or student learning outcomes--i. e., frameworks--based on recommendations of the Department of Education's staff. Once the board adopts the standards, the department supports local districts' implementation efforts by providing resources, offering professional development opportunities, and adopting textbooks that are aligned to the board's adopted standards. Local school district boards must adopt an instructional management system that addresses the competencies and objectives required by the state board's adopted standards. The frameworks guide school districts in developing curriculum locally. Teachers' lesson plans, instructional delivery, and assessment strategies must be based on the frameworks and be consistent with the curriculum adopted by the local school district board.

Exhibit 3

Standards Adoption and Implementation Responsibilities State Board of Education (SBE) / Mississippi Department of Education (MDE) / Local School Districts (Districts) / Classroom Teacher (Teachers)



Updated November 25, 2013

SOURCE: Mississippi Department of Education.

According to Department of Education staff, the typical timeline for the development and adoption of new academic standards by the Board of Education is approximately two to three years, as illustrated in Exhibit 4, page 33. In the case of the board's adoption of the Common Core State Standards, this timeline was abbreviated because of the time invested by national organizations to develop and validate the standards. Following the board's adoption of the Common Core State Standards, the implementation responsibilities noted in Exhibit 4 have been carried out by the responsible parties as they would be for any newly adopted standards.

What curriculum and teaching materials will be used by classroom teachers to provide lessons based on the Common Core State Standards?

State law and Board of Education policy require local school districts to implement an instructional management system that has been adopted by the school board and that includes, at a minimum, the competencies and objectives required in frameworks approved by the Board of Education. The frameworks guide school districts in developing curriculum locally, with districts determining curriculum resources to be used by classroom teachers.

MISS. CODE ANN. Section 37-3-49 (2) (b) (1972) and Board of Education policy require local school districts to implement an instructional management system that has been adopted by the school board and includes, at a minimum, the competencies and objectives required in the frameworks approved by the Board of Education (in this case, the Common Core State Standards). The frameworks guide school districts in developing curriculum locally, with school districts determining the curriculum resources to be used by classroom teachers. Teachers' lesson plans, instructional delivery, and assessment strategies must be based on the frameworks, in this case the Common Core State Standards adopted by the Board of Education on June 25, 2010.

With regard to the Common Core State Standards, the Department of Education has developed training modules to provide guidance to teachers and school districts for developing lessons and unit plans to teach to the standards. The department is also conducting focused webinars to address specific aspects of the standards. The webinars are designed to assist teachers in gaining a better understanding of how to incorporate the standards into the teaching and learning process.

Exhibit 4: Mississippi Department of Education Office of Instructional Enhancement Office of Curriculum and Instruction Framework Revision Process*

Phase	Task	Estimated Time for Completion
Phase One	MDE content staff conducts a review of national standards, national trends, and current research.	Three to six months
Phase Two	MDE administers a survey to school districts to get feedback on the strengths and weaknesses of the current framework. Information is compiled and presented to the revision committee.	Two months
Phase Three	MDE solicits nominations from district superintendents for administrators and teachers to serve on the revision committee. MDE also solicits nominations from higher education affiliates.	Two months
Phase Four	MDE selects the revision writing team based on congressional district, race, gender, subject area/grade level taught, years of experience, position, district size, and accountability level of district. The team is usually comprised of K-12 teachers, administrators, and higher education faculty. Additionally, a small advisory team is selected from the list of nominees to review the drafts and provide feedback to the writing team.	One month
Phase Five	MDE convenes several two-day meetings with the writing team to develop drafts. Drafts are sent to advisory team members for review.	Twelve to eighteen months
Phase Six	MDE conducts an initial Depth of Knowledge analysis of the draft framework. The analysis is conducted by Dr. Norman Webb, a former senior research scientist with the Wisconsin Center for Education Research and the National Institute for Science Education, who has expertise in evaluating state standards and assessments. Feedback is also solicited from other outside experts to assure content is aligned to national standards and assessments.	Two to three months
Phase Seven	MDE convenes the writing team to revise the draft based on the depth of knowledge analysis and feedback from outside experts. Refined draft is sent to the advisory team for review.	Three to four months

Phase	Task	Estimated Time for Completion
Phase Eight	The draft is presented to the Board of Education for approval to begin the Administrative Procedures Act process. The document is filed with the Secretary of State's Office and posted to the MDE website. School districts are informed in writing about the draft framework being out for public comment. A feedback form is used for the comments.	Two months
Phase Nine	MDE compiles and reviews the comments to determine whether additional revisions are needed.	One month
Phase Ten	The final document is presented to the Board of Education for final approval. The final document is filed with the Secretary of State's Office and posted to the MDE website. School districts are notified in writing about approval of the final framework.	One month
Phase Eleven	Training is developed and delivered through the state based on the availability of funds.	Six to twelve months, ongoing
Phase Twelve	Textbook adoption is conducted based on the revised frameworks.	Eighteen months

*Note that some overlap exists in the timeframe. For instance, Phase Two and Phase Three could run concurrently.

SOURCE: Mississippi Department of Education.

The department's "training of the trainers" sessions and webinars have included information about the PARCC model content framework (MCF) for grades 3-11 in both English language arts and mathematics (see page 38). Although the primary purpose of the MCF documents is to provide a framework for the Partnership for Assessment of Readiness for College and Careers (PARCC) assessments, they also serve as resources to assist educators and those developing curricula and instructional materials. The MCF documents provide examples of key content dependencies (i. e., when one concept ought to come before another), key instructional emphases, opportunities for in-depth work on key concepts, and connections to critical practices. The last two components are intended to support local and state efforts to deliver instruction that connects content and practices while achieving the standards' balance of conceptual understanding, procedural skill and fluency, and application.

As part of its efforts to assist states with implementation of the Common Core State Standards, Achieve (see page 4) has developed resources for school districts and classroom teachers. In particular, Achieve worked with Massachusetts, New York, and Rhode Island to develop Quality Review Rubrics and review processes for educators to use in evaluating the quality of lesson plans and units intended to address the standards in English language arts and mathematics.

With regard to textbook selection, MISS. CODE ANN. Section 37-43-1 et seq. (1972) mandates the process by which the state adopts textbooks for use by Mississippi school districts. Specifically, MISS. CODE ANN. Section 37-43-31 (1972) states that the “State Board of Education shall adopt and furnish textbooks only for use in those courses set up in the state course of study as recommended by the State Accreditation Commission and adopted by such board, or courses established by acts of the Legislature.” Subsection (5) of CODE Section 37-43-31 states that the board shall not allow previously rejected textbooks to be used if such textbooks were rejected for any of the following reasons:

- obscene, lewd, sexist or vulgar material;
- advocating prejudicial behavior or actions; or,
- encouraging acts determined to be anti-social or derogatory to any race, sex or religion.

Subsection (f) of CODE Section 37-43-31 (1) states that school districts may use their allotment of state textbook funds to procure textbooks that have been adopted by the state or those not adopted by the state. Therefore, a local school board has discretion to identify and adopt textbooks that will enable its classroom teachers to provide instruction that comports with academic standards adopted by the Board of Education. (As shown in Exhibit 5, page 36, the state’s textbook adoption process includes textbooks that are aligned with the Common Core State Standards.)

The Common Core State Standards for English language arts and literacy include an appendix that describes exemplar texts for use by classroom teachers. According to NGA and CCSSO, the text samples serve to exemplify the level of complexity and quality that the standards require all students in a given grade band to be able to master. They are also suggestive of the breadth of texts that students should encounter in the text types required by the standards. As with state-adopted textbooks, classroom teachers are not bound to use the exemplar texts in their classroom instruction. The appendix states that the sample texts should serve as useful guideposts in helping educators select texts of similar complexity, quality, and range for their own classrooms--i. e.,

classroom teachers are responsible for selecting their own texts for providing instruction that comports with the standards. Because the exemplar texts consist of various literature and informational readings only, they are not textbooks--i. e., a book that presents the principles of a subject--and are not subject to the provisions of MISS. CODE ANN. Section 37-43-31 (5) (1972).

Exhibit 5: Tentative Timeline for Adoption of Materials Aligned to the Common Core State Standards

School Year for Adoption	Content Areas Adopted
2010-2011	Science (includes Common Core State Standards grades 6-12 literacy standards in science)
2011-2012	Common Core State Standards reading and literature
2012-2013	Common Core State Standards mathematics K-8 and Social Studies (includes Common Core State Standards grades 6-12 literacy standards in history)
2013-2014	Common Core State Standards mathematics 9-12 and compacted mathematics 7-8
	Common Core State Standards English language arts K-12

SOURCE: Mississippi Department of Education.

What training and professional development opportunities regarding Common Core State Standards are available for educators?

To address the skills development needs of current and future classroom teachers, Mississippi received a \$40,000 grant from the Partnership for Assessment of Readiness for College and Careers (PARCC) to provide professional development to higher education faculty related to CCSS postsecondary courses and teacher preparation on the standards. Since June 2011, MDE has conducted 147 in-person training seminars for teachers and administrators. However, PEER found that the Department of Education does not assess participants' competencies following the completion of a webinar or in-person training seminar and that classroom teachers and administrators may not have a complete understanding of the standards or teaching strategies necessary to deliver classroom instruction necessary for students to succeed on the PARCC assessment.

The Common Core State Standards require classroom teachers to instruct students on critical thinking, problem solving, evidence-based analysis, and literary analysis. Many teachers were not exposed to these concepts as part of their college preparation to become a classroom teacher.

In March 2011, the Department of Education's Office of Curriculum and Instruction convened a two-day meeting of English language arts and mathematics stakeholders. The groups were composed of K-12 teachers, curriculum coordinators, and higher education faculty. The purpose of the meeting was to review the standards and make recommendations regarding the implementation of the standards. The department used information gathered during the meeting to develop resources and training materials for teachers and administrators.

The Legislature, in the department's FY 2013 appropriation (House Bill 1593, 2012 Regular Session), designated \$400,000 for "Common Core Professional Development." Also, to address the skills development needs of current and future classroom teachers, Mississippi received a \$40,000 grant from PARCC to provide professional development to higher education faculty related to CCSS postsecondary courses and teacher preparation courses. The majority of the grant, \$30,000, has been used for professional development, with the remaining amount, \$10,000, being used to reimburse higher education faculty for travel expenses to conferences. The Department of Education has also sponsored meetings for higher education faculty to allow participants to become familiar with Common Core State Standards documents and resources. These meetings have involved national education experts, PARCC representatives, and Department of Education content specialists.

In preparing classroom teachers for the implementation of the Common Core State Standards, the Department of Education has provided opportunities by:

- offering online webinars (see Appendix L, page 84, for a list of the online webinars);
- conducting in-person training seminars; and,
- contracting with local regional educational service agencies to provide seminars regarding the new standards.

Since the board's final adoption of the Common Core State Standards in August 2010, Department of Education staff members have made presentations regarding the standards to at least twenty-five professional meetings and state conferences. Also, since June 2011, the Department of Education has conducted 147 in-person training seminars for teachers and administrators. (Appendix M, page 85, lists the in-person training seminars regarding Common Core State Standards that have been conducted by the Department of Education.)

One approach the department has used with the in-person training seminars is the "training of trainers." The department encouraged school districts to select three

individuals from each district to attend the seminars and then return to their respective school districts to share information with the district's classroom teachers and administrators.

The department's webinars and in-person training seminars have included information from the PARCC Model Content Framework that can serve as a resource for educators and administrators in developing curricula and instructional materials. The model content framework documents provide examples of content dependencies (i.e., when concepts need to be taught before another), instructional emphases, opportunities for in-depth work on key concepts, and connections to critical practices. As with any new academic standard adopted by the Board of Education, teachers' and administrators' attendance at professional development seminars and teachers' development of curriculum and teaching materials associated with the Common Core State Standards represent a cost to the local school districts. To date, to PEER's knowledge, the department has not calculated related costs incurred by the districts.

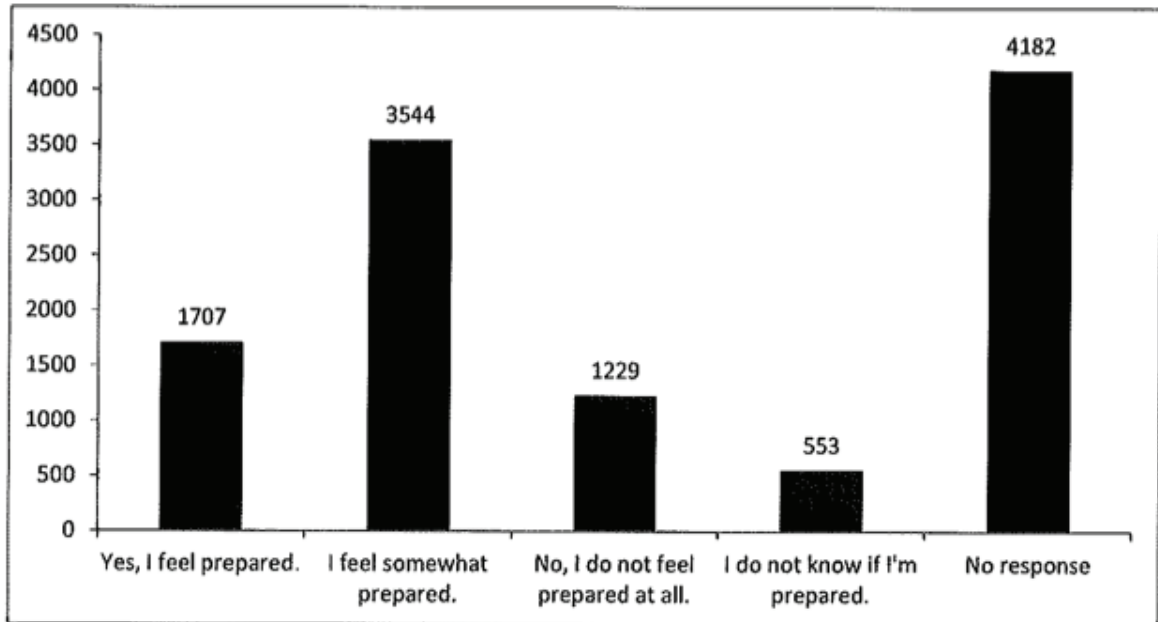
Department of Education staff requested districts' technology coordinators to provide e-mail addresses of teachers in their districts so that a listserve could be created to facilitate discussions among the state's teachers relative to the Common Core State Standards. The department also broadened the selection of resources and content on its website, continued archiving webinars for mathematics and English language arts, and offered focused professional development opportunities targeting educators.

In Fall 2012, the Department of Education conducted a feedback survey of teachers and administrators on the implementation of the standards. The survey asked a variety of questions on standards implementation and the department's professional development opportunities. Exhibit 6, page 39, presents the teachers' responses to the question "Do you feel prepared to teach common core standards?" and administrators' responses to the question "Do you feel prepared to support teachers in the implementation of Common Core State Standards?" The majority of the teachers who responded to their question, 76%, stated that they felt somewhat or less prepared to teach to the standards. The majority of administrators who responded to their question, 83%, stated that they felt somewhat or less than prepared to support teachers in the implementation of the standards.

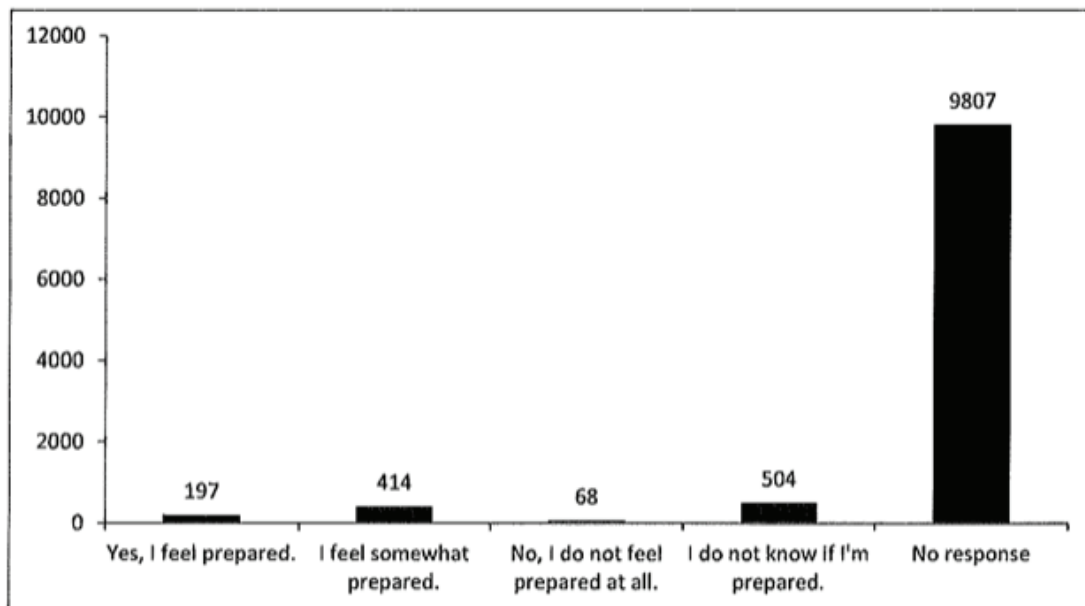
Presently, the Department of Education does not assess participants' competencies following the completion of a webinar or in-person training seminar. Therefore, it is possible that classroom teachers and administrators might not have a complete understanding of the standards or

Exhibit 6: Mississippi Teachers' and Administrators' Responses to Fall 2012 Survey on CCSS implementation

To teachers: "Do you feel prepared to teach Common Core State Standards?"



To administrators: "Do you feel prepared to support teachers in the implementation of Common Core State Standards?"



SOURCE: MDE Common Core State Standards Feedback Survey Report Fall 2012.

teaching strategies necessary to deliver classroom instruction necessary for students to succeed on the PARCC assessment. The lack of competency-based training is especially problematic in seminars designed to “train the trainer.”

The Department of Education had planned to roll out a new method of teacher evaluation in the 2015-2016 school year that included test scores and observation in order to make decisions on teacher salary, promotion, and termination. This program has been delayed one year in order to provide teachers with additional time to become comfortable with the Common Core State Standards material.

In addition to professional development resources developed by the Department of Education and local school districts, the Council of Chief State School Officers (CCSSO) developed a list of free tools and resources to support state education agencies, districts, and educators during the process of implementing the Common Core State Standards. The list includes information about instructional materials, instructional support, and subject-specific resources.

How will students’ performance be assessed and how much will such assessment cost?

To assess students’ understanding of learning concepts required by the new English language arts and math standards, local school districts will administer mid-year and end-of-year online assessments developed by the Partnership for Assessment of Readiness for College and Careers, a multi-state consortium of which Mississippi is a member. The cost for administering and grading PARCC assessments in English language arts and mathematics is projected to be approximately \$2.5 million more in 2015 than costs under the state’s current statewide assessment program.

The states’ adoption of the Common Core State Standards required the development of new assessments. For English language arts and mathematics subjects, states will no longer rely on state-developed assessments, but will utilize nationally developed assessments aligned with the new standards.

Testing Consortium

According to MDE staff, former State Superintendent Tom Burnham reviewed information concerning the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC) and made the decision that Mississippi would become a part of PARCC, signing a Memorandum of Understanding with PARCC on May 7, 2010.

According to the U. S. Department of Education, the ARRA legislation (see page 26), through the Race to the Top program, included funding to consortia of states to develop assessments that are valid, support and inform instruction, provide accurate information about what students know and can do, and measure student achievement against standards designed to ensure that all students gain the knowledge and skills needed to succeed in college and the workplace.

On September 2, 2010, Secretary of Education Arne Duncan announced that the U. S. Department of Education had awarded competitive grants amounting to approximately \$300 million to two consortia of states, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC). (Appendix N and Appendix O, pages 89 and 90, provide the original and current state membership of each consortium.) In addition to the \$300 million grants, each consortium received supplemental grants of approximately \$15.9 million to help participating states successfully transition to common standards and assessments.

According to Department of Education staff, former State Superintendent Tom Burnham reviewed information concerning both consortia--specifically, the individuals leading each consortium--and made the decision that Mississippi would become a part of PARCC. Superintendent Burnham signed a Memorandum of Understanding with PARCC on May 7, 2010, with Mississippi joining the consortium as a governing state and having Mississippi's State Superintendent (or his designee) serve on the consortium's board.

According to PARCC, the consortium contracted with two groups of vendors--Pearson and Educational Testing Services--to develop the range of items and tasks that will make up the PARCC mid-year and end-of-year assessments in English language arts and mathematics for grade 3 through high school. The PARCC states are conducting a multi-state review process to ensure the items developed by PARCC's item development contractors are acceptable for use in field testing and operational test administration. According to PARCC, the items must be closely aligned to

the Common Core State Standards, of sufficient quality and rigor, and fair and free from bias. K-12 and postsecondary educators, content specialists, assessment experts, and members of the community from across the PARCC states are participating in the review of the test items, tasks, and reading passages. According to the Department of Education, Mississippi has thirty-one classroom teachers, curriculum specialists, school administrators, and college professors involved in reviewing test items developed by the PARCC contractors. (See Appendix P, page 91.)

Regarding the timeline of testing, PARCC released to the states an early set of item and task prototypes for English language arts and mathematics assessments in August 2012, with a new set of sample items being released in August 2013. PARCC will begin field testing the assessment instrument in the spring of 2014. According to Department of Education staff, the PARCC assessment will be field tested in 513 Mississippi schools (within 139 school districts) representing approximately 87,000 students. Nationwide, over 1.2 million students will participate in the PARCC field test. The PARCC assessments will be ready for full implementation in the 2014-15 school year. According to the Department of Education's staff, once the assessments are fully implemented and scores are known, local school districts will have to analyze the scores and determine whether their curriculum should be adjusted to align more closely with the standards and the assessment of those standards. (This ongoing review of curriculum would occur in local districts regardless of whether the state had adopted the Common Core State Standards or had developed its own new academic standards.)

To assist classroom teachers in understanding the Common Core State Standards and the associated PARCC assessments, each state department of education appointed twenty-four educators to comprise the Educator Leader Cadre within the state and serve as experts regarding the standards and assessments. Mississippi's twenty-four-member Educator Leader Cadre consists of classroom teachers, curriculum coordinators, administrators, and college professors. (See Appendix Q, page 93.)

Cost of Student Assessment

The cost of administering and grading PARCC assessments in English language arts and mathematics is projected to be approximately \$2.5 million more in 2015 than costs under the state's current statewide assessment program. One factor affecting the increase in costs is an increase in the number of assessments to be administered in the PARCC assessments versus those presently used by the state and local school districts.

According to Department of Education staff, the cost of administering and grading the PARCC assessments for grades 3-8 in English language arts and mathematics is projected to be approximately 50% more than the per-student cost under the state's current statewide assessment program. Department staff also project that the cost for administering and grading the PARCC assessments for high school grades for both English language arts and mathematics is projected to be approximately 50% less than the current per student cost under the state's end-of-course assessments for high school students. Overall, Department of Education staff believe that the PARCC assessments will cost approximately \$2.5 million more in FY 2015 than the current assessment testing structure based on the fact that more testing and components will be utilized under the PARCC format. Under the current testing regime, Mississippi most recently assessed writing in grades 4, 7, and 10; under the new PARCC assessment testing regime, writing assessments will be made in grades 3 through 11.

Because the PARCC assessments are still in development, the actual cost per student for the English language arts and mathematics assessment is not known. One factor involved in the cost equation is the number of states that continue to be members of the consortium over which the developmental and administration costs will be spread.

Do districts have the technological capabilities to administer the online student assessments for the Common Core State Standards?

According to analysis of information collected from school districts' Technology Readiness Tools, which assess districts' capabilities in comparison to the technology needed to administer the new online assessments, districts will be more limited by the number of devices (e. g., computers) they have to administer assessments than by their information technology infrastructure (e. g., WiFi capability). Also, according to the Department of Education's staff, districts that do not have adequate technological capabilities can rely on paper tests for the PARCC assessments during the 2014-2015 school year.

According to Department of Education staff, the department has encouraged districts over the last several

years to improve their classroom technology to comply with the National Educational Technology Standards. (Developed by the International Society for Technology in Education, the standards set a standard of excellence and best practices in learning, teaching and leading with technology in education.) The department has also assisted school districts with technology innovation through the E-Rate program, an initiative of the Federal Communications Commission that offers discounts on approved telecommunications, Internet access, and internal connections. At various meetings with district personnel, the department's staff members have encouraged districts to examine funding streams, including E-Rate, local funds, title funds, and grants as a means of improving technological capabilities.

According to Department of Education staff, Mississippi began using the Pearson TestNav platform--i. e., online computerized testing--in December 2012 for the retesting of students who failed the state's Subject Assessment Testing Program (SATP); this platform was also used for SATP2 retesting in September 2013. (The SATP tests students upon completion of the following high school-level classes: Algebra I, English II, Biology I, and U. S. History.) Department staff state that the Pearson TestNav testing platform was the platform used by the state to conduct retesting of students who failed SATP2 beginning in September 2013. Schools will also use the platform to administer the Mississippi Science Test to students in grades 5 and 8 in May 2014. Department staff note that the Pearson TestNav platform will be used for PARCC assessments during the 2014-2015 school year.

According to Department of Education staff, the Pearson TestNav platform includes a software-based caching solution known as Proctor Caching, which is a lightweight and secure caching option that enables the platform to deliver rich media online tests in a low-bandwidth environment. Proctor Caching accelerates the delivery of test items because the tests are downloaded to a district server from two to seven days prior to the actual test day. This solution does not require the purchase or use of server-class computers. Proctor Caching runs on computers already in place in the school; its technology requirements mirror the normal requirements for student workstations. The department's staff believes the caching solution significantly reduces the bandwidth and connection requirements, allowing virtually any school with a working internet connection of any speed to be able to deliver large-volume testing with little regard to external bandwidth constraints. The department's staff also noted that districts that do not have adequate technological capabilities can rely on paper tests for the PARCC assessments during the 2014-2015 school year. While a paper-based option will be available during the 2014-2015 school year, neither PARCC nor MDE has yet

established policies and procedures regarding how long paper-based tests will be allowed after that.

The PARCC consortium developed and released to states in March 2012 a Technology Readiness Tool (TRT) to support states' planning as they transition to the next-generation assessments to be launched during the 2014-2015 school year. The tool is an open source tool that assesses districts' current capacity and compares that to the technology that will be needed to administer the new online assessments. The tool requests that districts provide a certain amount of information via survey about their network capacity, devices and specifications, staff and personnel knowledge, and testing configuration at each school.

According to the Department of Education's staff, 92.8% of Mississippi's schools have completed PARCC's Technology Readiness Tool. Of the 83,413 computer devices for which the schools entered data into the TRT, 13,542 devices or 16.2% of the total number of devices within the schools had missing determinants. ("Missing determinants" refers to the fact that one or more of the following technical specifications were not entered into the TRT by the district's technology coordinator, making it impossible to determine whether certain devices met the minimum specifications: operating system; memory; screen resolution; monitor/display size; and/or assessment environment.) Nationally, 39.1% of computer devices located within schools had missing determinants. Therefore, the number of computer devices in Mississippi schools with missing determinants was well below the national average, indicating that the majority of computer devices within Mississippi school were technologically capable of handling the PARCC assessments.

The TRT analysis also shed light on districts' readiness to test students online. According to the analysis, the percentage of students who could be tested on existing devices—i. e., computers and monitors—in Mississippi's 152 school districts is as follows:

- 0-25%: 21 districts
- 26% - 50%: 20 districts
- 51% - 75%: 27 districts
- 76% - 100%: 84 districts

This analysis is based on the number of compliant devices per district, the number of testing days available, and the number of testing sessions per day.

Also, according to the TRT analysis, the percentage of students who could be tested on existing infrastructure—i.e., network, cabling, routers, WiFi capability—in Mississippi school districts is as follows:

- 0-25%: 30 districts
- 26% - 50%: 5 districts
- 51% - 75%: 6 districts
- 76% - 100%: 111 districts

Based on the information reported by the school districts in their Technology Readiness Tools, it appears that the districts are more affected by limitations of their devices (i. e., computers and monitors) than by an inadequate information technology infrastructure (i. e., network, cabling, routers, WiFi capability). According to Department of Education staff, local school districts have been encouraged over the past several years to include in their annual operating budgets the funds to purchase computers and make technological upgrades in light of online testing trends.

How does Mississippi's Statewide Longitudinal Data System relate to the adoption and implementation of the Common Core State Standards and how will the system's education-related information be utilized?

The Legislature enacted Chapter 407, *Laws of 2011*, to establish the Statewide Longitudinal Data System (SLDS) to provide stakeholders and policymakers with access to data on state residents from birth to workforce in order to drive accountability and investment decisions about the quality of education within the state. Like other states, Mississippi's SLDS is funded by a federal grant.

New requirements in the federal No Child Left Behind Act of 2001 included a broader collection of student information and a speedy turnaround of state assessment data to local districts. The law endorsed databases that linked students' test scores, length of time they have been enrolled in given schools, and graduation records over time. In the early 1990s, the Department of Education created the Mississippi Student Information System (MSIS), a tracking system of students enrolled in public schools in pre-k through 12th grade. With the advent of the No Child Left Behind federal legislation, the MSIS embraced the longitudinal data system aspect required of the federal law.

In 2011, the Legislature enacted law to create a statewide longitudinal data system that incorporated data from the Department of Education as well as data from other state agencies. With the advent of the state's adoption and implementation of the Common Core State Standards, legislators and other interested parties questioned how education-related data would be incorporated into and used by the SLDS.

Creation of SLDS

The Legislature created the Statewide Longitudinal Data System to improve the quality of life, education, and employment opportunities for the citizens of Mississippi.

The Legislature enacted Chapter 407, *Laws of 2011*, to establish the Statewide Longitudinal Data System (SLDS), now codified as MISS. CODE ANN. Section 37-154-1 (1972). As stated in Section 37-154-1, the purpose of establishing the SLDS was “to improve quality of life, education, and employment opportunities for all citizens.” It is a system designed to “allow stakeholders and policymakers access data on state residents from birth to the workforce to drive accountability and investment decisions” about the quality of education within the state and make appropriate decisions based on the information gleaned.

It is the purpose of SLDS to provide decisionmakers a tool to develop policies to support such objectives as:

- enabling Mississippians to secure and retain employment and better pay after completing training or postsecondary education;
- enabling Mississippi to meet the education and job skill demands of business and industry;
- developing an early warning system that allows for the state to intervene early, improving the graduation rates in high school and college;
- identifying teachers, teaching methods, and programs that lead to positive student outcomes; and,
- encouraging the sharing of electronic data across educational and other entities.

Development costs of Mississippi’s SLDS, like those in other states, were funded by a federal grant. Authorized under the federal Educational Technical Assistance Act of 2002, the Statewide Longitudinal Data Systems Grant Program is a program administered through the Institute of Education Sciences that awards competitive, cooperative, and agreement grants to states. Through grants and other services and resources, the program has helped with the successful design, development, implementation, and expansion of K12 and P-20W (i. e., early learning through the workforce) longitudinal data systems. These systems are intended to enhance the ability of states to efficiently and accurately manage, analyze, and use education data, including individual student records. The SLDSs are designed to help states, districts, schools, educators, and other stakeholders make data-informed decisions to improve student learning and outcomes, as well as to facilitate research to increase student achievement and close achievement gaps.

Mississippi received an SLDS grant in the amount of \$7,569,716 for the period July 1, 2010, through June 30, 2014.

In addition to the system created by the 2011 legislation, the Department of Education also maintains its own student data tracking system that pre-dates the SLDS program. The department's system collects and analyzes data that is similar to that submitted by the department to the SLDS system.

SLDS Data Gathering and Governance

State laws establish the location of the SLDS system at the National Strategic Planning and Analysis Research Center (nSPARC) at Mississippi State University and require state agencies to glean and send data for the SLDS system. Also, state law creates a governing board composed of a representative from each agency or entity providing data to the SLDS system.

Data for the SLDS (also referred to as LifeTracks) is gleaned from information supplied by agencies throughout the state. MISS. CODE ANN. § 37-154-1 (2) (a-g) (1972) states that the following state agencies and entities shall send data from their internal system to the SLDS:

- Department of Education;
- Board of Community and Junior Colleges;
- Board of Trustees of State Institutions of Higher Learning;
- State Workforce Investment Board;
- Department of Employment Security;
- Department of Human Services; and,
- State Early Childhood Advisory Council.

In addition to the statutory members of the SLDS governing board, the members have added the following data suppliers and representatives to the board:

- Division of Medicaid;
- Mississippi Development Authority;
- Department of Health;
- Department of Rehabilitation Services; and,
- Department of Corrections.

MISS. CODE ANN. Section 37-154-1 (3) (1972) states that the SLDS will be based on an existing system currently housed, developed, and maintained by the National Strategic Planning and Analysis Research Center (nSPARC) at Mississippi State University.

MISS. CODE ANN. Section 37-154-3 (1972) states that the SLDS will be governed by a board composed of a representative from each agency or entity providing data to the system. Exhibit 7, below, lists the current members of the SLDS Governing Board.

Exhibit 7: Statewide Longitudinal Data System, Governing Board Members

Member	Representation
Jay Moon, Chair	CEO and President, Mississippi Manufacturers
Richard Berry	Executive Director, Department of Human Services
Hank Bounds	Commissioner, Board of Trustees of Institutions of Higher Learning
Glenn F. Boyce	President, Holmes Community College
Brent Christensen	Executive Director, Mississippi Development Authority
Eric Clark	Executive Director, Board for Community and Junior Colleges
Mary Currier	State Health Officer, Department of Health
Chris Epps	Commissioner, Department of Corrections
Mark Henry	Executive Director, Department of Employment Security
Carey Wright	State Superintendent, Department of Education
H. S. "Butch" McMillan	Executive Director, Department of Rehabilitation Services
Laurie Smith	Executive Director, State Early Childhood Advisory Council

SOURCE: Statewide Longitudinal Data System Board website.

Sharing of SLDS Data

State law charges the SLDS governing board with defining and maintaining standards for privacy, confidentiality, and security of student and education data. State law also requires that certain information on students be maintained by the schools and limits who may access that information. To date, the SLDS governing board has not adopted permanent rules and regulations, specifically those relating to privacy, confidentiality, and security of data.

Data to be provided to the SLDS by the Department of Education includes data such as enrollment in courses,

assessment results, and other academic data that can be used to evaluate educational programming. Data currently maintained by the department and submitted to the SLDS is a cumulative record of a student's progression through school, as required by state and federal law.

MISS. CODE ANN. Section 37-154-3 (3) (d) (1972) charges the SLDS Governing Board with "defining and maintaining standards for privacy, confidentiality, and security of data." However, as stated in subsection (5) of Section 37-154-3 "all data provided to the SLDS shall be provided in accordance with all local, state, and federal laws governing the protection and sharing of such data."

At the state level, such personal data to be gathered falls under the guidance of MISS. CODE ANN. § 37-15-1 and 3 (1972), which require that certain information on students be maintained by the schools in their permanent and cumulative records and limits who may access the information provided in such a system. Under state law, only school officials who have been determined by the school district to have a legitimate educational interest in the records may view such items. Additionally, parents, guardians, or eligible pupils may make requests for transcripts and grades as allowed under the federal Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, 20 USCS Section 1232. PEER knows of no provision that would allow parents to "opt out" of having their children's academic performance included in the SLDS.

The purpose of FERPA, originally passed in 1976 and amended many times since, is to guarantee parents free access to student school records. Under provisions of the act, the Secretary of Education has the authority to withhold all federal funding to institutions that do not make school records available to a student's parents. There are exceptions to this rule, such as authorizing the transfer of transcripts when a student changes schools or applies for admission elsewhere, for researchers doing studies of educational techniques and practices when such research can be conducted confidentially and anonymously, for state or federal officials conducting audits of public assistance programs, or in the course of normal business.

Once education data moves beyond the school district level and is reported to the Statewide Longitudinal Data System and nSPARC, after having personal identifiable information removed, such information is subject to MISS. CODE ANN. Section 25-61-1 et seq. (1972) and other provisions of Mississippi's Access to Public Records statutes. This statute states that the public has the right to view such reports or papers prepared using the data gathered by the agencies and analyzed by nSPARC or make requests for such data or reports. Currently, such reports

are available through the LifeTracks website. To date, the SLDS governing board has not adopted permanent rules and regulations, specifically those relating to the privacy, confidentiality, and security of data.

The Status of Other States' Adoption and Implementation of the Common Core State Standards

This chapter will address the following question:

- What is the status of other states' adoption and implementation of the Common Core State Standards?

What is the status of other states' adoption and implementation of the Common Core State Standards and related legislation?

Only four states (Alaska, Nebraska, Texas, and Virginia) have not officially adopted the Common Core State Standards. No state that has adopted the standards has reversed its adoption, although four states have enacted laws requiring formal reviews of the standards. According to a report released in February 2013 by Education First and Editorial Projects in Education, states that have adopted the Common Core State Standards have made significant progress in teacher professional development, developing curriculum guides, and creating teacher evaluation systems.

National Conference of State Legislatures' Review of States' Common Core Legislation

While no state that has adopted the Common Core State Standards has reversed its adoption, legislatures in four states have enacted laws requiring formal reviews of the standards. Legislatures in four other states have taken legislative action to either prohibit implementation of the standards or affect funding of implementation efforts.

According to the National Conference of State Legislatures, currently only Alaska, Nebraska, Texas, and Virginia have not officially adopted the Common Core State Standards. Minnesota has adopted only the English language arts standards. Minnesota was precluded from adopting the mathematics standards concurrently with the English language standards by virtue of a state statute that assigns specific calendar years to different academic subjects for review and revision. Minnesota's mathematics standards are slated for review beginning in the 2015-2016 school year.

To date, no state has reversed its adoption of the Common Core State Standards. Some states have renamed the standards to reflect the state's ownership or prerogative over their standards—e.g., Utah House Bill 15 (2012) renamed the standards "Utah's Common Core." Legislatures in Alaska, Indiana, Nevada, and New Mexico

have enacted legislation requiring a formal review of the standards. According to that state's news media, implementation of the Common Core State Standards in Indiana remains uncertain.

Some states have taken legislative action to either prohibit the adoption of the Common Core State Standards (Texas), defund implementation (Michigan and Wisconsin), or put in place other measures that require greater legislative oversight of implementation of the standards (North Carolina and Pennsylvania). The Michigan legislature later voted to allow funding for implementation to move forward. A fiscal analysis in Wisconsin concluded that standards implementation would not be substantively hampered by the legislative action taken there.

In 2013, nineteen bills were introduced in various state legislatures that would have had the effect of revoking adoption of the Common Core State Standards. None of these bills passed. Another eight bills would have had the effect of delaying or placing a moratorium on standards implementation. None of those bills have passed.

State membership in the two student assessment consortia—PARCC and Smarter Balanced Assessment Consortium—has seen volatility since the launch of the Common Core State Standards initiative. Both consortiums have seen states joining, withdrawing, and moving from one consortium to the other.

Survey of States by Education First and Editorial Projects in Education

According to a survey by Education First and Editorial Projects in Education, states that have adopted the Common Core State Standards have made significant progress in teacher professional development, developing curriculum guides, and creating teacher evaluation systems.

In February 2013, Education First, a national education policy and strategic consulting firm, and Editorial Projects in Education (EPE), a nonprofit organization that raises awareness regarding issues in American education, released a report entitled *Moving Forward, A National Perspective on States' Progress in Common Core State Standards Implementation Planning*. The report was a follow-up to a January report entitled *Preparing for Change*. Both reports were compiled to assess the states' implementation progress in three areas: teacher professional development, curriculum guides, and teacher evaluation systems.

According to Education First and EPE, the ultimate success of the Common Core State Standards initiative hinges on how well educators can teach to the new standards and how well students can master them. As a result, most states that adopted the standards are now intently focused

on the fidelity of implementation in classrooms. As stated in the report, “building instructional capacity and adequately supporting educators making the ‘instructional shifts’ called for by the Common Core represent a dramatic change for most states, districts, and schools.”

The key findings of the 2013 report include the following:

- All states that adopted the Common Core State Standards reported having a formal implementation plan for transitioning to the new standards.
- All but one state reported having either a fully developed plan to provide teachers with professional development aligned to the Common Core State Standards or a plan in development.
- Thirty states have fully developed plans for changing instructional materials to align with the standards.
- Forty-two states have either developed or are in the process of developing a plan to revise teacher evaluation systems to hold teachers accountable for students’ mastery of the Common Core State Standards.

Conclusion: Frequently Asked Questions about Common Core State Standards

Summary

The PEER Committee recognizes that there are many good districts and schools in Mississippi's educational system. However, PEER also recognizes that Mississippi's educational system as a whole lags behind those of other states and the world in educational performance.

Further, the Committee recognizes that the Common Core State Standards represent a significant shift in how American education will face the challenges of the balance of the twenty-first century. The PEER Committee conducted this review with the purpose of providing information regarding the genesis and development of the Common Core State Standards. The stakes are simply too high to have the standards either embraced or dismissed without a careful understanding of the challenges and the potential of CCSS. Decisions regarding the future of CCSS in Mississippi should be made in full light of the facts surrounding the development and implementation of the Common Core State Standards and what those facts suggest regarding any future actions.

Following is an attempt to bring forth key areas of promise and concern by addressing some of the frequently asked questions about Common Core State Standards.

Frequently Asked Questions and Responses Regarding Common Core State Standards

Was there a central educational premise behind development of the Common Core State Standards?

Based on PEER's review of the literature, the primary driving force behind what is now the Common Core State Standards initiative was a concern that had been growing over the last thirty years that the quality of education in the United States is losing ground and the common belief that U. S. students are ill-prepared for college-level work at completion of high school.

While there may be disagreements about how this problem could be best resolved, the Common Core State Standards approach does not represent a radical departure from mainstream educational thought, but is a distillation of that body of knowledge and thought into a generally

agreed-upon set of standards that defines the college-and career-ready competencies that students should achieve by the completion of high school. The Common Core State Standards represent what many in the professional education community believe is a critical step in helping the United States to reclaim world leadership in K-12 education.

Were the standards developed and financed by outside groups and the federal government in an effort to drive curriculum development?

The leaders behind the Common Core State Standards initiative were the National Governors Association, through its Center for Best Practices, and the Council of Chief State School Officers, in partnership with Achieve, Inc.; ACT; and the College Board. Each of these organizations has a history of interest in public education policy and has been active for years in promoting a debate on improving public education. These organizations are funded through fees, federal grants, contracts, and contributions from foundations and corporations.

The literature PEER reviewed presented no evidence that the CCSS development process was heavily influenced by special interests or attempts at abrogating local control. While there is evidence that the federal government did offer incentives to encourage state involvement in improving the United States' international standing in K-12 education through participation in the development of national standards, the details of those standards were left to a consensus of the national educational community, including key officials and educators from participating states.

The standards do not require use of a specific curriculum, but the curriculum must be of sufficient depth and quality to support the instructional rigor required by the new standards. Once assessments are fully implemented and scores are known, local school districts will have to analyze the scores and determine whether their curriculum needs to be adjusted to reconcile more closely with the requirements of the standards and the assessment of those standards. Such ongoing review of a curriculum's effectiveness should occur regardless of the set of standards used.

What evidence is there that the Common Core State Standards are “internationally benchmarked?”

Common Core State Standards were “internationally benchmarked” in the sense that, through a process of consulting selected state and international models to find common elements that mark the educational standards of

world-leading systems, the development team arrived at a competitive definition of the competency base needed to become college- and career-ready on an international scale. The English language arts and mathematics standards include bibliographies noting the sources used by the work teams in developing the standards. The technical briefs supporting the CCSS present detailed findings on these international comparisons and conclude with observations regarding the similarities or differences between the Common Core State Standards and those of the states, national organizations, and countries analyzed.

Do the Common Core State Standards represent a federal “power grab” or a move toward nationalizing education?

PEER did not find credible evidence that the Common Core State Standards initiative is a federal “power grab” or an effort to usurp the authority of states and local school districts in setting curricula for the purpose of social or political change. Based on an analysis of the history and development of CCSS, its primary focus has been on developing internationally competitive content statements that clearly specify what students should be able to understand and be able to do at a particular grade level.

While the standards do suggest exemplary materials, the means and materials with which the students will interact for the purpose of achieving the desired educational outcomes is left to the states and, in Mississippi’s case, the districts. The Common Core State Standards approach recognizes the need for high-level, national standards for competency in key subject matter areas, but is not a standardization of the educational process itself.

Should Mississippi be concerned about warnings regarding the adequacy of Common Core’s math standards?

As noted previously, the Common Core State Standards approach does not represent a radical departure from mainstream educational thought. Rather, it is a distillation of that body of knowledge and thought into a generally agreed-upon set of standards that, under the current state of our knowledge, defines the college-ready competencies that should be achieved by the completion of high school. Based upon that premise, it is quite likely that there will not be uniform agreement on how far the standards can and should extend in a given subject area.

While the Common Core State Standards might have critics who feel either that the standards go too far or do not go far enough in a given subject matter, the question is whether they adequately represent a consensus of

mainstream educational thought. As with any system as far-reaching and complex as the needs of a K-12 education system, there is room for continued debate and improvement.

What was the primary impetus for the State Board of Education's determination that adoption of the Common Core State Standards was best for Mississippi students?

The State Department of Education's staff became involved in a formal dialogue internally, and with educators outside the department, regarding common standards after numerous governors, including Mississippi's, signed a Memorandum of Agreement committing the states to aligning their K-12 educational standards to common standards. However, the primary impetus for adoption of the standards was a general recognition of the state's poor performance on national tests and the need for remediation in a significant percentage of college-bound students.

What input did the Legislature have on adoption of the Common Core State Standards versus certification of Mississippi's existing standards as being "college- and career-ready?"

Obviously, the Legislature can enact laws that create or affect education policy or that would require certain actions to ensure accountability. However, there is no current requirement that the Board of Education go through the Legislature to adopt new education policy. MISS. CODE ANN. Section 37-1-3 (2) (a) (1972) states that the State Board of Education can adopt a "course of study to be used in the public schools and districts." This gives the board authority to set academic standards without specific legislative involvement or approval.

The critical question is whether any state lawmaking body should take upon itself the task of judging whether a state's education standards and the supporting curricula are "college- and career-ready." That is a technical judgment appropriate for career educators, with the Legislature's role being to oversee whether educational goals are actually being met.

Subsequent to the Board of Education's adoption of the Common Core State Standards in 2010, the Legislature enacted and Governor Phil Bryant signed three laws that referred to the standards—i. e., Senate Bill 2737 (2012 Regular Session), Senate Bill 2776 (2012 Regular Session), and Senate Bill 2396 (2013 Regular Session). Senate Bill 2396 incorporated into state law the board's goal of having "sixty percent (60%) of students scoring proficient and advanced on the assessments of the Common Core

State Standards by 2016 with incremental increases of three percent (3%) each year thereafter.”

How have the Common Core State Standards been incorporated into the State Department of Education’s strategic planning process?

The Mississippi Department of Education has incorporated the Common Core State Standards into its five-year strategic plan and has at least two goals that are specific to implementation and measurement of the new standards. For example, the department’s goal of ensuring that all students exit the third grade reading on grade level includes “transition to an educational system focused on using Common Core State Standards (CCSS) as the benchmark for student success and the criteria for promotion/retention.” Another strategic goal of the department is to have “60% of students scoring proficient/advanced on the assessments of the Common Core State Standards by 2016 with incremental increases of 3% each year thereafter.”

What actions were taken by the State Department of Education to notify interested stakeholders during the comment period required by the Administrative Procedures Act?

As noted in this report, the Department of Education filed the board’s proposed and final adoption notice of the Common Core State Standards with the Secretary of State’s Office as required by the Administrative Procedures Act (APA). However, the law does not place a requirement on the department to notify anyone about the pending adoption of such standards changes.

An argument could be made that additional transparency requirements would be appropriate when adopting so sweeping a change, but such requirements should be put in place only after due consideration of the possible unintended consequences. PEER notes that educators and others presented a significant body of APA comments during the board’s August 2010 meeting prior to final adoption of the Common Core State Standards.

How were parents notified regarding the adoption of the Common Core State Standards?

As noted in this report, the State Department of Education did not provide notice directly to parents prior to the board’s adoption of the Common Core State Standards. However, the Deputy State Superintendent of Education met with local school district officials in May and June 2010 to discuss the standards and their potential adoption

by the board. Logically, local superintendents represent their educator/parent constituents and should have raised on their behalf in those meetings any concerns or cautions that had arisen. PEER found no significant deviation from the manner in which other notifications of major changes in education policy have been communicated to parents in the past.

What efforts did the State Department of Education make to have the state's English language arts and math standards certified as "college- and career-ready" prior to adoption of the Common Core State Standards?

Through analysis of Mississippi students' performance on national standardized tests, such as the ACT college entrance test, and feedback received from the state's higher education leaders regarding students' need for remedial education once they enrolled in college, the Department of Education's staff recognized that the state's English language arts and mathematics standards would not meet a "college- and career-readiness" standard. Given the circumstances of the time, the board opted to pursue adoption and implementation of the already vetted Common Core State Standards without certifying a set of state standards that would require extensive revision to be acceptable as "college- and career-ready."

Was the State Department of Education in the process of updating English language arts and math standards prior to adoption of the Common Core State Standards?

The state's English language arts and math standards were due to be updated in 2011. The department had not yet begun that process when the discussion of common standards was initiated. The State Board of Education's typical timeline to complete the development and adoption of new academic standards is from two to three years. By adopting the Common Core State Standards, state education officials believed that the process could be abbreviated and the state could proceed with routine implementation immediately after adoption, thus shortening the timeline.

What are the Common Core exemplary texts and what guidance has the State Department of Education provided to districts regarding use of those texts?

The exemplar text appendix included in the State Board of Education's adoption of the Common Core State Standards is presented to help teachers understand the type and depth of materials needed to allow students to achieve the competencies required by the standards.

Using the materials as demonstrative examples does not mean that the texts must be adopted by the schools and used in the curriculum. Schools may use other texts that they feel are more reflective of local mores, but the texts chosen for inclusion in the curriculum should exemplify the breadth and level of complexity and quality that the standards require students to be able to master.

As with state-adopted textbooks, classroom teachers are not bound to use the exemplar texts in their classroom instruction. The State Department of Education has made it clear that choice of supporting texts for the adopted curriculum is a local issue.

What has been the cost of implementing the Common Core State Standards and what funding sources have been used?

According to information supplied by the State Department of Education, the State Board of Education did not conduct a comprehensive analysis of the cost of implementation prior to adoption of the Common Core State Standards in Mississippi. The best available projections on costs relate to cost of student assessment. The estimated FY 2015 total cost of the new assessments will be approximately \$2.5 million more than current assessment costs because more tests and components will be utilized under the new format.

As with any new academic standard adopted by the Board of Education, teachers' and administrators' attendance at professional development seminars and teachers' development of curriculum and teaching materials associated with the Common Core State Standards represent a cost to the local school districts and to the state. To date, the department has not estimated the total costs for such that have been incurred by the state or by the districts. The need for definitive cost data for the full cost of implementation of CCSS is critical and should be undertaken as expeditiously as possible.

Do the districts have sufficient broadband capability to support Common Core testing?

Mississippi does have some technology challenges that must be addressed, but these challenges are not insolvable, nor do they compromise implementation of the Common Core State Standards. Mississippi will use an online computerized testing platform that includes a software-based caching solution that will deliver online tests in a low-bandwidth environment. This platform can be run on computers already in place in the schools because its technology requirements mirror the normal requirements for student workstations. The Department

of Education's staff believes that the caching solution significantly reduces the bandwidth and connection requirements needed, allowing almost any school with a working internet connection to be able to deliver large-volume testing with little regard to external bandwidth constraints.

As noted in this report, according to analysis of information self-reported by school districts, districts will be more limited by the number of devices (e. g., computers) that they have to administer assessments than by their information technology infrastructure (e. g., WiFi capability). Also, according to the Department of Education's staff, districts that do not have adequate technological capabilities can rely on paper tests for administering the assessments during the 2014-2015 school year.

What is the Statewide Longitudinal Data System and what privacy issues does it present?

As a recipient of No Child Left Behind federal funding, the Mississippi Department of Education established a longitudinal data system in 2002 to track student information. In 2011, the Legislature enacted law to create a statewide longitudinal data system that incorporated data from the Department of Education as well as other state agencies. The system's purpose is to provide stakeholders and policymakers with access to data on state residents from birth to workforce to drive accountability and investment decisions about the quality of education within the state and to assist in making appropriate decisions based on the information maintained.

The Statewide Longitudinal Data System's governing board is required by law to establish rules and regulations regarding privacy, confidentiality and security. However, permanent rules have not yet been adopted and are still under consideration.

Appendix A: Common Core State Standards, College- and Career-Readiness Standards, English Language Arts Work Team

Sara Clough, Director, Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.

David Coleman, Founder, Student Achievement Partners

Sally Hampton, Senior Fellow for Literacy, America's Choice

Joel Harris, Director, English Language Arts Curriculum and Standards, Research and Development, The College Board

Beth Hart, Senior Assessment Specialist, Research and Development, The College Board

John Kraman, Associate Director, Research, Achieve

Laura McGiffert Slover, Vice President, Content and Policy Research, Achieve

Nina Metzner, Senior Test Development Associate-Language Arts, Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.

Sherri Miller, Assistant Vice President, Educational Planning and Assessment System (EPAS) Development, Education Division, ACT, Inc.

Sandy Murphy, Professor Emeritus, University of California – Davis

Jim Patterson, Senior Program Development Associate – Language Arts, Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.

Sue Pimentel, Co-Founder, Standards Work; English Language Arts Consultant, Achieve

Natasha Vasavada, Senior Director, Standards and Curriculum Alignment Services, Research and Development, The College Board

Martha Vockley, Principal and Founder, VockleyLang, LLC

SOURCE: NGA and CCSSO.

Appendix B: Common Core State Standards, College- and Career-Readiness Standards, Mathematics Work Team

Sara Clough, Director, Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.

Phil Daro, Senior Fellow, America's Choice

Susan K. Eddins, Educational Consultant, Illinois Mathematics and Science Academy (Retired)

Kaye Forgione, Senior Associate and Team Leader for Mathematics, Achieve

John Kraman, Associate Director, Research, Achieve

Marci Ladd, Mathematics Consultant, The College Board and Senior Manager and Mathematics Content Lead, Academic Benchmarks

William McCallum, University Distinguished Professor and Head, Department of Mathematics, The University of Arizona and Mathematics Consultant, Achieve

Sherri Miller, Assistant Vice President, Educational Planning and Assessment System (EPAS) Development, Education Division, ACT, Inc.

Ken Mullen, Senior Program Development Associate-Mathematics, Elementary and Secondary School Programs, Development, Education Division, ACT, Inc.

Robin O'Callaghan, Senior Director, Mathematics, Research and Development, The College Board

Andrew Schwartz, Assessment Manager, Research and Development, The College Board

Laura McGiffert Slover, Vice President, Content and Policy Research, Achieve

Douglas Sovde, Senior Associate, Mathematics, Achieve

Natasha Vasavada, Senior Director, Standards and Curriculum Alignment Services, Research and Development, The College Board

Jason Zimba, Faculty Member, Physics, Mathematics, and the Center for the Advancement of Public Action, Bennington College and Cofounder, Student Achievement Partners

SOURCE: NGA and CCSSO.

Appendix C: Common Core State Standards, College- and Career-Readiness Standards, English Language Arts Feedback Team

Peter Afflerbach, University of Maryland, Professor

Arthur Applebee, University at Albany, State University of New York (SUNY)
Distinguished Professor and Chair, Department of Educational Theory and Practice,
School of Education

Mark Bauerlein, Emory University, Professor of English

Mary Bozik, University of Northern Iowa, Professor, Communication Studies

Don Deshler, University of Kansas, Williamson Family Distinguished Professor of Special
Education and Director, Center for Research on Learning

Checker Finn, Fordham Institute Senior Fellow, Hoover Institution, Stanford University
and President, Thomas B. Fordham Institute

Brian Gong, The National Center for the Improvement of Educational Assessment,
Executive Director

Kenji Hakuta, Stanford University, Professor of Education

Carol Jago, University of California – Los Angeles, National Council of Teachers of
English (NCTE) President-elect, California Reading and Literature Project

Jeanneine Jones, University of North Carolina – Charlotte, Professor

Michael Kamil, Stanford University, Professor, School of Education

Suzanne Lane, University of Pittsburgh, Professor in the Research Methodology
Program, School of Education

Carol Lee, Northwestern University, Professor of Education and Social Policy

Robert Linn, University of Colorado, Distinguished Professor Emeritus, and Co-Director
of the National Center for Research on Evaluation, Standards and Student Testing
(CRESST)

Dolores Perin, Columbia University, Associate Professor of Psychology and Education

Tim Shanahan, University of Illinois at Chicago, Professor, Urban Education

Catherine Snow, Harvard Graduate School of Education, Patricia Albjerg Graham
Professor

Doranna Tindle, Friendship Public Charter Schools, Instructional Performance Coach

SOURCE: NGA and CCSSO.

Appendix D: Common Core State Standards, College- and Career-Readiness Standards, Mathematics Feedback Team

George Andrews, The Pennsylvania State University, Evan Pugh Professor of Mathematics

Hyman Bass, University of Michigan, Samuel Eilenberg Distinguished University Professor of Mathematics and Mathematics Education

David Bressoud, Macalester College, De Witt Wallace Professor of Mathematics and President, Mathematical Association of America

John Dossey, Illinois State University, Distinguished University Professor of Mathematics Emeritus

Scott Eddins, Tennessee Department of Education, Mathematics Coordinator and President, Association of State Supervisors of Mathematics (ASSM)

Brian Gong, The National Center for the Improvement of Educational Assessment, Executive Director

Kenji Hakuta, Stanford University, Professor of Education

Roger Howe, Yale University, Professor of Mathematics

Henry S. Kepner, Jr., University of Wisconsin-Milwaukee, Professor, Curriculum and Instruction and Mathematical Sciences

Suzanne Lane, University of Pittsburgh, Professor in the Research Methodology Program, School of Education

Robert Linn, University of Colorado, Distinguished Professor Emeritus, and Co-Director of the National Center for Research on Evaluation, Standards and Student Testing (CRESST)

Jim Milgram, Stanford University, Professor of Mathematics, Emeritus, Department of Mathematics

Fabio Milner, School of Mathematical and Statistical Sciences, Arizona State University, Director, Mathematics for Science, Technology, Engineering, and Mathematics (STEM) Education

Roxy Peck, California Polytechnic State University, San Luis Obispo, Associate Dean, College of Science and Mathematics and Professor of Statistics

Nora Ramirez, TODOS: Mathematics for ALL, President

William Schmidt, Michigan State University, College of Education, University Distinguished Professor

Uri Treisman, University of Texas, Professor of Mathematics and Public Affairs and Executive Director, Charles A. Dana Center

Vern Williams, Mathematics Teacher, HW Longfellow Middle School, Fairfax County, Virginia Public Schools

W. Stephen Wilson, Johns Hopkins University, Professor of Mathematics

SOURCE: NGA and CCSSO.

Appendix E: Common Core State Standards, K-12 Standards, English Language Arts Work Team

Marilyn Jager Adams, Research Professor, Department of Cognitive and Linguistic Sciences, Brown University

Marcia Ashhurst-Whiting, Language Arts Literacy Coordinator, Division of Educational Standards and Programs, New Jersey Department of Education

Sorel Berman, English Teacher, Retired, Brookline High School, Brookline, MA

Katherine Bishop, National Board Certified Teacher (NBCT), Exceptional Needs Educator, Putnam City Public Schools, National Education Association, Oklahoma City, Oklahoma

Dana Breitweiser, English Language Arts Curriculum Specialist, Arkansas Department of Education

David Buchanan, Project Manager – ESE Performance Standards Project, Office of Humanities, Center for Curriculum and Instruction, Massachusetts Department of Elementary and Secondary Education

Paul Carney, Coordinator of Ready or Not Writing and Step Write Up programs for the Center for College Readiness, English Instructor, Minnesota State Community and Technical College

David Coleman, President, Student Achievement Partners

Patricia D'Alfonso, English/Language Arts Specialist/Coach, West Warwick Public Schools, West Warwick, RI

Janet Davis, Point Professional Development Advisor, Los Angeles Unified School District

Matthew Davis, Director, Reading Program, Core Knowledge Foundation

Steve Delvecchio, Librarian, Seattle, Washington

JoAnne T. Eresh, Senior Associate for English Language Arts, Achieve

Jan Freeland, Middle and Secondary English Language Arts Supervisor, Middle and Secondary Standards, Louisiana Department of Education

Sally Hampton, Senior Fellow, America's Choice and Strategic Education Research Partnerships

Juley Harper, English Language Arts Education Associate, Curriculum and Instruction, Delaware Department of Education

Joel Harris, Director, English Language Arts Curriculum and Standards, Research and Development, The College Board

Bobbi Ciriza Houtchens, U.S. Department of Education Teaching Ambassador Fellow (2009), Teacher and English Language Facilitator, Arroyo Valley High School, San Bernardino, CA

Michael Kamil, Professor, Language Learning and Policy, Stanford University School of Education

Valerie Kinloch, Associate Professor, Literacy Studies, School of Teaching and Learning, The Ohio State University

Karen Klinzing, Assistant Commissioner, Minnesota Department of Education

Susan Lafond, National Board Certified Teacher (NBCT) in English as a New Language (EAY A ENL), Assistant in Educational Services, New York State United Teachers

Carol D. Lee, Professor of Learning Sciences and African American Studies, Northwestern University President, American Educational Research Association

David Liben, Liben Education Consulting L.L.C.

Meredith Liben, Liben Education Consulting L.L.C.

Cheryl Liebling, Director, Office of Literacy, Massachusetts Department of Elementary and Secondary Education

James Marshall, Associate Dean of Academic Programs, Professor of Language and Literacy Education, University of Georgia

Margaret McKeown, Senior Scientist Learning Research and Development Center, Clinical Professor, Instruction and Learning School of Education, University of Pittsburgh

Nina Metzner, Senior Test Development Associate in Language Arts, ACT

Louisa Moats, Moats Associates Consulting, Inc.

Laura Mongello, Vice President, Product Development, The Quarasan Group, Inc.

Sandra M. Murphy, Professor Emerita, University of California, Davis

Jim Patterson, Senior Program Development Associate in Language Arts, ACT

Anthony Petrosky, Professor of Education/Professor of English and Associate Dean for Academic Program, School of Education, University of Pittsburgh

Julia Phelps, Director of Curriculum and Instruction, Massachusetts Department of Elementary and Secondary Education

Susan Pimentel, Lead, English Language Arts, Senior Consultant to Achieve

Donlynn Rice, Administrator, Curriculum, Instruction, and Innovation, Nebraska Department of Education

Ricardo Rincón, Sunrise Elementary Teacher, University of Phoenix Faculty and Mentor, National ELL Training Cadre

Tracy Robertson, English Coordinator, Virginia Department of Education

Kari D. Ross, Reading Specialist, Division of School Improvement, Minnesota Department of Education

Petra Schatz, Educational Specialist, Language Arts, Instructional Services Branch, Office of Curriculum, Instruction and Student Support, Hawaii Department of Education

Diana Senechal, Author, English Language Arts and ESL certified, New York State

Timothy Shanahan, Professor of Urban Education, University of Illinois at Chicago

Miriam Soto-Pressley, Elementary Teacher, American Federation of Teachers, ELL Cadre Committee, Hammond, Indiana

Laura McGiffert Slover, Vice President, Content and Policy Research, Achieve

Charon Tierney, Language Arts Specialist, Minnesota Department of Education

Vince Verges, Executive Director, Test Development Center, Florida Department of Education

Elaine Weber, Consultant, Macomb ISD, Michigan

Susan Whelple, Director, Office for Humanities, History and Social Science, Center for Curriculum and Instruction, Massachusetts Department of Elementary and Secondary Education

Karen Wixson, Professor of Education, University of Michigan

SOURCE: NGA and CCSSO.

Appendix F: Common Core State Standards, K-12 Standards, English Language Arts Feedback Team

Mark Bauerlein, Department of English, Emory University

Gina Biancarosa, Assistant Professor of Special Education, University of Oregon, College of Education

Sheila Byrd Carmichael, Education Policy Consultant

Erika Cassel, National Board Certified Teacher (NBCT), Humanities Teacher, Central Kitsap Junior High

Barbara R. Foorman, Francis Eppes Professor of Education, Director, Florida Center for Reading Research, Florida State University

Juley Harper, English Language Arts Education Associate, Curriculum and Instruction, Delaware Department of Education

George Kamberelis, Wyoming Excellence Chair of Literacy Education, College of Education, University of Wyoming

Deborah D. Perry, Director of K-12 English Language Arts, Arlington, Massachusetts Public Schools

Cheryl M. Scott, Professor, Department of Communication Disorders and Sciences, Rush University Medical Center

Doranna Tindle, Instructional Performance Coach, Friendship Public Charter School, Clinton, MD

Marc Tucker, President, National Center on Education and the Economy

Arlette Ingram Willis, Professor, University of Illinois

SOURCE: NGA and CCSSO.

Appendix G: Common Core State Standards, K-12 Standards, Mathematics Work Team

Beth Aune, Director of Academic Standards and P-16 Initiatives, Minnesota Department of Education

Deborah Loewenberg Ball, Dean, School of Education, University of Michigan

Nancy Beben, Director, Curriculum Standards, Louisiana Department of Education

Sybilla Beckmann, Professor of Mathematics, University of Georgia

Stacey Caruso-Sharpe, Mathematics Teacher, Lynch Literacy Academy Board of Directors, New York State United Teachers Vice President, American Federation of Teachers

Diana Ceja, Teacher on Assignment, Garey High School, Pomona, California

Marta Civil, Professor, The University of Arizona

Douglas H. Clements, SUNY Distinguished Professor, University at Buffalo, The State University of New York Department of Learning and Instruction, Graduate School of Education

Thomas Coy, Public School Program Advisor, Arkansas Department of Education

Phil Daro, America's Choice and Strategic Education Research Partnerships

Ellen Delaney, Associate Principal, Spring Lake Park High School, Spring Lake Park, Minnesota

Susan Eddins, Faculty Emerita, Illinois Mathematics and Science Academy Educational Consultant

Wade Ellis, Mathematics Instructor, Retired, West Valley College

Francis (Skip) Fennell, Professor, Education Department, McDaniel College, Past-President, NCTM

Bradford R. Findell, Mathematics Initiatives Administrator, Ohio Department of Education

Sol Garfunkel, Executive Director, COMAP, the Consortium for Mathematics and its Applications

Dewey Gottlieb, Education Specialist for Mathematics, Hawaii Department of Education

Lawrence Gray, Professor of Mathematics, University of Minnesota

Kenneth I. Gross, Professor of Mathematics and Education, University of Vermont

Denny Gulick, Professor of Mathematics, University of Maryland

Roger Howe, Wm. Kenan Jr. Professor of Mathematics, Yale University

Deborah Hughes Hallett, Professor of Mathematics, University of Arizona, Adjunct Professor of Public Policy, Harvard Kennedy School

Linda Kaniecki, Mathematics Specialist, Maryland State Department of Education

Mary Knuck, Deputy Associate Superintendent, Standards-Based Best Practices, Arizona Department of Education

Barbara J. Libby, STEM Director, Office for Mathematics, Science and Technology/Engineering, Massachusetts Department of Elementary and Secondary Education

James Madden, Professor of Mathematics, Louisiana State University

Bernard L. Madison, Professor of Mathematics, University of Arkansas

William McCallum, Lead, Mathematics Head, Department of Mathematics, The University of Arizona, Senior Consultant to Achieve

Ken Mullen, Senior Mathematics Program Development Associate, ACT

Chuck Pack, National Board Certified Teacher (NBCT), Mathematics Department Chair, Mathematics Curriculum Coordinator, Tahlequah Public Schools District, Board of Directors, Oklahoma Education Association

Becky Pittard, National Board Certified Teacher (NBCT), Pine Trail Elementary School, Volusia County Schools, Florida

Barbara J. Reys, Lois Knowles Distinguished Professor of Mathematics Education, University of Missouri – Columbia

Katherine Richard, Associate Director, Mathematics Programs, Lesley University

Deb Romanek, Director, Mathematics Education, Nebraska Department of Education

Bernadette Sandruck, Professor and Division Chair, Mathematics, Howard Community College, Columbia, Maryland

Richard Scheaffer, Professor Emeritus, University of Florida

Andrew Schwartz, Assessment Manager, Research and Development, The College Board

Rick Scott, P-20 Policy and Programs, New Mexico Department of Higher Education

Carolyn Sessions, Standards and Curriculum Projects Coordinator, Louisiana Department of Education

Laura McGiffert Slover, Vice President, Content and Policy Research, Achieve

Douglas Sovde, Senior Associate, Mathematics, Achieve

Sharyn Sweeney, Mathematics Standards and Curriculum Coordinator, Massachusetts Department of Elementary and Secondary Education

Mary Jane Tappen, Deputy Chancellor for Curriculum, Instruction and Student Services, Florida Department of Education

Mark Thames, Assistant Research Scientist, School of Education, University of Michigan

Patrick Thompson, Professor of Mathematics Education, School of Mathematical and Statistical Sciences, Arizona State University

Donna Watts, Coordinator for Mathematics and STEM Initiatives, Maryland State Department of Education

Kerri White, Executive Director of High School Reform, Oklahoma State Department of Education

Vern Williams, Mathematics Teacher, H.W. Longfellow Middle School, Fairfax County, Virginia

Hung-Hsi Wu, Professor of Mathematics, Emeritus, Department of Mathematics, University of California-Berkeley

Susan Wygant, Mathematics Specialist, Minnesota Department of Education

Jason Zimba, Professor of Mathematics and Physics, Bennington College, Student Achievement Partners

SOURCE: NGA and CCSSO.

Appendix H: Common Core State Standards, K-12 Standards, Mathematics Feedback Team

Richard Askey, Professor Emeritus of Mathematics, University of Wisconsin-Madison

Hyman Bass, Samuel Eilenberg Distinguished University Professor of Mathematics and Mathematics Education, University of Michigan

Elaine Carman, Middle School Math Instructional Specialist, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

Andrew Chen, President, EduTron Corporation

Miguel Cordero, Secondary Math Instructional Specialist, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

Linda Curtis-Bey, Director, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

John A Dossey, Distinguished University Professor of Mathematics Emeritus, Illinois State University

Scott Eddins, Tennessee Mathematics Coordinator President, Association of State Supervisors of Mathematics (ASSM)

Lisa Emond, Elementary Math Instructional Specialist, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

Karen Fuson, Professor Emerita, Northwestern University

Sandra Jenoure, Early Childhood Math Instructional Specialist, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

Tammy Jones, Content Editor, Tennessee Standards Committee

Suzanne Lane, Professor, Research Methodology Program, School of Education, University of Pittsburgh

Fabio Milner, Director, Mathematics for STEM Education, School of Mathematical and Statistical Sciences, Arizona State University

Jodie Olivo, 5th Grade Teacher, Nathanael Greene Elementary School, Pawtucket School Department, North Providence, Rhode Island

Roxy Peck, Associate Dean and Professor of Statistics, College of Science and Mathematics, California Polytechnic State University, San Luis Obispo

John Santangelo, New England Laborers'/Cranston Public Schools Construction Career Academy, American Federation of Teachers, Rhode Island Federation of Teachers and Health Professionals, Cranston Teachers' Alliance

Wilfried Schmid, Professor, Mathematics, Harvard University

Ronald Schwarz, High School Math Instructional Specialist, Department of Science, Technology, Engineering and Mathematics, Office of Curriculum, Standards and Academic Engagement, New York City Department of Education

Matthew Ting, Mathematics Instructional Coach, Los Angeles Unified School District

Uri Treisman, Professor of Mathematics and of Public Affairs, Executive Director, Charles A. Dana Center, The University of Texas at Austin

W. Stephen Wilson, Professor of Mathematics, Department of Mathematics, Johns Hopkins University

SOURCE: NGA and CCSSO.

Appendix I: Common Core State Standards, Validation Committee Members

Bryan Albrecht, President, Gateway Technical College, Kenosha, Wisconsin

Arthur Applebee, Distinguished Professor, Center on English Learning and Achievement, School of Education, University at Albany, SUNY

Sarah Baird, 2009 Arizona Teacher of the Year, K-5 Math Coach, Kyrene School District

Jere Confrey, Joseph D. Moore Distinguished University Professor, William and Ida Friday Institute for Educational Innovation, College of Education, North Carolina State University

David T. Conley, Professor, College of Education, University of Oregon CEO, Educational Policy Improvement Center (Co-Chair)

Linda Darling-Hammond, Charles E. Ducommun Professor of Education, Stanford University

Alfinio Flores, Hollowell Professor of Mathematics Education, University of Delaware

Brian Gong, Executive Director, Center for Assessment (Co-Chair)

Kenji Hakuta, Lee L. Jacks Professor of Education, Stanford University

Kristin Buckstad Hamilton, Teacher, Battlefield Senior High School, NEA

Feng-Jui Hsieh, Associate Professor of the Mathematics Department, National Taiwan Normal University

Mary Ann Jordan, Teacher, New York City Dept. of Education, AFT

Jeremy Kilpatrick, Regents Professor of Mathematics Education, University of Georgia

Dr. Jill Martin, Principal, Pine Creek High School

Barry McGaw, Professor and Director of Melbourne Education Research Institute, University of Melbourne; Director for Education, OECD

James Milgram, Professor Emeritus, Stanford University

David Pearson, Professor and Dean, Graduate School of Education, University of California, Berkeley

Steve Pophal, Principal, DC Everest Junior High

Stanley Rabinowitz, Senior Program Director, Assessment and Standards Development Services, WestEd

Lauren Resnick, Distinguished University Professor, Psychology and Cognitive Science, Learning Sciences and Education Policy, University of Pittsburgh

Andreas Schleicher, Head, Indicators and Analysis Division of the OECD Directorate for Education

William Schmidt, University Distinguished Professor, Michigan State University

Catherine Snow, Henry Lee Shattuck Professor of Education, Harvard Graduate School of Education

Christopher Steinhauser, Superintendent of Schools, Long Beach Unified School District

Sandra Stotsky, Professor of Education Reform, 21st Century Chair in Teacher Quality, University of Arkansas

Dorothy Strickland, Samuel De Witt Proctor Professor of Ed., Emerita, Distinguished Research Fellow, National Institute for Early Education Research, Rutgers, The State University of NJ

Martha Thurlow, Director, National Center on Educational Outcomes, University of Minnesota

Norman Webb, Senior Research Scientist, Emeritus, Wisconsin Center for Education Research, University of Wisconsin

Dylan William, Deputy Director, Institute of Education, University of London

SOURCE: NGA and CCSSO.

Appendix J

Common Core State Standards (CCSS) Mathematics and Language Arts Feedback Form Comments

NOTE: No changes have been made to correct grammar, punctuation, or spelling.

1. What are the strengths of the CCSS?

Mathematics

- Students could transfer among local schools and states and still have the basic Math skills necessary for success. The standards are explained well.
- There appears to be more real world problem solving in the area of Mathematics.

Language Arts

- The standards for reading and literature match the ELA anchor standards providing a guide as to instruction that will prepare the student for college. The verbs analyze, cite, and determine promote higher level thinking skills. These standards infer that all secondary classes will be taught as college preparatory. These standards will enable Mississippi to compete academically nationally.
- They are similar to what we already use when our teachers are incorporating the National Standards/Texas Standards into our Mississippi Standards. We will be challenging our students to make them be able to compete on a national level. I like that writing standards are included in other subject areas.
- In looking at the MS Language Arts Framework alignment samples it has been noted that the overall alignment is better with the CCSS and the rigor is comparable. This would allow for a smoother transition to CCSS.

Both

- The strengths of the CCSS is great. Educators can help students build on a firm foundation in which more information can be added each year. If a student transfer from one district, it won't be as hard on the student.
- The strengths of the CCSS is the commonality of the core standards being the same for all states. It will make it easier for children to be successful in academics if they move from state to state.
- The CCSS seems to offer a streamlined curriculum with the objectives being more clearly stated.
- They are rigorous and include application through higher order thinking skills. They will provide consistency across states. They will provide the ability to compare student achievement across states.
- The obvious strength is to better prepare students for successful careers both nationally and globally. It also appears that the core standards are closely aligned to the Mississippi benchmarks.
- Language Arts are aligned to our state frameworks, much closer than Math. I feel that the core curriculum will be good, but will also take time to implement.

- A strength is that the curriculum is standardized nationally. Because of the economy, families are more transient in terms of employment. A common core curriculum is advantageous to students who must move. There would be a basic set of standards which overlay our current framework.
- The Standards give consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help the students. The Standards focus on results rather than means. The Standards define what all students are expected to know and be able to do, not how teachers should teach. The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. This gives teachers the freedom to address the needs of their students in a way that only they would know how to address those needs.

2. What are the concerns regarding the CCSS?

Mathematics

- We have not taught use of protractors for measurement of angles. Students have only learned degrees of 90, 180, 270, and 360 in the fourth grade. This is one of the few exceptions to the state standards.
- Math is a concern. Many adjustments will need to be made in local and state frameworks.

Language Arts

- Some areas are vague: reading fluency, reading comprehension – what does “successful” mean? Successful might mean 80% to one school and 70% to another school. Does it mean that the students are receiving passing grades or scores according the school district’s grading scale?
- A concern is time. While writing is a component of English, the multiple types of writing along with the English takes time. Some elementary teachers have multiple subjects that are tested. Hence, time allocated to cover a topic well is a premium.

Both

- More interventions for struggling learners should be looked at when trying to follow “The No Child Left Behind”.
- I like the fact that the CCSS will be a building block from year to year; however, do all teachers follow their pacing guides or lesson plans and can they adequately teach or explain the concepts to their students.
- The standards are extremely broad with too much latitude in interpretation. Will resources be provided to assist the teacher in interpretation?
- Examples would help explain the standards. Definitions would help to clarify the vocabulary. Teachers should be trained and have adequate knowledge of the new standards.
- What type of assessment will be used to indicate the success of the program? Will there be a national standardized test that all students will take? If so, how will test results impact individual schools? Will individual state tests still exist? If so, will they have the same impact they currently have on individual schools?

- Common Core State Standards would be a positive move; however, the process of implementation will be crucial in achieving the long term benefits of putting CCSS in place.
- My main concern is getting teachers to follow through with introducing the skills that are to be taught at each level. Many teachers will continue to teach from a textbook or a particular curriculum that they have been given or have used over the years. They will not utilize the Core Standards to guide their instruction.

3. Other comments

Mathematics

- Math book writers need a workshop on ideas related to the math curriculum. More hands-on for younger grades should be implemented because younger ages think concrete. This would improve math scores.

Language Arts

- Mississippi's Language Arts Framework Scope and Sequence seems to follow the Scope and Sequence of the New Common Core State Standards fairly closely. Some of the objectives are introduced at different grades, but that is typical when trying to align any curriculum. It will not be hard to implement the New Standards. There will always be some disagreement among teachers on when to introduce and teach certain skills. The thing I like most about the New Standards is that the document holds all of our students to a high standard, spells out what is expected at each grade level, and puts all of our students on an even playing field.

Both

- I agree that students need a strong foundation on core principles; however, they are not tested on just those objectives at the end of the year. Will there be enough teachable time to master the CCSS and additional objectives if I am required to teach both?
- Extensive training should be provided for thorough understanding.
- Training and resources must be made available to administrators and teachers.
- It appears from the map that MS has already approved the CCSS. If that is the case, when will these standards be required for testing?
- Will we go to a Nationally norm referenced test? When will CCSS be fully implemented?
- Our children are our future and we must maintain high expectations to provide them with an education that will prepare them for the 21st century workforce. This can only be achieved through a curriculum and methods of instruction which exposes and engages students in real life situations, requires them to problem solve, work as a team, and be reflective in their decisions and performance as a means of self evaluation and improvement.
- My final comment concerns what checks are there going to be to assure the core curriculum is taught nationally. To be the most effective, a common core standard needs to be utilized by all in the teaching arena.
- I agree 100% with the statement that students with disabilities "must be challenged to excel within the general curriculum and be prepared for success in their post-school

Mississippi Department of Education
Office of Curriculum and Instruction

lives, including college and/or careers.” But my concern is at what grade level those students, inclusion students and students with severe learning problems, will be assessed. I believe they should be tested at the learning level indicated on their IEP.

Appendix K: Individuals Who Wrote Letters of Support for the State's Race to the Top Grant Submission

Hank Bounds, Ph.D., Commissioner, Board of Trustees of Institutions of Higher Learning

Cecil Brown, State Representative

Phil Bryant, Former Lieutenant Governor

Videt Carmichael, State Senator

Eric Clark, Executive Director, State Board for Community and Junior Colleges

Thad Cochran, United States Senator

Rebecca Combs, Executive Director, The Phil Hardin Foundation

Haley Fisackerly, President and CEO, Entergy

Kevin Gilbert, President, Mississippi Association of Educators

Jim Goodnight, CEO, SAS Institute

Cathy Grace, Ph.D., Director, Early Childhood Institute, Mississippi State University

Beverly Hogan, President, Tougaloo College

Alfred Jenkins, Ph.D., Assistant Commissioner, Board of Trustees of Institutions of Higher Learning

Leroy Johnson, Executive Director, Southern Echo, Inc.

Nancy Loome, Executive Director, Parents' Campaign

Ronald Mason, Former President, Jackson State University

Barry Morris, Ph.D., Dean, School of Education, William Carey University

Kelly Riley, Executive Director, Mississippi Professional Educators

Bennie Thompson, U. S. Representative

Ann Travis, CEO, The Bower Foundation

Michael Waldrop, Ph.D., Executive Director, Mississippi School Boards Association

Nikisha Ware, Executive Director, Mississippi Learning Institute

SOURCE: Mississippi Department of Education.

Appendix L: Mississippi Department of Education Common Core State Standards Webinars as of December 5, 2013*

English Language Arts

- 101: Organization of the CCSS-ELA
- 102: Unpacking the CCSS-ELA
- 103: Determining Text Complexity
- 104: Tiered Vocabulary
- 105: Close Reading and Text Dependent Questions
- 106: Florida Center for Reading Research
- 107: PARCC ELA Assessment
- 108: Finding and Using Informational Texts
- 110: CCSS for English Language Arts and the PARCC Assessment: Navigating the Documents
- 111: Teaching Grammar in Context – CCSS Standards for Language
- 112: Narrative Writing in K-2

Math

- 101: The Cure for the Common Core – Successful Integration of the Mathematical Practices
- 102: The CCSS Math Trilogy (PARCC Model Content Frameworks, Progression Documents, Standards for Mathematical Practices)
- 103: Preparing for the PARCC Math Assessment (Volume 1)
- 104: Administrative Support for the CCSS-M
- 105: Frequently Asked Questions
- 106: Preparing for the PARCC Math Assessment (Volume 2)
- 107: Evaluating the CCSS for High School Mathematics (Grades 9-12)
- 108: Preparing for the PARCC Math Assessment (Volume 3): The Complete Common Core Document
- 109: Reviewing the PARCC Evidence Tables and New PARCC Sample Items for Math
- 110: Introducing the MS CCSSM Framework Documents (Volume 1)

Special

- 101: CCSS and PARCC Assessment Update (September 2012)
- 102: CCSS-ELA 3-5 Follow-Up
- 103: CCSS-Math 3-5 Follow-Up
- 104: CCSS-ELA 6-8 Follow-Up
- 105: CCSS-Math 6-8 Follow-Up
- 106: Resource Overview
- 107: PARCC Admin Guidance (March 2013)
- 108: CCSS-ELA 9-12 Follow-Up
- 109: CCSS-Math 9-12 Follow-Up

*Key: CCSS: Common Core State Standards
ELA: English Language and Arts
M: Math
PARCC: Partnership for Assessment and Readiness for College and Careers
SOURCE: Mississippi Department of Education.

Appendix M: CCSS, In-Person Training Sessions

Date	Title	Place	Attendance
6/29/2011	MDE CCSS K-2	Pearl	88
7/14/2011	CCSS K-2	Oxford	195
10/4/2011	Regional CCSS Eng/Lang Arts 3-5	Hattiesburg	134
10/5/2011	Regional CCSS Math 3-5	Hattiesburg	136
10/18/2011	Regional CCSS Eng/Lang Arts 3-5	Raymond	109
10/19/2011	Regional CCSS Math 3-5	Raymond	95
11/1/2011	Regional CCSS Math 3-5	Oxford	185
11/2/2011	Regional CCSS Eng/Lang Arts 3-5	Oxford	192
1/23/2012	Regional Principals Meeting	Cleveland	87
1/24/2012	Regional CCSS Eng/Lang Arts 6-8	Oxford	168
1/25/2012	Regional CCSS Math 6-8	Oxford	165
2/22/2012	Regional CCSS Eng/Lang Arts 6-8	Flowood	95
2/23/2012	Regional CCSS Math 6-8	Flowood	88
2/29/2012	Regional CCSS Eng/Lang Arts 6-8	Hattiesburg	126
3/1/2012	Regional CCSS Math 6-8	Hattiesburg	126
3/26/2012	Regional Principals Meeting	Jackson	101
3/28/2012	CCSS Math for IHL	Jackson	43
3/30/2012	Regional Principals Meeting	Oxford	160
4/4/2012	CCSS ELA for IHL	Jackson	44
4/13/2012	Regional Principals Meeting	Meridian	69
4/18/2012	MDE CCSS K-2 Follow Up	Hattiesburg	115
4/23/2012	Regional Principals Meeting	Ellisville	93
4/24/2012	MDE CCSS K-2 Follow Up	Pearl	77
4/26/2012	MDE CCSS K-2 Follow Up	Oxford	146
4/27/2012	Regional Principals Meeting	Gulfport	107
7/11/2012	K-2 Writing Project Focusing on CCSS	Oxford	37
7/11/2012	3-5 Writing Project Focusing on CCSS	Oxford	33
7/11/2012	6-8 Writing Project Focusing on CCSS	Oxford	29
7/11/2012	9-12 Writing Project Focusing on CCSS	Oxford	15
7/13/2012	K-2 Writing Project Focusing on CCSS	Greenville	5
7/13/2012	3-5 Writing Project Focusing on CCSS	Greenville	28
7/13/2012	6-8 Writing Project Focusing on CCSS	Greenville	5
7/13/2012	9-12 Writing Project Focusing on CCSS	Greenville	0
7/16/2012	Regional CCSS Math 9-12	Jackson	74
7/17/2012	Regional CCSS Eng/Lang Arts 9-12	Jackson	69
7/18/2012	K-2 Writing Project Focusing on CCSS	Ellisville	34
7/18/2012	K-2 Writing Project Focusing on CCSS	Long Beach	33
7/18/2012	3-5 Writing Project Focusing on CCSS	Ellisville	34
7/18/2012	3-5 Writing Project Focusing on CCSS	Long Beach	24
7/18/2012	6-8 Writing Project Focusing on CCSS	Ellisville	29
7/18/2012	6-8 Writing Project Focusing on CCSS	Long Beach	33
7/18/2012	9-12 Writing Project Focusing on CCSS	Ellisville	19
7/18/2012	9-12 Writing Project Focusing on CCSS	Long Beach	6
7/19/2012	Regional CCSS Eng/Lang Arts 9-12	Ellisville	116
7/20/2012	Regional CCSS Math 9-12	Ellisville	126
7/20/2012	K-2 Writing Project Focusing on CCSS	Jackson	31

Appendix M: CCSS, In-Person Training Sessions

Date	Title	Place	Attendance
7/20/2012	3-5 Writing Project Focusing on CCSS	Jackson	35
7/20/2012	6-8 Writing Project Focusing on CCSS	Jackson	37
7/20/2012	9-12 Writing Project Focusing on CCSS	Jackson	27
7/24/2012	Regional CCSS Eng/Lang Arts 9-12	Oxford	91
7/25/2012	Regional CCSS Math 9-12	Oxford	101
7/25/2012	K-2 Writing Project Focusing on CCSS	Meridian	30
7/25/2012	3-5 Writing Project Focusing on CCSS	Meridian	27
7/25/2012	6-8 Writing Project Focusing on CCSS	Meridian	8
7/25/2012	9-12 Writing Project Focusing on CCSS	Meridian	7
10/23/2012	K-2 Writing Project Focusing on CCSS	Oxford	35
10/23/2012	3-5 Writing Project Focusing on CCSS	Oxford	27
10/23/2012	6-8 Writing Project Focusing on CCSS	Oxford	27
10/23/2012	9-12 Writing Project Focusing on CCSS	Oxford	12
10/25/2012	3-5 Writing Project Focusing on CCSS	Greenville	17
10/30/2012	K-2 Writing Project Focusing on CCSS	Long Beach	32
10/30/2012	3-5 Writing Project Focusing on CCSS	Long Beach	24
10/30/2012	6-8 Writing Project Focusing on CCSS	Long Beach	27
11/2/2012	K-2 Writing Project Focusing on CCSS	Ellisville	32
11/2/2012	3-5 Writing Project Focusing on CCSS	Ellisville	23
11/2/2012	6-8 Writing Project Focusing on CCSS	Ellisville	17
11/2/2012	9-12 Writing Project Focusing on CCSS	Ellisville	14
11/8/2012	K-2 Writing Project Focusing on CCSS	Jackson	24
11/8/2012	3-5 Writing Project Focusing on CCSS	Jackson	23
11/8/2012	6-8 Writing Project Focusing on CCSS	Jackson	27
11/8/2012	9-12 Writing Project Focusing on CCSS	Jackson	16
11/13/2012	K-2 Writing Project Focusing on CCSS	Meridian	25
11/13/2012	3-5 Writing Project Focusing on CCSS	Meridian	24
1/23/2013	ELA CCSS 3-5 Follow Up	Hattiesburg	98
1/24/2013	Math CCSS 3-5 Follow Up	Hattiesburg	94
2/5/2013	K-2 Writing Project Focusing on CCSS	Oxford	35
2/5/2013	3-5 Writing Project Focusing on CCSS	Oxford	25
2/5/2013	6-8 Writing Project Focusing on CCSS	Oxford	25
2/5/2013	9-12 Writing Project Focusing on CCSS	Oxford	9
2/7/2013	3-5 Writing Project Focusing on CCSS	Greenville	11
2/12/2013	ELA CCSS 3-5 Follow Up	Jackson	63
2/13/2013	Math CCSS 3-5 Follow Up	Jackson	55
2/13/2013	3-5 Writing Project Focusing on CCSS	Ellisville	15
2/13/2013	6-8 Writing Project Focusing on CCSS	Ellisville	16
2/13/2013	9-12 Writing Project Focusing on CCSS	Ellisville	8
2/15/2013	K-2 Writing Project Focusing on CCSS	Long Beach	31
2/15/2013	3-5 Writing Project Focusing on CCSS	Long Beach	20
2/15/2013	6-8 Writing Project Focusing on CCSS	Long Beach	24
2/19/2013	K-2 Writing Project Focusing on CCSS	Ellisville	29
2/20/2013	ELA CCSS 3-5 Follow Up	Oxford	99
2/21/2013	Math CCSS 3-5 Follow Up	Oxford	93
2/21/2013	K-2 Writing Project Focusing on CCSS	Jackson	23

Appendix M: CCSS, In-Person Training Sessions

Date	Title	Place	Attendance
2/21/2013	3-5 Writing Project Focusing on CCSS	Jackson	20
2/21/2013	6-8 Writing Project Focusing on CCSS	Jackson	18
2/21/2013	9-12 Writing Project Focusing on CCSS	Jackson	11
2/27/2013	K-2 Writing Project Focusing on CCSS	Meridian	24
2/27/2013	3-5 Writing Project Focusing on CCSS	Meridian	23
4/8/2013	Regional CCSS Eng/Lang Arts 6-8	Oxford	78
4/9/2013	Regional CCSS Math 6-8	Oxford	82
4/11/2013	Regional CCSS Eng/Lang Arts 6-8	Pearl	46
4/12/2013	Regional CCSS Math 6-8	Pearl	47
4/15/2013	Regional CCSS Eng/Lang Arts 6-8	Hattiesburg	97
4/16/2013	Regional CCSS Math 6-8	Hattiesburg	100
4/22/2013	Regional Principals Meeting	Pearl	108
4/22/2013	Regional Principals Meeting	Pearl	41
4/23/2013	Regional Principals Meeting	Ellisville	64
4/23/2013	Regional Principals Meeting	Ellisville	88
4/24/2013	Regional Principals Meeting	Gulfport	43
4/24/2013	Regional Principals Meeting	Gulfport	66
4/30/2013	Regional Principals Meeting	Winona	22
4/30/2013	Regional Principals Meeting	Batesville	173
6/12/2013	CCSS Boot Camp	Oxford	199
6/18/2013	Cohort II K-2 Writing Project Focusing on CCSS	Long Beach	33
6/18/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Long Beach	36
6/18/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Long Beach	22
6/18/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Long Beach	10
6/20/2013	Cohort II K-2 Writing Project Focusing on CCSS	Ellisville	20
6/20/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Ellisville	18
6/20/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Ellisville	15
6/20/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Ellisville	22
6/25/2013	Cohort II K-2 Writing Project Focusing on CCSS	Greenville	13
6/25/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Greenville	4
6/25/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Greenville	10
6/25/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Greenville	5
6/27/2013	Cohort II K-2 Writing Project Focusing on CCSS	Oxford	35
6/27/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Oxford	34
6/27/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Oxford	33
6/27/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Oxford	27
6/28/2013	CCSS Boot Camp	Pearl	221
7/9/2013	Cohort II K-2 Writing Project Focusing on CCSS	Jackson	33
7/9/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Jackson	33
7/9/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Jackson	35
7/9/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Jackson	5
7/11/2013	Cohort II K-2 Writing Project Focusing on CCSS	Meridian	11
7/11/2013	Cohort II 3-5 Writing Project Focusing on CCSS	Meridian	25
7/11/2013	Cohort II 6-8 Writing Project Focusing on CCSS	Meridian	13
7/11/2013	Cohort II 9-12 Writing Project Focusing on CCSS	Meridian	7
10/22/2013	ELA CCSS 9-12 Follow Up	Oxford	78
10/23/2013	Math CCSS 9-12 Follow Up	Oxford	87

Appendix M: CCSS, In-Person Training Sessions

Date	Title	Place	Attendance
10/30/2013	ELA CCSS 9-12 Follow Up	Hattiesburg	99
10/31/2013	Math CCSS 9-12 Follow Up	Hattiesburg	108
11/12/2013	ELA CCSS 9-12 Follow Up	Pearl	94
11/13/2013	Math CCSS 9-12 Follow Up	Pearl	83
11/18/2013	Regional Administrators Focusing on CC Implementation	Hattiesburg	193
11/19/2013	Regional Administrators Focusing on CC Implementation	Hattiesburg	170
12/2/2013	Regional Administrators Focusing on CC Implementation	Pearl	163
1/7/2014	Regional Administrators Focusing on CC Implementation	Pearl	104
1/8/2014	Regional Administrators Focusing on CC Implementation	Oxford	170
1/9/2014	Regional Administrators Focusing on CC Implementation	Oxford	144

SOURCE: Mississippi Department of Education.

Appendix N: Partnership for Assessment of Readiness for College and Careers Member States, as of November 26, 2013

Arizona
Arkansas
Colorado
District of Columbia
Florida
Illinois
Kentucky
Louisiana
Maryland
Massachusetts
Mississippi
New Jersey
New Mexico
New York
Ohio
Pennsylvania
Rhode Island
Tennessee

NOTE: The following states were originally members of PARCC, but subsequently withdrew their membership: Alabama, California, Delaware, Georgia, Indiana, New Hampshire, North Dakota, Oklahoma, and South Carolina.

SOURCE: U. S. Department of Education.

Appendix O: Smarter Balanced Assessment Consortium, as of November 26, 2013

Alaska
California
Connecticut
Delaware
Hawaii
Idaho
Iowa
Kansas
Maine
Michigan
Missouri
Montana
New Hampshire
Nevada
North Carolina
North Dakota
Oregon
Pennsylvania
South Carolina
South Dakota
Vermont
Washington
West Virginia
Wisconsin
Wyoming

NOTE: The following states were originally members of SBAC, but subsequently withdrew their membership: Alabama, Colorado, Georgia, Kentucky, New Jersey, New Mexico, Ohio, Oklahoma, and Utah.

SOURCE: U. S. Department of Education.

Appendix P: Mississippi Representatives on PARCC Item Review Committee

Penelope Allen, Math Teacher

Robin Atwood, Professional Development Coordinator

Richard Baliko, Educator in Residence

Karin Bowen, Math Teacher

Rebecca Bradley, English Teacher

Candies Cook, Math/Science Teacher

Patricia Cooper, English Language Arts Curriculum Specialist

Marla Davis, Mathematics Specialist/Office Director II

Stacey Donaldson, Language Arts Specialist

Jane Everly, Principal

Jason Frazier, English Language Arts Teacher

Brandi Freed, Elementary English Teacher

Trecina Green, Associate Superintendent

Torrey Hampton, Math Teacher

Leah Hannah, State Literacy Coach

Catie Haynes, Math Teacher

April Holifield-Scott, English Language Arts Curriculum Specialist

Latanya Johnson, Math Coach

Kim LaFontaine, Curriculum Coordinator/Director of Personnel

Ginny Leonard, English Professor

Leslie Leyser, English Language Arts Teacher

Julie McCullough, English Language Arts Teacher

Andrea Patterson, District Curriculum Coordinator

Dana Pomykal Franz, Associate Professor

Leigh Pourciau, English Language Arts Teacher

Genevieve Roman, English Instructor

Jason Ross, Math Instructor

Lisa Shirley, English Teacher

Cindy Simmons, English Language Arts Content Lead

Patti Smith, English Language Arts Professor

LaVonda White, Math Teacher

SOURCE: Mississippi Department of Education.

Appendix Q: Mississippi Educator Leader Cadre Members

Richard Baliko, Middle School Math Teacher

Robin Chapman, Curriculum Coordinator

Debra Dace, Curriculum Coordinator

David Daigneault, Superintendent

Marla Davis, Mathematics Specialist/Office Director II

Babette Duty, Deputy Superintendent, Curriculum and Accreditation

Glen East, Superintendent

Dana Franz, Professor, Mathematics

Jason Frazier, High School English Language Arts Teacher

Lisa Hull, Federal Programs Director

Michelle Larabee, Curriculum/Special Education Director

George Loper, Chief Instructional Technology Officer

Melissa McCray, Elementary Principal

Nathan Oakley, Director of Curriculum and Instruction

Stacey Pace, District Test Coordinator

Eddie Peasant, High School Principal

Laurie Pitre, Elementary Principal

Monica Riley, Professor, English/Language Arts

Deia Sanders, Middle School Master Teacher

Charlotte Seals, Assistant Superintendent

Vincent Segalini, English Language Arts Office Director II

Jenny Simmons, High School Math Teacher

Cassondra Vanderford, Assistant Principal

Diane Wolfarth, High School Science Teacher

SOURCE: Mississippi Department of Education.

PEER Committee Staff

Max Arinder, Executive Director
James Barber, Deputy Director
Ted Booth, General Counsel

Administration

Tracy Bobo
Larry Landrum
Rosana Slawson
Gale Taylor

Corrections Audit

Lou Davis

Reapportionment

Ben Collins

Evaluation

Kim Cummins
Matthew Dry
Lonnie Edgar
Barbara Hamilton
Matthew Holmes
Angela Norwood
Jennifer Sebren
Jenell Ward
Ava Welborn
Sarah Williamson
Julie Winkeljohn
Ray Wright

Performance Budgeting

Brian Dickerson
David Pray
Linda Triplett