

Mississippi

ACT Preliminary Results for Juniors

2015

State Board of Education Presentation
September 17, 2015



- Overview of the ACT
- Alignment with Board Goals and Post-Secondary Requirements
- Junior Class ACT results for 2014-15
- State and District Strategies for Improvement

What is the ACT?

- Curriculum based assessment designed to measure the skills high school teachers teach and what instructors of entry-level college courses expect
- Designed as a predictive measure, not as a content performance measure
- College admissions and placement test
- Over 1.8 million test takers each year
- Primary components
 - English, Math, Reading and Science Tests
 - College Readiness Benchmark Scores
 - Career Interest Inventory
 - Course Patterns

- Guides **students** as they navigate transitions throughout their learning paths in high school and post-secondary
- Empowers **education administrators** to make informed judgments about college readiness
- Fosters **parent, teacher, and counselor** understanding of student progress
- Supports both education and **workforce** development

GOAL 1: All Students Proficient And Showing Growth In All Grades In All Assessed Areas

Objective: Continue Implementing the MS College and Career Readiness Standards

Strategy: Provide targeted professional development in all content areas based on data

Goal 2: Every Student Graduates High School And Is Ready For College And Career

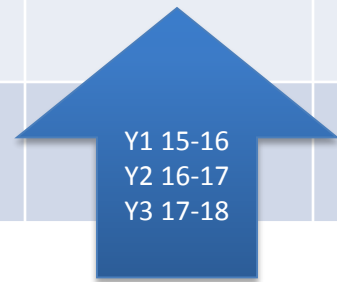
Objective 3: Increase the number and percentage of students participating in and successfully completing advanced coursework, such as advanced placement courses, dual credit/dual enrollment courses, articulated credit, and national certifications

Strategy: Provide expanded access for students to dual/credit/dual enrollment opportunities, Advanced Placement courses, and industry certification programs



Accountability Model

Reading	Math	Other Subjects	Four Year Graduation Rate	Acceleration	College Readiness
Proficiency	Proficiency	Science Proficiency	All Student Rate	Participation Proficiency	ACT
Growth All Students	Growth All Students	U.S. History Proficiency		70/30 Y1 60/40 Y2 50/50 Y3	Math 22 and Reading 22 Or English 18
Growth Lowest 25%	Growth Lowest 25%				



Y1 15-16
Y2 16-17
Y3 17-18



MISSISSIPPI
DEPARTMENT OF
EDUCATION

Ensuring a bright future for every child

ACT Statewide Preliminary Score Report for Juniors 2014-15

ACT College Benchmark Scores

College Course/Course Area	ACT Test	Benchmark Score
English Composition	English	18
Algebra	Mathematics	22
Social Sciences	Reading	22
Biology	Science	23

College Readiness Benchmark Scores – A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses, which include English Composition, Algebra, Social Sciences and Biology.

ACT Sub-scores **less than** the following require students to enroll in developmental education courses at both Community Colleges and Institutions of Higher Learning (IHL)

- English – 17
- Math – 19

IHL POLICY 602B

Full admission will be granted to the following:

- (1) All students completing the College Preparatory Curriculum (CPC) with a minimum of a **3.20 high school GPA** on the CPC; or
- (2) All students completing the College Preparatory Curriculum (CPC) with
(a) a minimum of a **2.50 high school GPA** on the CPC or a class rank in the top 50%, and (b) a score of **16 or higher on the ACT** (Composite); or
- (3) All students completing the College Preparatory Curriculum (CPC) with
(a) a minimum of a **2.00 high school GPA** on the CPC and (b) **a score of 18 or higher on the ACT** (Composite)



Year One ACT Composite Scoring Trends

Table 1.2. Five Year Trends—Average ACT Scores

Year	Number of Students	Average ACT Scores				
	Tested State	English State	Mathematics State	Reading State	Science State	Composite State
2010-2011	0	.	.	.	.	.
2011-2012	0	.	.	.	.	.
2012-2013	0	.	.	.	.	.
2013-2014	0	.	.	.	.	.
2014-2015	29,819	16.9	17.6	17.8	17.8	17.6

Table 1.3. Five Year Trends—Average ACT Scores Statewide (table omitted for this report)



Average ACT Score by Ethnicity

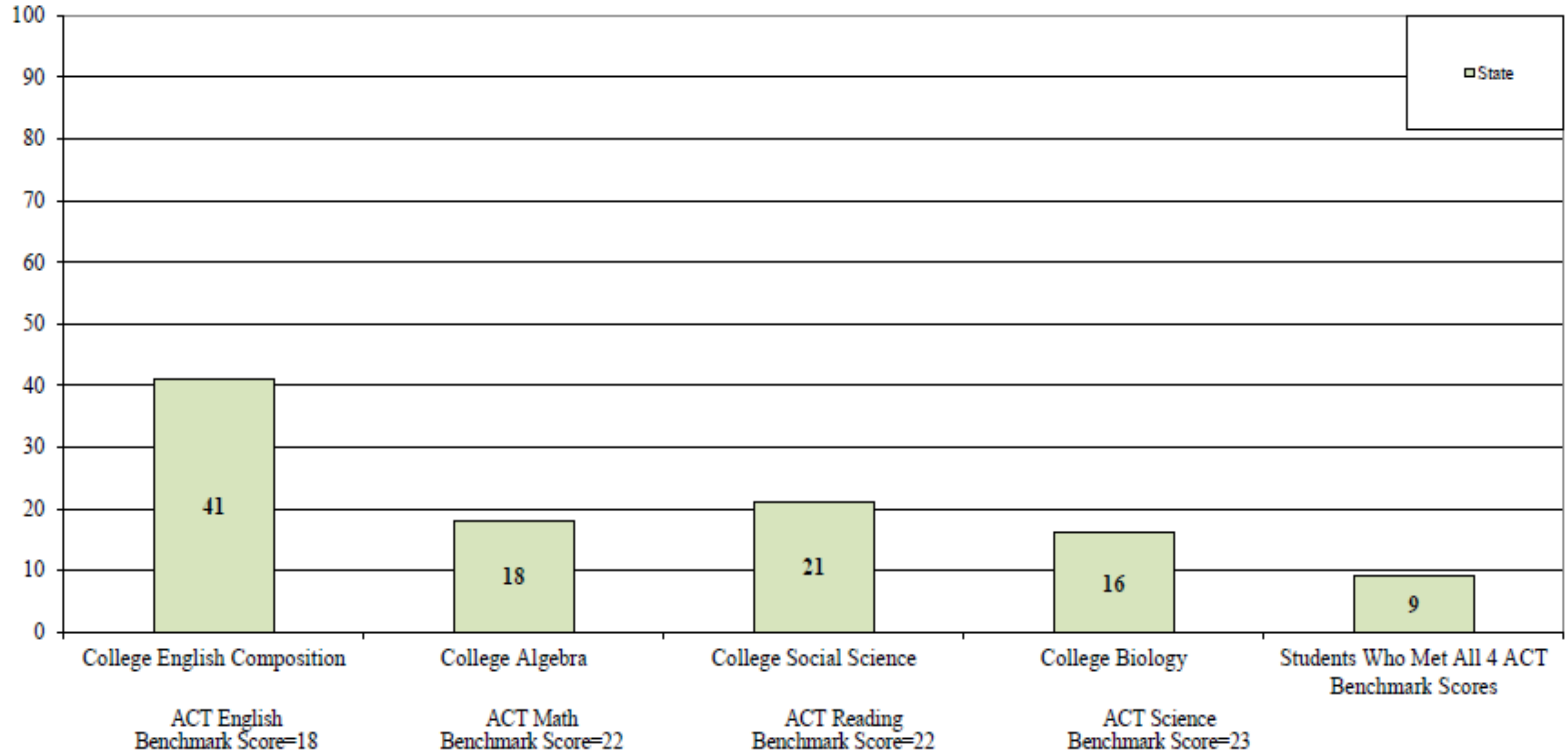
Table 2.5. Average ACT Scores by Race/Ethnicity

Student Group	Race/Ethnicity	English	Mathematics	Reading	Science	Composite
State	All Students	16.9	17.6	17.8	17.8	17.6
	Black/African American	14.2	16.0	15.7	15.9	15.6
	American Indian/Alaska Native	14.6	16.6	16.3	16.8	16.2
	White	19.5	19.2	19.9	19.6	19.7
	Hispanic/Latino	16.8	17.8	18.0	18.0	17.8
	Asian	21.7	22.4	20.9	21.8	21.8
	Native Hawaiian/Other Pac. Isl.	15.5	16.5	17.0	17.0	16.6
	Two or more races	18.7	18.7	19.5	19.3	19.2
	Prefer not/No Response	16.3	17.2	17.4	17.3	17.2



Percentage Juniors Meeting ACT Benchmarks

Figure 1.1. Percent of Your Students Ready for College-Level Coursework



A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college course.



Gender Comparison

Table 2.7. Average ACT Scores by Gender

Student Group	Gender	N	Percent	Average ACT Scores				
				English	Mathematics	Reading	Science	Composite
State	Males	13,821	46	16.1	17.7	17.2	17.7	17.3
	Females	14,229	48	17.6	17.6	18.4	17.9	18.0
	Missing	1,769	6	16.4	17.2	17.4	17.3	17.2

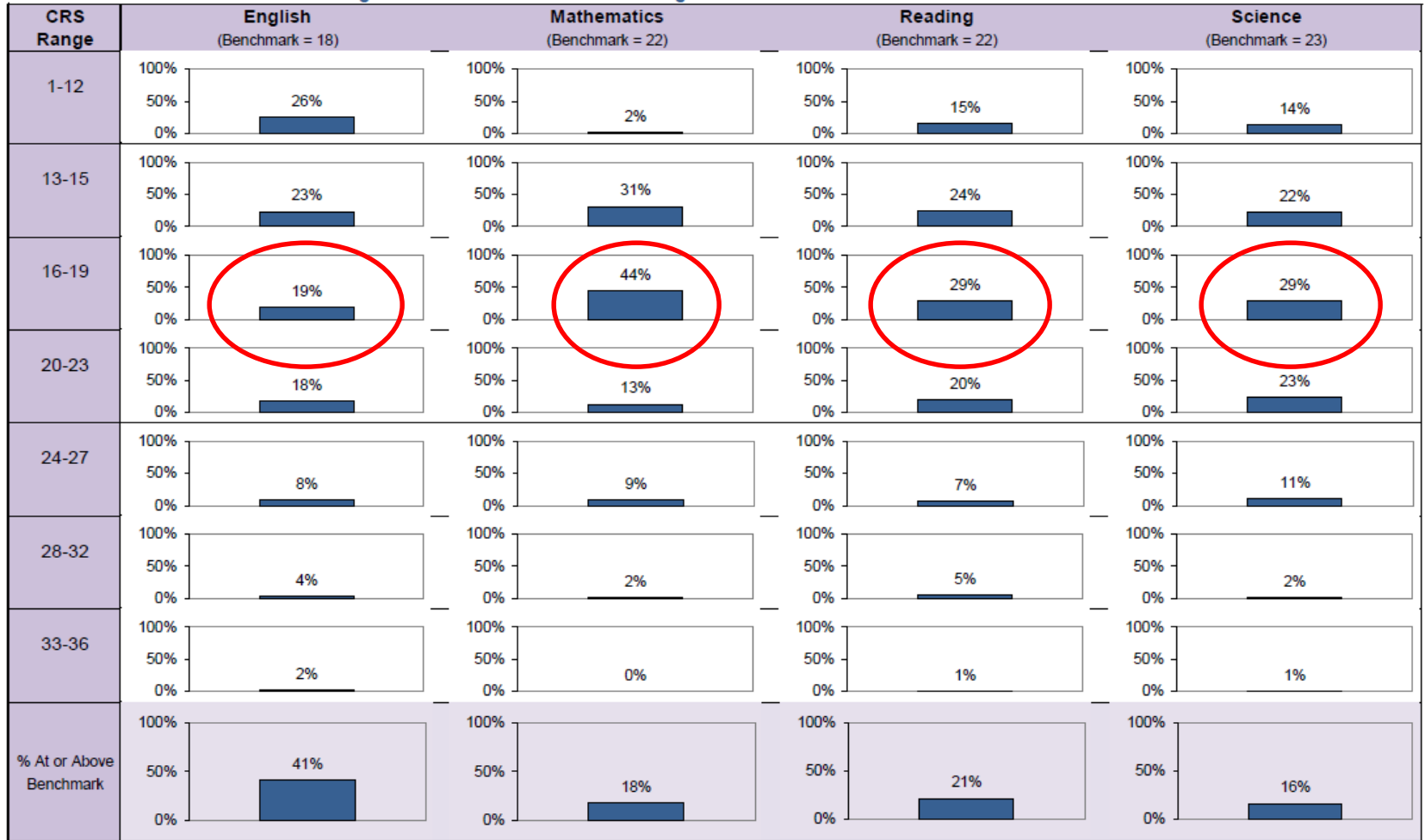
Table 2.8. Percent of Students Who Met College Readiness Benchmark Scores by Gender

Student Group	Gender	Percent of Students				Met All Four
		English	Mathematics	Reading	Science	
State	Males	36	19	18	17	9
	Females	46	17	23	16	8



Score Ranges

Table 1.6. Percent of Students in College Readiness Standards Score Ranges



= State

Core Curriculum

- 4 years of English
- 3 years of Math
- 3 years of Science
- 3 years of Social Science

Specific Core Courses

ACT research has also shown that taking specific courses in high school substantially increases students' readiness for college level and workforce training programs.

Recommended Courses:

- Biology
- Chemistry
- Physics
- Mathematics courses including Algebra II and beyond



Core vs Non-Core Course Completion

Table 2.9. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Overall High School Curriculum

Student Group	Curriculum Taken ¹	N	English		Mathematics		Reading		Science		Composite	
			CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB % ⁴	Avg
State	Core or More ²	14,026	51	18.4	25	18.6	27	19.0	22	18.9	13	18.8
	Less than Core	13,571	32	15.6	11	16.8	15	16.9	10	16.8	4	16.6
	Missing ³	2,222	28	15.0	13	16.7	15	16.3	12	16.4	7	16.2

¹ "Curriculum Taken" reflects overall high school curriculum in this table.

² "Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

³ Zero years or no coursework information reported in one or more content areas.

⁴ Composite CRB% results reflect students who met all four subject-area benchmarks.



Course Patterns

Table 3.1. Average ACT Scores and Average ACT Score Changes by Common Course Patterns

Course Pattern	All Students				Males				Females			
	N	Percent	ACT English	Course Value Added ¹	N	Percent	ACT English	Course Value Added ¹	N	Percent	ACT English	Course Value Added ¹
ENGLISH COURSE PATTERN												
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	2,643	9	19.2	4.7	1,067	8	18.2	4.3	1,436	10	20.0	4.7
Eng 9, Eng 10, Eng 11, Eng 12	20,977	70	17.2	2.7	9,596	69	16.6	2.7	10,191	72	17.8	2.5
Less than 4 years of English	4,516	15	14.5	-	2,345	17	13.9	-	1,923	14	15.3	-
Zero years / no English courses reported	1,683	6	15.6	-	813	6	14.6	-	679	5	16.8	-
MATHEMATICS COURSE PATTERN												
Alg 1, Alg 2, Geom, Trig, & Calc	1,950	7	18.2	2.8	824	6	18.9	3.6	1,021	7	17.7	2.1
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	1,852	6	19.9	4.5	707	5	20.3	5.0	1,062	7	19.7	4.1
Alg 1, Alg 2, Geom, & Trig	2,920	10	17.0	1.6	1,333	10	17.3	2.0	1,411	10	16.9	1.3
Alg 1, Alg 2, Geom, & Other Adv Math	2,390	8	18.2	2.8	950	7	18.6	3.3	1,275	9	18.0	2.4
Other comb of 4 or more years of Math	6,966	23	19.8	4.4	2,967	21	20.2	4.9	3,587	25	19.6	4.0
Alg 1, Alg 2, & Geom	7,176	24	16.1	0.7	3,624	26	16.3	1.0	3,190	22	16.0	0.4
Other comb of 3 or 3.5 years of Math	1,914	6	16.7	1.3	885	6	17.1	1.8	930	7	16.4	0.8
Less than 3 years of Math	2,819	9	15.4	-	1,627	12	15.3	-	1,023	7	15.6	-
Zero years / no Math courses reported	1,832	6	16.8	-	904	7	16.6	-	730	5	17.1	-
SOCIAL SCIENCE COURSE PATTERN												
US Hist, World Hist, Am Gov, & Other Hist	257	1	16.4	0.9	150	1	15.7	0.6	89	1	17.1	1.1
Other comb of 4 or more years Social Science	16,548	55	19.1	3.6	6,995	51	18.6	3.5	8,728	61	19.4	3.4
US Hist, World Hist, & Am Gov	425	1	15.3	-0.2	220	2	15.0	-0.1	174	1	15.6	-0.4
Other comb of 3 or 3.5 years of Social Science	5,706	19	17.0	1.5	2,705	20	16.7	1.6	2,604	18	17.4	1.4
Less than 3 years of Social Science	4,978	17	15.5	-	2,787	20	15.1	-	1,886	13	16.0	-
Zero years / no Social Science courses reported	1,905	6	16.5	-	964	7	15.6	-	748	5	17.5	-
NATURAL SCIENCE COURSE PATTERN												
Gen Sci ² , Bio, Chem, & Phys	6,477	22	18.1	1.2	2,939	21	18.3	1.7	3,156	22	17.9	0.7
Bio, Chem, Phys	2,070	7	21.5	4.6	939	7	22.3	5.7	986	7	21.0	3.8
Gen Sci ² , Bio, Chem	7,912	27	18.2	1.3	3,380	24	18.1	1.5	4,100	29	18.3	1.1
Other comb of 3 years of Natural Science	873	3	16.4	-0.5	472	3	16.5	-0.1	361	3	16.3	-0.9
Less than 3 years of Natural Science	10,481	35	16.9	-	5,109	37	16.6	-	4,803	34	17.2	-
Zero years / no Natural Science courses reported	2,006	7	16.7	-	982	7	16.4	-	823	6	17.0	-

¹Course value added is defined as the average ACT score change compared to course sequences in which students took less than four years of English or less than three years of Mathematics, Social Science or Natural Science.

²Includes General Physical and Earth Sciences

Course Completion by Subgroups

Table 2.4. Average ACT Composite Scores for Race/Ethnicity by Level of Preparation

Student Group	Race/Ethnicity	Number of Students Tested	Percent Taking Core or More ¹	Average ACT Composite Score	
				Core or More	Less Than Core
State	All Students	29,819	47	18.8	16.6
	Black/African American	12,553	44	16.4	15.1
	American Indian/Alaska Native	113	42	18.2	15.2
	White	12,355	50	21.0	18.3
	Hispanic/Latino	951	47	18.7	17.0
	Asian	270	63	23.0	20.7
	Native Hawaiian/Other Pac. Isl.	30	33	17.5	16.9
	Two or more races	753	54	20.3	17.8
	Prefer not/No Response	2,794	44	18.4	16.3

¹"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.



Career Planning

Table 4.1. Distribution of Planned Educational Majors for All Students by College Plans

Planned Educational Major	All Students			Plan on 2 Years or Less of College			Plan on 4 Years or More of College		
	N ¹	Percent ²	Avg ACT Comp	N	Percent ²	Avg ACT Comp	N	Percent ²	Avg ACT Comp
Agriculture & Natural Resources Conservation	558	2	16.2	171	4	14.8	351	2	17.0
Architecture	309	1	17.8	46	1	14.7	249	1	18.5
Area, Ethnic, & Multidisciplinary Studies	28	0	16.3	7	0	12.0	21	0	17.7
Arts: Visual & Performing	1,926	6	17.4	348	8	15.0	1,458	8	18.0
Business	1,582	5	17.5	303	7	15.1	1,219	6	18.2
Communications	302	1	18.5	38	1	15.2	257	1	19.1
Community, Family, & Personal Services	1,449	5	16.0	400	9	15.0	960	5	16.4
Computer Science & Mathematics	525	2	19.0	85	2	15.8	417	2	19.8
Education	1,373	5	17.6	167	4	14.9	1,165	6	18.1
Engineering	2,156	7	19.1	362	8	15.2	1,710	9	20.1
Engineering Technology & Drafting	579	2	16.8	177	4	14.6	382	2	17.9
English & Foreign Languages	163	1	21.4	10	0	18.8	147	1	21.7
Health Administration & Assisting	666	2	16.4	123	3	15.3	531	3	16.7
Health Sciences & Technologies	6,702	22	18.4	615	14	15.7	5,910	30	18.7
Philosophy, Religion, & Theology	88	0	18.7	8	0	15.4	78	0	19.0
Repair, Production, & Construction	996	3	15.6	557	12	15.2	381	2	16.1
Sciences: Biological & Physical	769	3	21.0	49	1	16.2	701	4	21.3
Social Sciences & Law	1,612	5	18.7	95	2	15.4	1,451	7	19.0
Undecided	1,450	5	18.0	323	7	15.2	986	5	19.2
No Response	6,194	21	16.7	413	9	13.5	822	4	15.4

¹2-Year and 4-Year "N" counts do not reflect "Missing" and "Other" college plans, therefore they may not add up to the N count for All Students.

²Percent of students tested within College Plan groups (All Students, 2-Year, 4-Year).



Regional Trainings for **District Administrative Teams**

Team Members- Principals, Counselors, Curriculum Coordinators

Sessions will focus on how to use ACT data to:

- Determine senior year placement
- Evaluate rigor of classroom instruction
- Examine course taking sequences
- Assess achievement gaps among sub-groups
- Proper use of Test-Prep courses
- Coordination of middle and high school initiatives
- Determine student weaknesses and strengths around the ACT PLAN and ACT EXPLORE
- Implementation of SREB Math and Literacy Readiness

Mississippi's SREB Readiness Courses

- Offered only to Seniors who have an ACT sub-score ranging from 15-18
- Teachers must meet endorsement requirements
- To meet IHL postsecondary developmental requirements students must earn an 80 or above
- Readiness course meets:
 - Carnegie Unit math graduation requirements
 - Carnegie Unit English graduation requirements
 - College Prep Curriculum IHL admission requirements

Improving ACT Scores in the State

- Middle School Principal and Counselor Professional Development
- Pre-AP and AP Expansion Efforts
- Dual Credit Opportunities
- SREB Senior Year Math Readiness Course
- SREB Senior Year Literacy Readiness Course
- Literacy Across the Content Areas Training for Teachers
- ACT Test-Prep Instructional Practices
- Regional Professional Development Opportunities provided by ACT

Program Contacts

Jean Massey

Executive Director, Office of Secondary Education

Wendy Clemons

Director of Middle and High School Innovative
Programs

Dr. Marla Davis

Director Middle and High School, STEM