### ACT Profile Report - State

Graduating Class 2013 Montana



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This report provides information about the performance of your 2013 graduating seniors who took the ACT as sophomores, juniors, or seniors; and self-reported at the time of testing that they were scheduled to graduate in 2013. Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included in the report.

### This report focuses on:

Performance - student test performance in the context of college readiness

Access - number of your graduates exposed to college entrance testing and the percent of race/ethnicity participation

Course Selection - percent of students pursuing a core curriculum

Course Rigor - impact of rigorous coursework on achievement

College Readiness - percent of students meeting ACT College Readiness Benchmark Scores in each content area

Awareness - extent to which student aspirations match performance

Articulation - colleges and universities to which your students send test results

Each year, test data for a school, district, and the state represents a different cohort of students. ACT encourages educators to focus on trends (3, 5, 10 years), not year-to-year changes. Such changes can represent normal – even expected – fluctuations. On the other hand, trend lines offer more insight into what is happening in a school, district, or the state.

Furthermore, ACT encourages educators to measure student performance in the context of college readiness measures. The focus should be on the number and percentage of students who met or exceeded ACT's College Readiness Benchmark Scores, a measure that is much more meaningful and understandable than an average composite score for a group of students.

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Total Students in Report: 6,631

### The ACT is a curriculum-based measure of college readiness. ACT components include:

Tests of academic achievement in English, math, reading, science, and writing (optional)
High school grade and course information
Student Profile Section
Career Interest Inventory

### The ACT:

Every few years, ACT conducts the **ACT National Curriculum Survey** to ensure its curriculum-based assessment tools accurately measure the skills high school teachers teach and instructors of entry-level college courses expect. The ACT is the only college readiness test designed to reflect the results of such a survey.

ACT's **College Readiness Standards** are sets of statements intended to help students, parents and educators understand the meaning of test scores. The standards relate test scores to the types of skills needed for success in high school and beyond. They serve as a direct link between what students have learned and what they are ready to do next. The ACT is the only college readiness test for which scores can be tied directly to standards. *Connecting College Readiness Standards to the Classroom* interpretive guides can be found at <a href="https://www.act.org/standard/infoserv.html">www.act.org/standard/infoserv.html</a>.

Only the ACT reports **College Readiness Benchmark Scores** – A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses, which include English Composition, Algebra, Social Science and Biology. These scores were empirically derived based on the actual performance of students in college. The College Readiness Benchmark Scores, updated for 2013, are:

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

For more information, go to www.act.org

### **How to Improve Scores and Increase College Readiness**

28% of your students met all four ACT College Readiness Benchmark Scores (Table 1.1). To improve students' scores and increase the percentage of students identified as college ready, ACT suggests:

PROVIDING ACCESS FOR ALL STUDENTS TO TAKE THE ACT: 6,631 of your students are included in this report (the 'cohort'). Increasing access insures that more students have the opportunity to consider college and allows the reader to use this report to evaluate how well courses and instructional programs are preparing students for college and work.

MAKING CORE CURRICULUM A PRIORITY: Emphasize the need for all students to develop college and work ready skills, regardless of postsecondary aspirations. 61% of the students in the cohort reported taking courses that would be considered 'Core or More' (Table 1.4).

MAKING SURE STUDENTS ARE TAKING THE RIGHT KINDS OF COURSES: Table 3.2 reports 10% of the cohort took less than three years of math courses. Of these students, 8% were college ready. 18% of the cohort reported taking a course sequence of Algebra I, Algebra II, and Geometry. 19% of these students were college ready. In comparison, 64% of the students who took 3 or more years of math beyond Algebra I, Algebra II, and Geometry were college ready. Getting more students ready for Algebra prior to 9th grade will increase the chances that students will be prepared for and take advanced-level math courses.

Similarly, Table 3.2 reports 28% of the cohort took less than three years of natural science courses. 19% of these students were college ready. In comparison, 49% of students who took at least three years of science coursework were college ready.

EVALUATING RIGOR OF COURSES: Table 2.6 reports the percentage of students falling in each of the ACT College Readiness Standards score ranges. For example, approximately 41% of the cohort fall into the lowest three Mathematics score ranges. To increase these students' achievement, identify the standards they should focus on next by accessing ACT's College Readiness Standards at www.act.org/standard.

PLAN GUIDANCE ACTIVITIES BASED ON STUDENTS' CAREER AND COLLEGE ASPIRATIONS: Data in Tables 4.1 and 4.2 enable the reader to determine if aspirations are consistent with academic performance and whether among students with similar aspirations, academic performance is consistent across racial/ethnic groups.

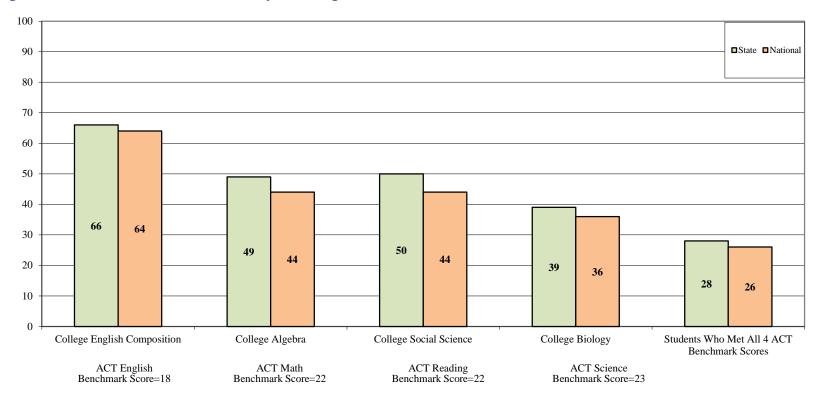
For more information on interpreting data in this report, or to learn how ACT can help your students improve their readiness for college and the workplace, contact ACT Customer Service at 319-337-1309 or customerservices@act.org.

## Section I Executive Summary

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

To find the results of only standard time or extended time test takers, refer to Tables 1.7 and 1.8 on page 10.

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.

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Total Students in Report: 6,631

Table 1.1. Five Year Trends—Percent of Students Who Met College Readiness Benchmarks

	Number of	of Students	Percent Who Met Benchmarks											
	Те	sted	En	glish	Mathe	ematics	Reading		Sci	ience	Met All Four			
Year	State	National	State	State National		National	State	State National		State National		National		
2009	5,960	1,480,469	74	67	48	42	63	53	33	28	26	23		
2010	6,222	1,568,835	74	66	51	43	62	52	34	29	28	24		
2011	6,037	1,623,112	75	66	53	45	63	52	35	30	29	25		
2012	6,024	1,666,017	74	67	54	46	63	52	37	31	30	25		
2013	6,631	1,799,243	66	64	49	44	50	44	39	36	28	26		

Table 1.2. Five Year Trends—Average ACT Scores

	Number of	of Students		Average ACT Scores										
	Te	sted	En	glish	Mathematics		Reading		Sci	ence	Composite			
Year	State	National	State	State National		National	State	State National		National	State	National		
2009	5,960	1,480,469	21.2	20.6	21.7	21.0	22.7	21.4	21.7	20.9	22.0	21.1		
2010	6,222	1,568,835	21.3	20.5	21.7	21.0	22.7	21.3	21.9	20.9	22.0	21.0		
2011	6,037	1,623,112	21.3	20.6	21.9	21.1	22.7	21.3	22.0	20.9	22.1	21.1		
2012	6,024	1,666,017	21.1	20.5	21.9	21.1	22.6	21.3	22.0	20.9	22.0	21.1		
2013	6,631	1,799,243	20.2	20.2	21.4	20.9	21.9	21.1	21.2	20.7	21.3	20.9		

Table 1.3. Five Year Trends—Average ACT Scores Nationwide

	Number of Students		A	verage ACT Scores		
Year	Tested	English	Mathematics	Reading	Science	Composite
2009	1,480,469	20.6	21.0	21.4	20.9	21.1
2010	1,568,835	20.5	21.0	21.3	20.9	21.0
2011	1,623,112	20.6	21.1	21.3	20.9	21.1
2012	1,666,017	20.5	21.1	21.3	20.9	21.1
2013	1,799,243	20.2	20.9	21.1	20.7	20.9

Table 1.4. Five Year Trends—Average ACT Scores by Level of Preparation

									Average A	ACT Scores				
		of Students sted	Perc	cent <sup>2</sup>	Eng	glish	Mathe	ematics	Rea	nding	Sci	ence	Composite	
	Core or	Less than	Core or	Less than	Core or	Less than	Core or	Less than	Core or	Less than	Core or	Less than	Core or	Less than
Year	More <sup>1</sup>	Core	More	Core	More	Core	More	Core	More	Core	More	Core	More	Core
2009	3,733	2,036	63	34	22.4	19.3	23.0	19.7	23.9	20.9	22.8	20.0	23.2	20.1
2010	4,063	2,008	65	32	22.6	19.1	23.0	19.5	23.8	20.6	23.0	20.0	23.2	19.9
2011	4,084	1,833	68	30	22.4	19.3	23.0	19.7	23.7	20.8	23.0	20.1	23.1	20.1
2012	4,193	1,735	70	29	22.1	18.9	22.9	19.7	23.5	20.6	22.8	20.1	23.0	20.0
2013	4,043	2,321	61	35	21.9	17.9	22.9	19.2	23.3	19.9	22.7	19.3	22.8	19.2

<sup>1&</sup>quot;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.

Table 1.5. Five Year Trends—Percent and Average Composite Score by Race/Ethnicity

	20	009		20	010		20	011		20	012		2013		
	N	%	Avg	N	%	Avg	Ν	%	Avg	N	%	Avg	N	%	Avg
All Students	5,960	100	22.0	6,222	100	22.0	6,037	100	22.1	6,024	100	22.0	6,631	100	21.3
Black/African American	26	0	20.3	39	1	19.1	29	0	19.2	27	0	18.2	41	1	17.2
American Indian/Alaska Native	313	5	18.1	373	6	17.8	284	5	18.0	277	5	17.6	363	5	16.3
White	5,086	85	22.2	5,290	85	22.4	5,065	84	22.4	4,984	83	22.4	5,323	80	21.8
Hispanic/Latino	106	2	20.7	124	2	21.0	195	3	20.5	205	3	20.6	266	4	19.5
Asian	72	1	23.1	83	1	22.5	56	1	22.5	64	1	21.6	70	1	21.4
Native Hawaiian/Other Pacific Islander	0	0		0	0		10	0	19.6	11	0	19.5	12	0	17.7
Two or more races	85	1	21.6	94	2	21.3	179	3	21.2	253	4	21.6	263	4	20.7
Prefer not to respond/No response	272	5	21.8	219	4	21.7	219	4	22.5	203	3	22.8	293	4	20.7

<sup>&</sup>lt;sup>2</sup>Percent of all students tested. Numbers will not add up to 100% due to student non-response.

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

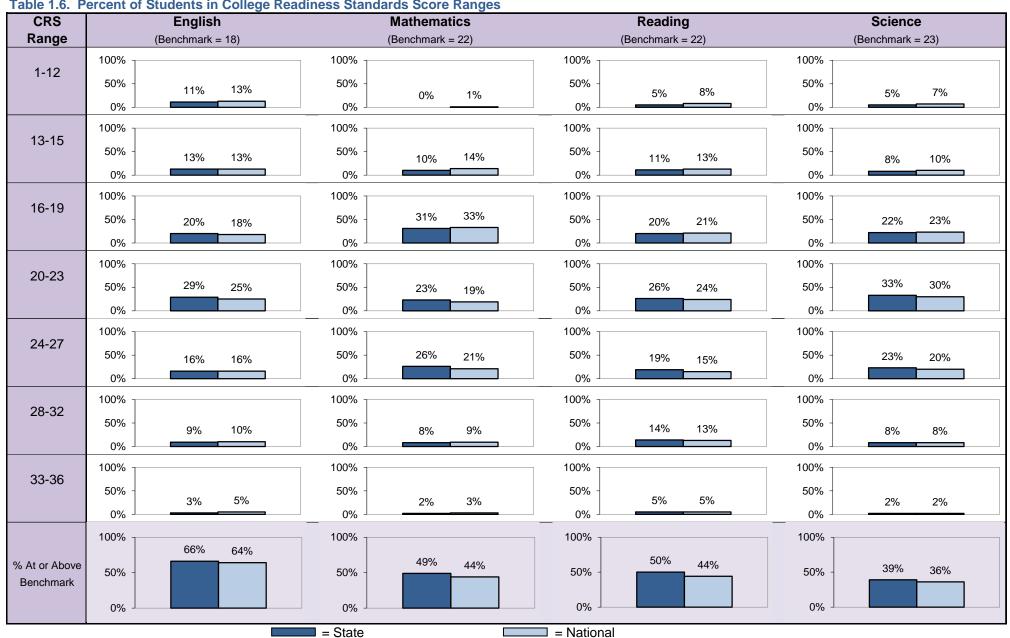


Table 1.7. Average ACT College Reportable Scores by Test Session Duration

Student Group	Test Session			Average ACT Scores							
Student Group	Duration	N	Percent	English	Mathematics	Reading	Science	Composite			
	Standard Time	6,480	98	20.3	21.5	21.9	21.3	21.4			
State	Extended Time	151	2	15.3	17.1	18.1	17.2	17.1			
	Total	6,631	100	20.2	21.4	21.9	21.2	21.3			
	Standard Time	1,727,041	96	20.4	21.0	21.3	20.9	21.0			
National	Extended Time	72,202	4	15.9	17.7	18.1	17.9	17.5			
	Total	1,799,243	100	20.2	20.9	21.1	20.7	20.9			

Table 1.8. Percent of Students Who Met College Readiness Benchmark Scores by Test Session Duration

Student Group	Test Session		Per	cent of Stude	ents	Met
Student Group	Duration	English	Mathematics	Reading	Science	All Four
	Standard Time	67	50	51	40	29
State	Extended Time	36	15	27	15	9
	Total	66	49	50	39	28
	Standard Time	65	45	45	37	27
National	Extended Time	35	20	28	20	13
	Total	64	44	44	36	26

### Section II Academic Achievement

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Montana

Total Students in Report: 6,631

Table 2.1. ACT Score Distributions, Cumulative Percentages (CP<sup>1</sup>), and Score Averages

ACT Scale	Enç	glish	Mathe	matics	Rea	ding	Scie	ence	Comp	oosite	ACT Scale
Score	N	СР	N	СР	N	СР	N	СР	N	CP	Score
36	19	100	5	100	50	100	21	100	2	100	36
35	50	100	23	100	43	99	39	100	10	100	35
34	55	99	52	100	93	99	25	99	32	100	34
33	77	98	36	99	138	97	25	99	39	99	33
32	73	97	38	98	157	95	66	98	57	99	32
31	101	96	52	98	234	93	73	97	102	98	31
30	124	94	97	97	179	89	99	96	136	96	30
29	109	92	148	95	152	87	113	95	148	94	29
28	166	91	225	93	221	84	156	93	195	92	28
27	183	88	339	90	210	81	226	91	273	89	27
26	217	86	407	85	290	78	281	87	326	85	26
25	285	82	439	79	266	73	417	83	373	80	25
24	384	78	506	72	482	69	615	77	450	74	24
23	386	72	485	64	343	62	460	67	490	68	23
22	458	66	380	57	478	57	522	61	520	60	22
21	523	59	339	51	458	50	667	53	477	52	21
20	541	52	343	46	462	43	533	43	522	45	20
19	322	43	422	41	364	36	525	35	466	37	19
18	310	39	390	35	353	30	383	27	439	30	18
17	314	34	575	29	325	25	274	21	434	24	17
16	394	29	658	20	263	20	300	17	332	17	16
15	368	23	414	10	325	16	187	12	258	12	15
14	263	18	180	4	180	11	186	9	217	8	14
13	200	14	53	1	201	9	137	7	170	5	13
12	193	11	17	1	166	5	109	5	101	2	12
11	169	8	6	1	91	3	105	3	44	1	11
10	151	5	1	1	66	2	52	1	10	1	10
9	75	3	1	1	20	1	12	1	4	1	9
8	75	2	0	1	9	1	11	1	3	1	8
7	35	1	0	1	7	1	8	1	1	1	7
6	7	1	0	1	1	1	2	1	0	1	6
5	1	1	0	1	0	1	1	1	0	1	5
4	2	1	0	1	1	1	0	1	0	1	4
3	1	1	0	1	1	1	0	1	0	1	3
2	0	1	0	1	1	1	0	1	0	1	2
1	0	1	0	1	1	1	1	1	0	1	1
Avg (SD)	20.2	? (6.0)	21.4	(4.8)	21.9	(6.0)	21.2	(4.9)	21.3	(4.9)	Avg (SD)

<sup>1</sup>CP is the cumulative percent of students at or below a score point.

Note: Shaded portions of columns identify the students who met/exceeded the ACT College Readiness Benchmark Scores.

Montana

Table 2.2. ACT Subscore Distributions, Cumulative Percentages (CP<sup>1</sup>), and Subscore Averages

	AOT OUDS	Engl					ding				Mathem	atics			
ACT Scale	Usage/ Med	chanics	Rhetorica	l Skills	Social St Science		Arts/ Lite	rature	Pre/Elem Algeb		Algebra/ Co Geom		Plane Geo Trigonor		ACT Scale
Score	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	Score
18	154	100	86	100	181	100	186	100	203	100	24	100	43	100	18
17	251	98	41	99	381	97	309	97	278	97	51	100	11	99	17
16	229	94	276	98	384	92	421	93	264	93	117	99	180	99	16
15	259	90	345	94	394	86	493	86	403	89	312	97	415	96	15
14	313	87	468	89	465	80	382	79	458	83	520	92	601	90	14
13	421	82	531	82	617	73	536	73	746	76	814	85	655	81	13
12	418	75	785	74	836	63	568	65	642	65	818	72	938	71	12
11	712	69	803	62	579	51	762	56	630	55	1,004	60	859	57	11
10	805	58	736	50	586	42	623	45	687	45	870	45	744	44	10
9	660	46	889	39	567	33	509	35	451	35	650	32	1,009	33	9
8	561	36	553	25	645	25	563	28	707	28	799	22	512	18	8
7	617	28	415	17	445	15	388	19	665	18	219	10	333	10	7
6	373	19	261	11	236	8	397	13	268	7	238	7	89	5	6
5	397	13	223	7	197	5	241	7	169	3	40	3	132	4	5
4	230	7	135	3	73	2	175	4	42	1	95	2	45	2	4
3	169	3	70	1	28	1	52	1	15	1	51	1	45	1	3
2	53	1	14	1	10	1	23	1	3	1	1	1	9	1	2
1	9	1	0	1	7	1	3	1	0	1	8	1	11	1	1
Avg (SD)	9.9 (3.	7)	10.5 (	3.2)	11.3 (3	3.5)	11.0 (3	3.7)	11.1 (3	3.4)	10.7 (2	2.7)	10.9 (2	8)	Avg (SD)

<sup>&</sup>lt;sup>1</sup>CP is the cumulative percent of students at or below a score point.

**Table 2.3. ACT Score Quartile Values** 

Quartile	English	Mathematics	Reading	Science	Composite
Q3 (75th Percentile)	24	25	26	24	25
Q2 (50th Percentile)	20	21	22	21	21
Q1 (25th Percentile)	16	17	17	18	18

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

Student		Number of Students	Percent Taking	Average ACT C	omposite Score
Group	Race/Ethnicity	Tested	Core or More <sup>1</sup>	Core or More	Less Than Core
	All Students	6,631	61	22.8	19.2
	Black/African American	41	51	18.1	16.4
	American Indian/Alaska Native	363	40	17.8	15.7
	White	5,323	63	23.2	19.7
State	Hispanic/Latino	266	51	21.2	17.7
	Asian	70	71	22.1	19.8
	Native Hawaiian/Other Pac. Isl.	12	42	19.4	16.4
	Two or more races	263	64	21.9	18.7
	Prefer not/No Response	293	56	23.1	17.9
	All Students	1,799,243	74	21.7	18.7
	Black/African American	239,598	69	17.5	15.6
	American Indian/Alaska Native	14,217	62	19.1	16.5
	White	1,034,712	76	22.9	20.0
National	Hispanic/Latino	259,741	72	19.5	17.2
	Asian	71,677	81	24.1	21.5
	Native Hawaiian/Other Pac. Isl.	4,772	71	20.5	17.5
	Two or more races	64,221	74	21.9	19.2
	Prefer not/No Response	110,305	58	22.4	18.4

<sup>&</sup>lt;sup>1</sup>"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.

Table 2.5. Average ACT Scores by Race/Ethnicity

Student						
Group	Race/Ethnicity	English	Mathematics	Reading	Science	Composite
_	All Students	20.2	21.4	21.9	21.2	21.3
	Black/African American	15.7	17.7	17.4	17.5	17.2
	American Indian/Alaska Native	14.1	17.1	16.8	16.7	16.3
	White	20.8	21.8	22.4	21.8	21.8
State	Hispanic/Latino	17.8	19.8	19.9	19.8	19.5
	Asian	19.7	23.4	20.9	21.3	21.4
	Native Hawaiian/Other Pac. Isl.	15.6	17.6	18.7	18.0	17.7
	Two or more races	19.7	20.6	21.5	20.5	20.7
	Prefer not/No Response	19.9	20.5	21.4	20.3	20.7
	All Students	20.2	20.9	21.1	20.7	20.9
	Black/African American	15.7	17.2	17.0	16.9	16.9
	American Indian/Alaska Native	16.6	18.2	18.3	18.3	18.0
	White	21.8	21.9	22.6	22.0	22.2
National	Hispanic/Latino	17.7	19.3	18.9	18.8	18.8
	Asian	22.5	25.0	22.9	23.1	23.5
	Native Hawaiian/Other Pac. Isl.	18.6	20.1	19.5	19.5	19.5
	Two or more races	20.6	20.9	21.6	20.9	21.1
	Prefer not/No Response	20.0	20.8	21.0	20.5	20.7

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Total Students in Report: 6,631

Table 2.6. Percent of Students in College Readiness Standards (CRS) Score Ranges

Student	CRS	Eng	llish	Mathe	matics	Read	ding	Scie	ence
Group	Range	N	%	N	%	N	%	N	%
	33 to 36	201	3	116	2	324	5	110	2
	28 to 32	573	9	560	8	943	14	507	8
	24 to 27	1,069	16	1,691	26	1,248	19	1,539	23
State	20 to 23	1,908	29	1,547	23	1,741	26	2,182	33
	16 to 19	1,340	20	2,045	31	1,305	20	1,482	22
	13 to 15	831	13	647	10	706	11	510	8
	01 to 12	709	11	25	0	364	5	301	5
	33 to 36	81,846	5	51,648	3	89,731	5	36,033	2
	28 to 32	175,672	10	156,561	9	239,643	13	138,865	8
	24 to 27	291,095	16	385,102	21	277,723	15	364,600	20
National	20 to 23	447,398	25	343,822	19	424,936	24	542,531	30
	16 to 19	327,718	18	590,816	33	384,706	21	413,107	23
	13 to 15	242,064	13	258,384	14	240,069	13	183,840	10
	01 to 12	233,450	13	12,910	1	142,435	8	120,267	7

Table 2.7. Average ACT Scores by Gender

Student Group	Gender				Aver	age ACT Sco	ores	
Student Group	Geridei	N	Percent	English	Mathematics	Reading	Science	Composite
	Males	3,203	48	19.8	21.8	21.6	21.7	21.3
State	Females	3,395	51	20.7	21.0	22.2	20.8	21.3
	Missing	33	0	15.3	18.0	17.7	17.1	17.2
	Males	835,431	46	19.8	21.4	20.9	21.2	20.9
National	Females	954,919	53	20.6	20.5	21.4	20.4	20.9
	Missing	8,893	0	16.1	18.2	17.6	17.7	17.5

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

Student Group	Gender		Per	cent of Stude	ents	Met
Student Group	Gender	English	Mathematics	Reading	Science	All Four
State	Males	62	52	49	43	30
State	Females	70	46	52	37	27
National	Males	62	47	43	40	29
National	Females	67	41	45	33	24

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

Student	Curriculum	N English		lish	Mathematics		Reading		Science		Composite	
Group	Taken <sup>1</sup>	19	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB % <sup>4</sup>	Avg
	Core or More <sup>2</sup>	4,043	78	21.9	63	22.9	60	23.3	51	22.7	38	22.8
State	Less than Core	2,321	51	17.9	28	19.2	36	19.9	23	19.3	14	19.2
	Missing <sup>3</sup>	267	27	14.5	11	16.7	22	16.8	11	16.3	6	16.2
	Core or More	1,322,739	71	21.2	50	21.7	50	22.0	42	21.5	31	21.7
National	Less than Core	396,592	48	17.8	27	18.9	30	19.0	22	18.8	14	18.7
	Missing	79,912	36	16.0	19	17.8	24	17.5	17	17.7	10	17.4

<sup>&</sup>lt;sup>1</sup> "Curriculum Taken" reflects overall high school curriculum in this table.

Table 2.10. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Content-Specific Curriculum

Student	Curriculum		English		Mathematics				Reading			Science		
Group	Taken <sup>1</sup>	N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	
	Core or More <sup>2</sup>	6,167	68	20.5	5,734	55	22.1	5,727	53	22.2	4,595	49	22.4	
State	Less than Core	295	37	16.0	654	8	16.8	731	38	19.9	1,842	19	18.7	
	Missing <sup>3</sup>	169	29	15.0	243	10	16.6	173	25	17.4	194	13	16.8	
	Core or More	1,646,286	67	20.6	1,648,697	46	21.3	1,554,990	46	21.5	1,506,965	40	21.3	
National	Less than Core	84,048	36	15.9	77,906	7	16.3	171,617	32	19.1	218,267	17	18.0	
	Missing	68,909	38	16.4	72,640	20	17.9	72,636	25	17.7	74,011	18	17.8	

<sup>&</sup>lt;sup>1</sup> "Curriculum Taken" reflects content-specific curriculum in this table.

<sup>&</sup>lt;sup>2</sup> "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.

<sup>&</sup>lt;sup>3</sup> Zero years or no coursework information reported in one or more content areas.

<sup>&</sup>lt;sup>4</sup> Composite CRB% results reflect students who met all four subject-area benchmarks.

<sup>&</sup>lt;sup>2</sup> "Core or More" results correspond to students taking four or more years of English or three or more years of math, social studies, or natural science, respectively. For instance, Reading "Core or More" results correspond to students taking three or more years of social studies, regardless of courses taken in other content areas.

<sup>&</sup>lt;sup>3</sup> Zero years or no coursework information reported in the specified content area.

# Section III College Readiness and the Impact of Course Rigor

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Figure 3.1. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: ENGLISH

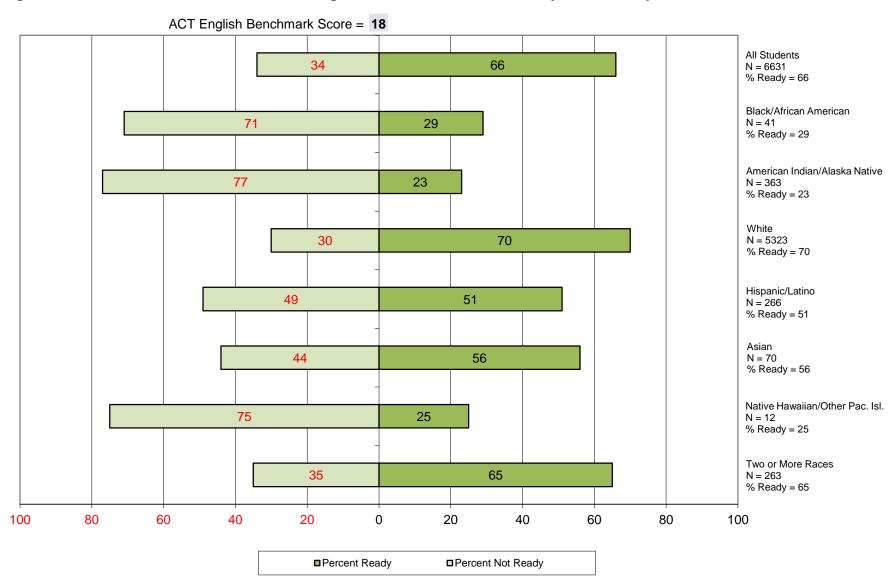


Figure 3.2. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: MATHEMATICS

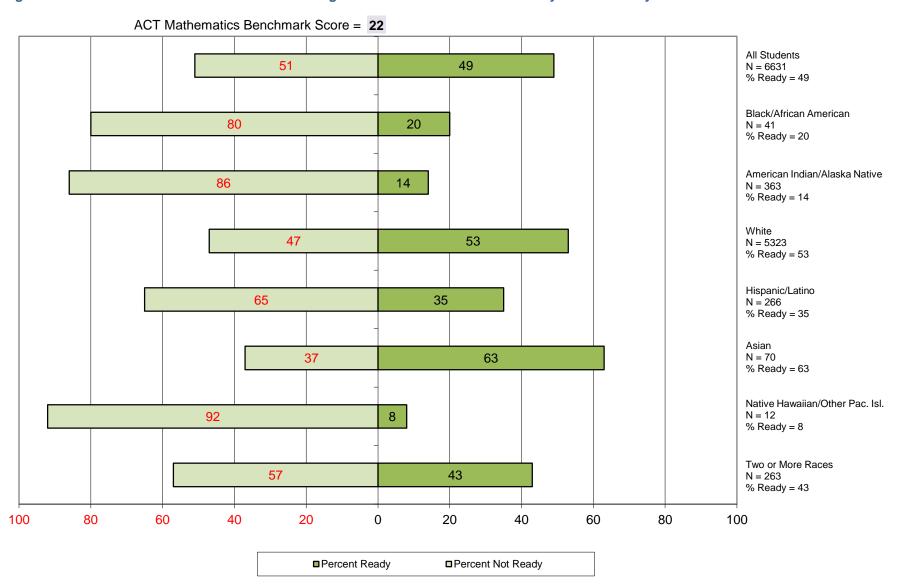


Figure 3.3. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: READING

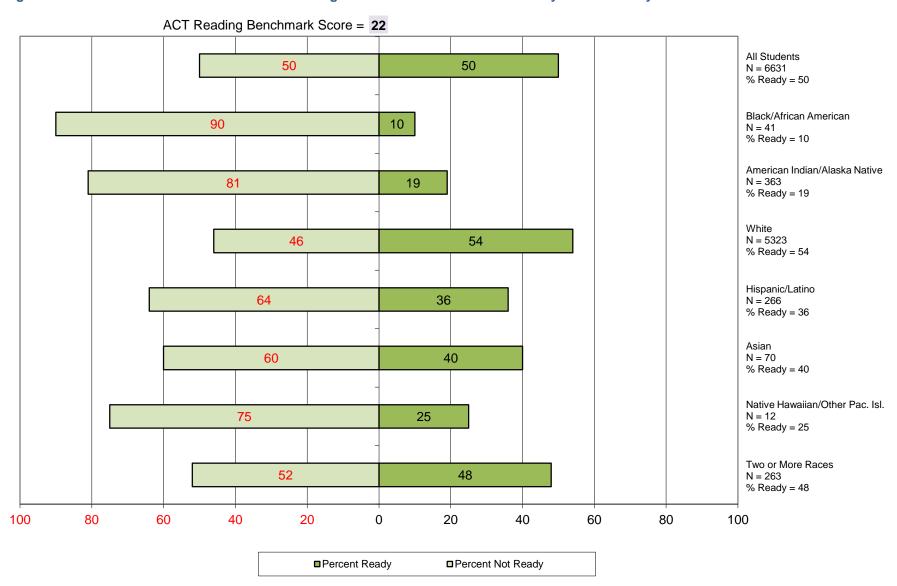


Figure 3.4. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: SCIENCE

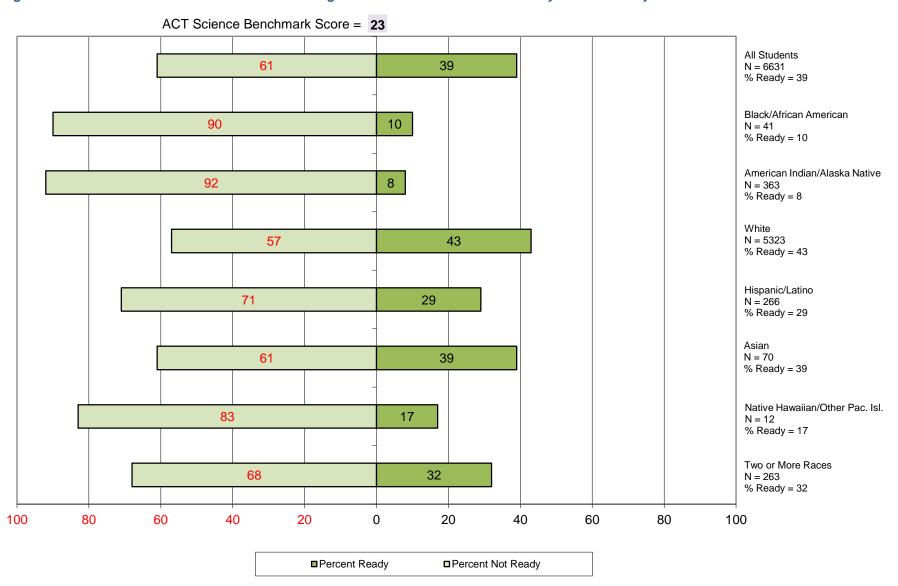


Figure 3.5. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: ALL FOUR

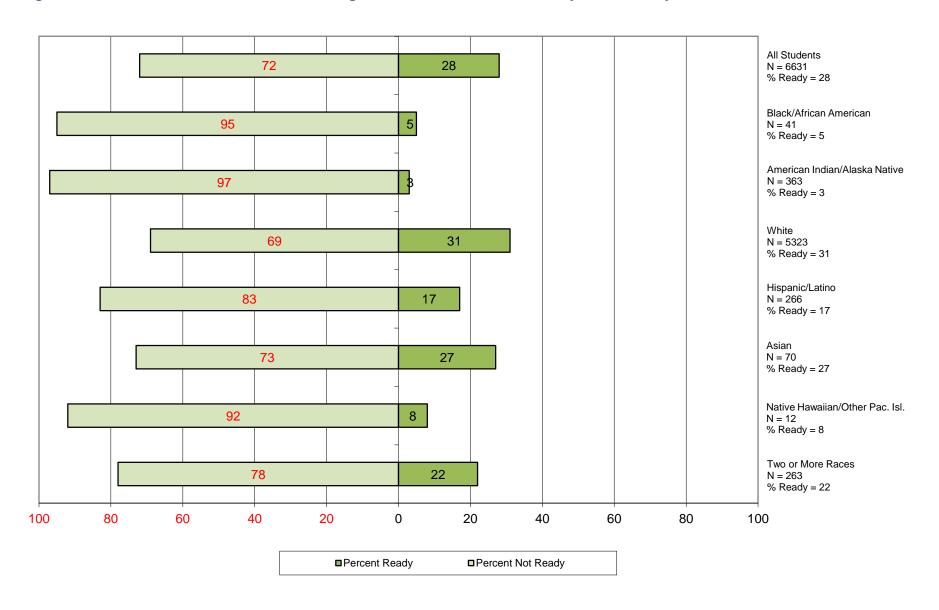


Table 3.1. Average ACT Scores and Average ACT Score Changes by Common Course Patterns												
Course Pattern		All	Students				Males			F	emales	
			ACT	Course Value			ACT	Course Value			ACT	Course Value
ENGLISH COURSE PATTERN	N	Percent	English	Added <sup>1</sup>	N	Percent	English	Added <sup>1</sup>	N	Percent	English	Added <sup>1</sup>
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	1,398	21	21.1	5.1	620	19	20.5	5.0	771	23	21.7	4.8
Eng 9, Eng 10, Eng 11, Eng 12	4,769	72	20.4	4.4	2,326	73	20.0	4.5	2,430	72	20.7	3.8
Less than 4 years of English	295	4	16.0	-	168	5	15.5	-	124	4	16.9	-
Zero years / no English courses reported	169	3	15.0	-	89	3	15.1	-	70	2	15.1	-
			ACT	Course Value			ACT	Course Value			ACT	Course Value
MATHEMATICS COURSE PATTERN	N	Percent	Math	Added <sup>1</sup>	N	Percent	Math	Added <sup>1</sup>	N	Percent	Math	Added <sup>1</sup>
Alg 1, Alg 2, Geom, Trig, & Calc	415	6	25.1	8.3	199	6	25.9	8.9	216	6	24.4	7.9
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	527	8	23.0	6.2	209	7	23.3	6.3	316	9	22.8	6.3
Alg 1, Alg 2, Geom, & Trig	428	6	20.7	3.9	203	6	21.6	4.6	225	7	20.0	3.5
Alg 1, Alg 2, Geom, & Other Adv Math	1,116	17	21.5	4.7	461	14	22.1	5.1	651	19	21.1	4.6
Other comb of 4 or more years of Math	1,804	27	24.5	7.7	928	29	25.2	8.2	873	26	23.8	7.3
Alg 1, Alg 2, & Geom	1,169	18	18.4	1.6	583	18	18.7	1.7	578	17	18.0	1.5
Other comb of 3 or 3.5 years of Math	275	4	20.4	3.6	146	5	20.8	3.8	129	4	19.9	3.4
Less than 3 years of Math	654	10	16.8	3.0	349	11	17.0	3.0	299	9	16.5	5.4
Zero years / no Math courses reported	243	4	16.6	_	125	4	16.6	_	108	3	16.5	-
2010 yours, 110 main oderood reported					0						10.0	
			ACT	Course Value			ACT	Course Value			ACT	Course Value
SOCIAL SCIENCE COURSE PATTERN	N	Percent	Reading	Added <sup>1</sup>	N	Percent	Reading	Added <sup>1</sup>	N	Percent	Reading	Added <sup>1</sup>
US Hist, World Hist, Am Gov, & Other Hist	623	9	22.2	2.3	330	10	21.9	2.5	293	9	22.6	2.1
Other comb of 4 or more years Social Science	1,840	28	22.5	2.6	848	26	22.5	3.1	989	29	22.6	2.1
US Hist, World Hist, & Am Gov	1,400	21	22.1	2.2	718	22	21.8	2.4	680	20	22.4	1.9
Other comb of 3 or 3.5 years of Social Science	1,864	28	22.1	2.2	813	25	21.9	2.5	1,044	31	22.3	1.8
Less than 3 years of Social Science	731	11	19.9	-	400	12	19.4	-	320	9	20.5	-
Zero years / no Social Science courses reported	173	3	17.4	-	94	3	17.2	-	69	2	18.0	-
			ACT	Course Value			ACT	Course Value			ACT	Course Value
NATURAL SCIENCE COURSE PATTERN	N	Percent	Science	Added <sup>1</sup>	N	Percent	Science	Added <sup>1</sup>	N	Percent	Science	Added <sup>1</sup>
Gen Sci <sup>2</sup> , Bio, Chem, & Phys	2,069	31	23.5	4.8	1,131	35	24.2	5.4	936	28	22.7	4.1
Bio, Chem, Phys	155	2	24.3	5.6	84	3	24.9	6.1	71	2	23.5	4.9
Gen Sci <sup>2</sup> , Bio, Chem	2,033	31	21.4	2.7	751	23	21.6	2.8	1,273	37	21.2	2.6
Other comb of 3 years of Natural Science	338	5	21.7	3.0	217	7	22.2	3.4	121	4	20.8	2.2
Less than 3 years of Natural Science	1,842	28	18.7	-	916	29	18.8	-	914	27	18.6	
Zero years / no Natural Science courses reported	194	3	16.8	_	104	3	17.1	_	80	2	17.0	_

<sup>1</sup>Course 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.

<sup>&</sup>lt;sup>2</sup>Includes General, Physical and Earth Sciences.

Table 3.2. College Readiness Percents by Common Course Patterns

Table 3.2. College Readiness Percents by Common Course Patterns												
Course Pattern		1	State	l		i .	National	l				
ENGLISH COURSE PATTERN	N	Percent Taking Pattern	Avg ACT English	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT English	Percent Who Met Benchmark				
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	1,398	21	21.1	72	380,375	21	21.6	73				
Eng 9, Eng 10, Eng 11, Eng 12	4,769	72	20.4	68	1,265,911	70	20.3	65				
Less than 4 years of English	295	4	16.0	37	84,048	5	15.9	36				
Zero years / no English courses reported	169	3	15.0	29	68,909	4	16.4	38				
MATHEMATICS COURSE DATTERN	N	Percent Taking Pattern	Avg ACT Math	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT Math	Percent Who Met Benchmark				
MATHEMATICS COURSE PATTERN												
Alg 1, Alg 2, Geom, Trig, & Calc	415	6	25.1	78	113,999	6	23.8	68				
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	527	8	23.0	68	155,095	9	21.9	56				
Alg 1, Alg 2, Geom, & Trig	428	6	20.7	43	119,993	7	19.4	32				
Alg 1, Alg 2, Geom, & Other Adv Math	1,116	17	21.5	52	336,291	19	19.6	32				
Other comb of 4 or more years of Math	1,804	27	24.5	77	610,720	34	23.6	65				
Alg 1, Alg 2, & Geom	1,169	18	18.4	19	223,733	12	17.2	11				
Other comb of 3 or 3.5 years of Math	275	4	20.4	37	88,866	5	19.7	34				
Less than 3 years of Math	654	10	16.8	8	77,906	4	16.3	7				
Zero years / no Math courses reported	243	4	16.6	10	72,640	4	17.9	20				
SOCIAL SCIENCE COURSE PATTERN	N	Percent Taking Pattern	Avg ACT Reading	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT Reading	Percent Who Met Benchmark				
US Hist, World Hist, Am Gov, & Other Hist	623	9	22.2	51	50,989	3	22.2	51				
Other comb of 4 or more years Social Science	1,840	28	22.5	55	908,394	50	22.0	50				
US Hist, World Hist, & Am Gov	1,400	21	22.1	50	106,021	6	19.5	34				
Other comb of 3 or 3.5 years of Social Science	1,864	28	22.1	53	489,586	27	21.0	43				
Less than 3 years of Social Science	731	11	19.9	38	171,617	10	19.1	32				
Zero years / no Social Science courses reported	173	3	17.4	25	72,636	4	17.7	25				
		Percent Taking	Avg ACT	Percent Who Met		Percent Taking	Avg ACT	Percent Who Met				
NATURAL SCIENCE COURSE PATTERN	N	Pattern	Science	Benchmark	N	Pattern	Science	Benchmark				
Gen Sci <sup>1</sup> , Bio, Chem, & Phys	2,069	31	23.5	58	767,293	43	21.9	46				
Bio, Chem, Phys	155	2	24.3	65	183,685	10	23.0	54				
Gen Sci <sup>1</sup> , Bio, Chem	2,033	31	21.4	39	504,165	28	19.9	28				
Other comb of 3 years of Natural Science	338	5	21.7	45	51,822	3	19.1	25				
Less than 3 years of Natural Science	1,842	28	18.7	19	218,267	12	18.0	17				
Zero years / no Natural Science courses reported	194	3	16.8	13	74,011	4	17.8	18				

<sup>&</sup>lt;sup>1</sup>Includes General, Physical and Earth Sciences.

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### Section IV Career and Educational Aspirations

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

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

		All Students		Plan on 2	Years or Less	of College	Plan on 4	Years or More	of College
Planned Educational Major	$N^1$	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp
Agriculture & Natural Resources Conservation	231	3	19.7	33	6	17.3	186	3	20.4
Architecture	92	1	21.9	2	0	15.5	86	2	22.1
Area, Ethnic, & Multidisciplinary Studies	10	0	22.7	0	0		9	0	22.4
Arts: Visual & Performing	520	8	20.8	48	9	17.2	431	8	21.3
Business	450	7	20.6	49	9	18.2	376	7	21.1
Communications	100	2	22.0	8	1	17.8	85	2	22.1
Community, Family, & Personal Services	170	3	18.6	41	8	17.8	114	2	19.0
Computer Science & Mathematics	142	2	23.4	5	1	17.6	131	2	23.8
Education	422	6	20.7	10	2	18.1	401	7	20.8
Engineering	614	9	23.7	27	5	17.4	569	10	24.0
Engineering Technology & Drafting	104	2	21.5	14	3	18.7	81	1	22.3
English & Foreign Languages	86	1	23.7	3	1	18.0	79	1	23.8
Health Administration & Assisting	163	2	20.0	16	3	19.7	141	3	20.0
Health Sciences & Technologies	1,172	18	21.8	60	11	18.2	1,071	20	22.1
Philosophy, Religion, & Theology	30	0	22.4	3	1	19.0	25	0	23.1
Repair, Production, & Construction	193	3	17.5	109	20	17.6	69	1	17.4
Sciences: Biological & Physical	364	5	23.6	4	1	20.3	349	6	23.6
Social Sciences & Law	445	7	21.7	15	3	17.0	417	8	22.0
Undecided	987	15	21.7	82	15	17.8	772	14	22.3
No Response	329	5	16.5	14	3	15.8	55	1	18.0

<sup>12-</sup>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.

<sup>&</sup>lt;sup>2</sup>Percent of students tested within College Plan groups (All Students, 2-Year, 4-Year).

Table 4.2. Average ACT Composite Scores for Racial/Ethnic Groups by Post-Secondary Educational Aspirations

Educational Degree	All Racial/Ethnic Groups Combined		Black/African American			n/ Alaska Native	WI	hite	Hispanic/Latino		
Aspirations	N	Average	N	Average	N	Average	N	Average	N	Average	
Voc-Tech	136	17.6	0		10	15.3	104	18.0	8	18.5	
2-yr College Degree	407	17.8	1	16.0	24	14.9	333	18.0	9	17.2	
Bachelors Degree	3,584	21.0	33	17.7	163	16.4	2,944	21.4	159	19.1	
Graduate Study	767	23.8	1	12.0	25	16.8	647	24.2	28	21.2	
Prof. Level Degree	1,102	23.9	2	19.0	54	19.0	900	24.4	40	21.4	
Other	176	18.3	0		4	16.3	133	18.5	10	17.0	
No Response	459	18.7	4	13.8	83	14.6	262	19.9	12	18.2	

Educational Degree	All Racial/Ethnic Groups Combined		Asian		Native Hawaiian/ Other Pacific Islander		Two or more races		Prefer not to respond/ No Response		
Aspirations	N	Average	N	Average	N Average		N	Average	N	Average	
Voc-Tech	136	17.6	2	17.5	0		6	17.5	6	13.5	
2-yr College Degree	407	17.8	3	15.0	1	13.0	17	19.4	19	17.5	
Bachelors Degree	3,584	21.0	28	20.1	7	17.4	154	20.6	96	20.6	
Graduate Study	767	23.8	14	23.4	2	19.5	20	23.9	30	24.0	
Prof. Level Degree	1,102	23.9	17	23.2	1	27.0	37	22.8	51	22.9	
Other	176	18.3	1	20.0	0		11	18.2	17	18.2	
No Response	459	18.7	5	23.0	1	11.0	18	17.6	74	19.8	

Table 4.3. Students' Score Report Preferences at Time of Testing											
	Percent of Students in										
			Number of Students			College Readiness Standards Ranges					
				2nd-6th							
Name	State	Total	1st Choice	Choice	01-12	13-15	16-19	20-23	24-27	28-32	33-36
MONTANA STATE UNIVERSITY-BOZEMAN	Montana	2,269	1,032	1,237	1	6	22	34	25	11	1
UNIVERSITY OF MONTANA	Montana	1,892	802	1,090	1	8	27	33	23	8	0
MONTANA STATE UNIVERSITY-BILLINGS	Montana	896	350	546	3	11	31	34	16	6	0
MONTANA TECH OF THE UNIV OF MONTANA	Montana	585	205	380	1	8	26	32	23	9	1
STATE-COLLEGE/NO REPORTS NOW	Iowa	493	493	0	5	20	33	22	12	7	1
CARROLL COLLEGE	Montana	461	118	343	1	5	16	34	31	12	1
ROCKY MOUNTAIN COLLEGE	Montana	356	71	285	3	10	27	31	22	7	0
UNIVERSITY OF MONTANA WESTERN	Montana	355	107	248	1	14	34	32	16	3	0
MONTANA STATE UNIVERSITY-NORTHERN	Montana	252	88	164	4	19	35	29	13	1	0
UNIVERSITY OF GREAT FALLS	Montana	190	32	158	4	15	39	23	16	3	0
UNIVERSITY OF WASHINGTON	Washington	171	29	142	2	1	15	24	36	19	3
UNIVERSITY OF OREGON	Oregon	147	28	119	1	5	21	29	30	14	0
GONZAGA UNIVERSITY	Washington	135	31	104	4	6	13	30	27	19	1
MONTANA STATE UNIV C TECH-GREAT FALLS	Montana	123	36	87	2	15	41	27	12	4	0
UNIVERSITY OF MONTANA-HELENA C OF TECH	Montana	107	34	73	5	15	37	28	13	2	0
BOISE STATE UNIVERSITY	Idaho	105	27	78	3	9	26	28	29	7	0
FLATHEAD VALLEY COMMUNITY COLLEGE	Montana	98	29	69	1	20	24	36	12	6	0
NORTHWEST COLLEGE	Wyoming	93	29	64	4	10	29	39	15	3	0
DAWSON COMMUNITY COLLEGE	Montana	91	37	54	8	18	38	24	8	4	0
MILES COMMUNITY COLLEGE	Montana	90	23	67	2	16	36	31	10	6	0
WASHINGTON STATE UNIVERSITY	Washington	89	13	76	3	7	20	29	29	11	0
BRIGHAM YOUNG UNIVERSITY-IDAHO	Idaho	88	41	47	1	5	18	22	32	22	1
UNIVERSITY OF WYOMING	Wyoming	87	15	72	3	7	23	31	28	8	0
BRIGHAM YOUNG UNIVERSITY	Utah	84	39	45	1	1	15	20	35	25	2
STATE-NO COLLEGE PLANS	lowa	84	84	0	23	27	33	14	1	1	0
ARIZONA STATE UNIVERSITY	Arizona	81	27	54	4	9	22	27	28	9	1
NCAA ELIGIBILITY CENTER	Indiana	79	26	53	0	0	34	25	28	9	4
MONTANA BIBLE COLLEGE	Montana	75	22	53	4	13	32	20	23	8	0
OREGON STATE UNIVERSITY	Oregon	66	9	57	2	3	12	26	39	14	5
NORTH DAKOTA STATE UNIVERSITY	North Dakota	65	14	51	0	6	23	38	26	6	0
All Other Institutions		4,498	1,117	3,381	2	8	20	27	25	15	3
Total		14,205	5,008	9,197	2	9	24	30	23	11	1

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Total Students in Report: 6,631

## Section V Optional Writing Test Results

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Table 5.1. Average ACT English and Writing Scores by Race/Ethnicity and Gender for students who took ACT Writing

			Average ACT Scores							
	N		Eng	lish	Es	say	English/Writing Combined			
	State	National	State	National	State	National	State	National		
All Students	4,849	942,769	20.2	21.3	6.6	7.0	19.3	20.5		
Black/African American	29	114,751	15.4	16.3	5.9	6.1	15.2	16.0		
American Indian/Alaska Native	326	6,031	14.0	16.8	5.1	6.1	13.4	16.4		
White	3,756	518,407	20.9	22.9	6.7	7.2	20.1	21.9		
Hispanic/Latino	225	151,504	17.7	18.6	6.0	6.8	16.9	18.3		
Asian	57	54,580	20.1	23.5	6.9	7.6	19.6	22.7		
Native Hawaiian/Other Pac. Isl.	10	2,812	15.1	19.5	5.2	6.9	14.4	19.2		
Two or more races	201	35,355	19.6	21.5	6.3	7.0	18.7	20.6		
Prefer not/No Response	245	59,329	19.7	21.8	6.3	7.1	18.7	20.9		
Males	2,305	423,104	19.7	21.0	6.2	6.7	18.7	20.1		
Females	2,511	513,945	20.6	21.6	6.9	7.2	19.9	20.9		
Missing	33	5,720	15.3	16.6	5.8	6.3	15.1	16.5		