

Challenges Facing Iowa

The image is a conceptual graphic. It features a perspective view of a road with a white dashed center line, leading towards a central point. At this point, a globe is shown with a city skyline (resembling Iowa City) on its surface. The globe is positioned as if it's a portal or a focal point. The background is a deep blue, filled with a pattern of binary code (0s and 1s) that recedes into the distance, creating a sense of depth. There are also several concentric, glowing circular patterns that radiate from the central globe area, suggesting a digital or technological theme.

Iowa Department of Education • Judy Jeffrey • April 21, 2009

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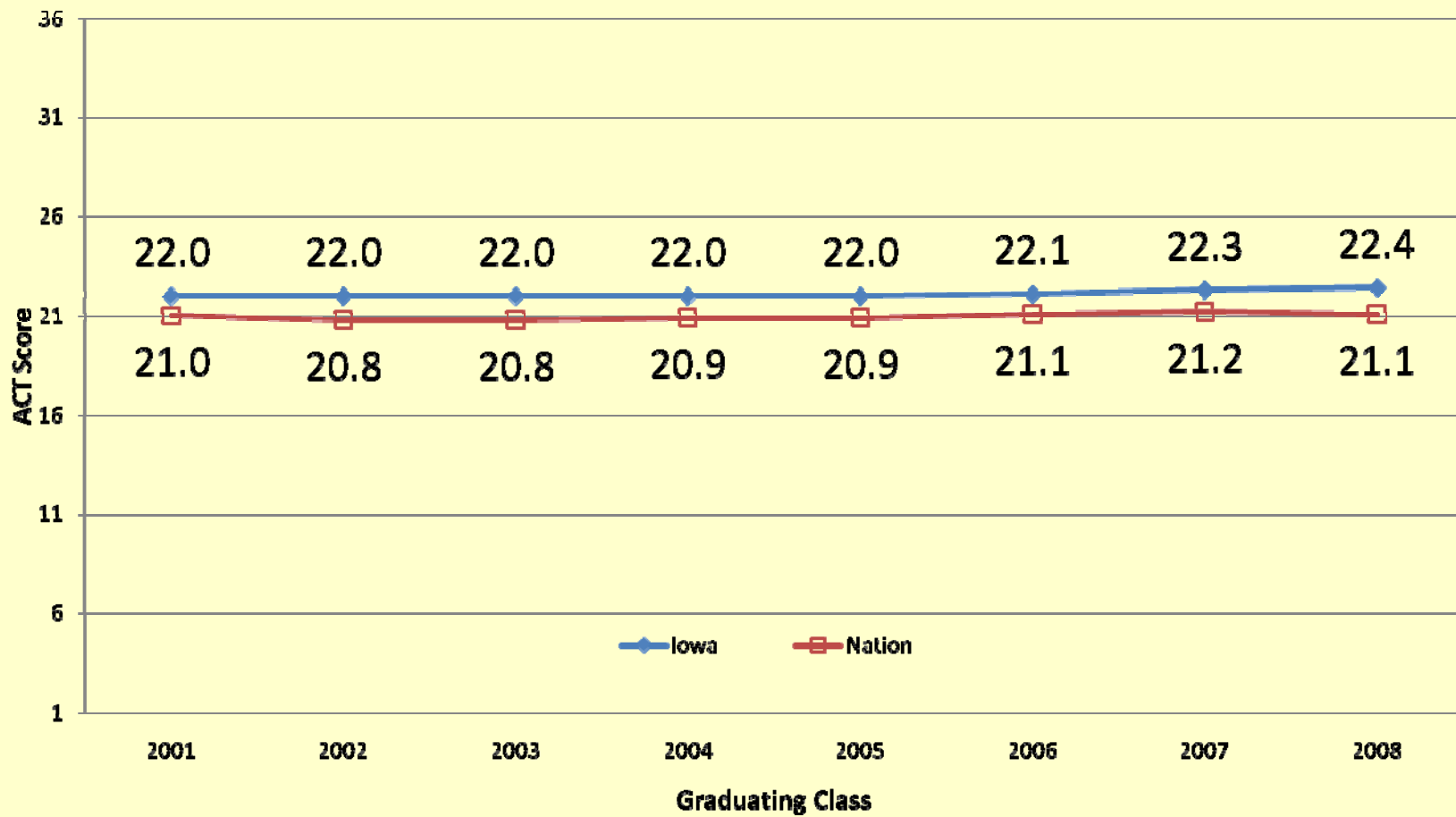
Our Current State

- Achievement
- Course Taking Patterns
- Desired State



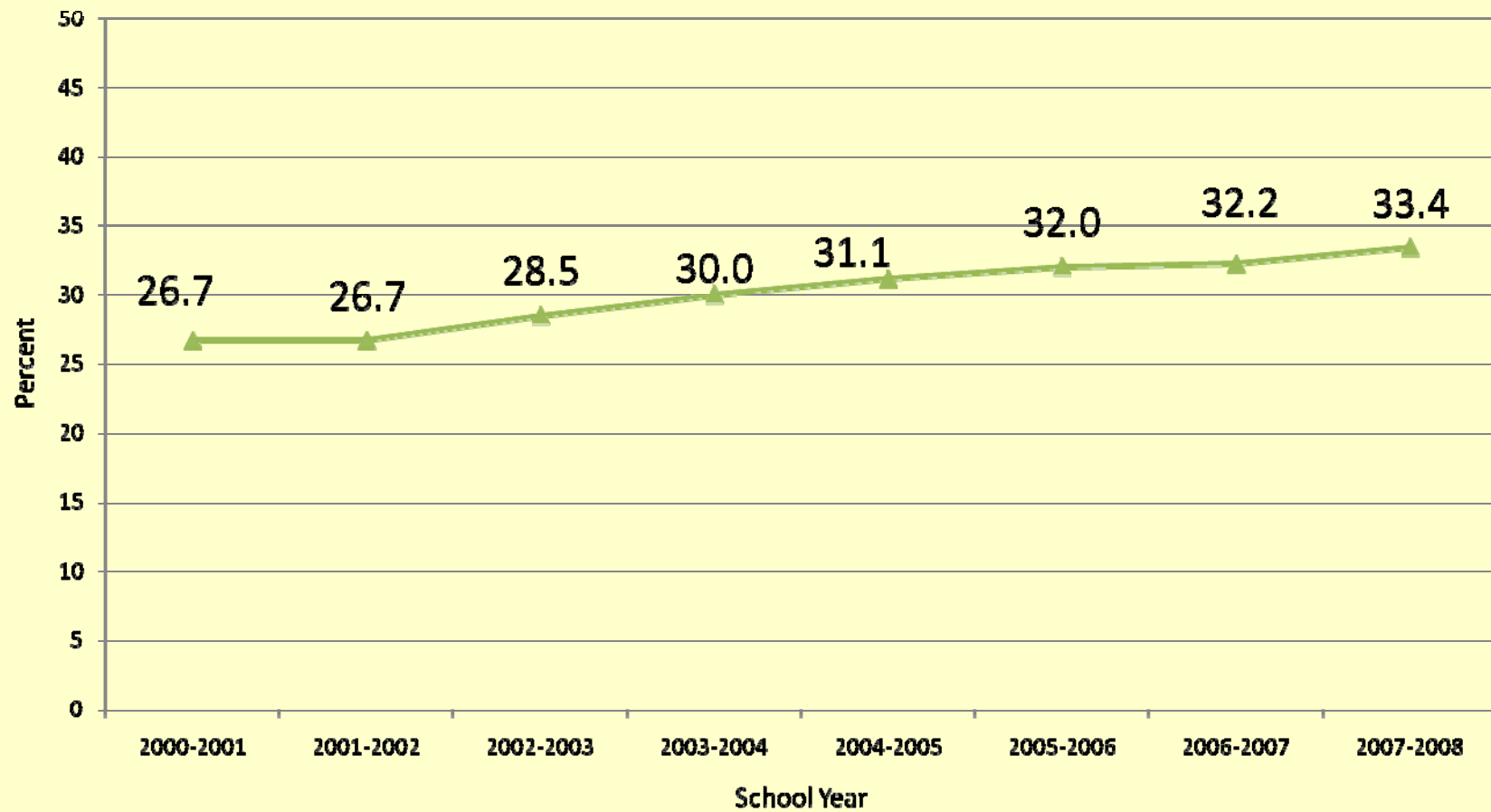
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Average ACT Composite Scores for Iowa and the Nation 2001-2008



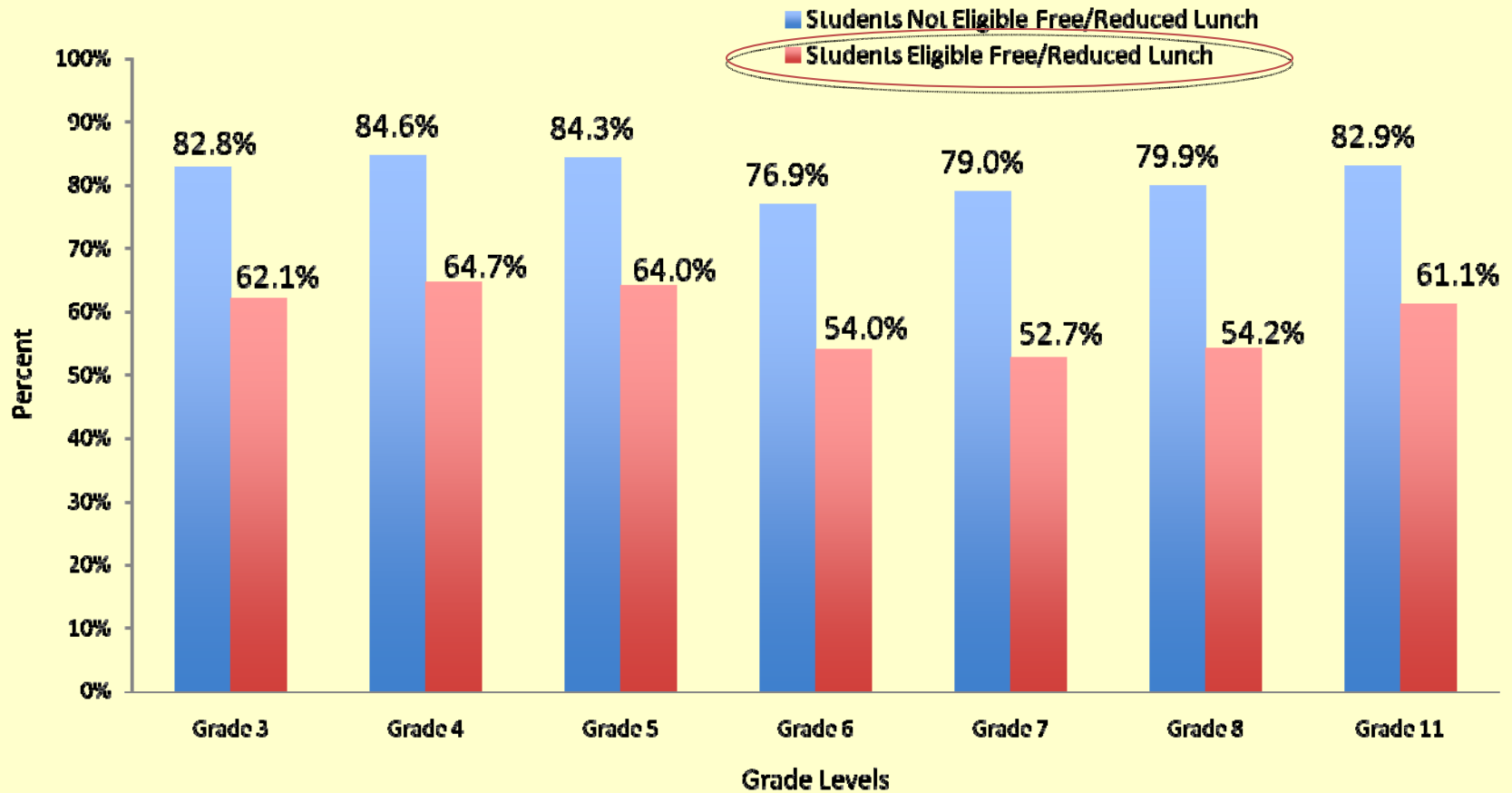
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Percent of Iowa's Public School Students Eligible for
Free and Reduced-Price School Meals



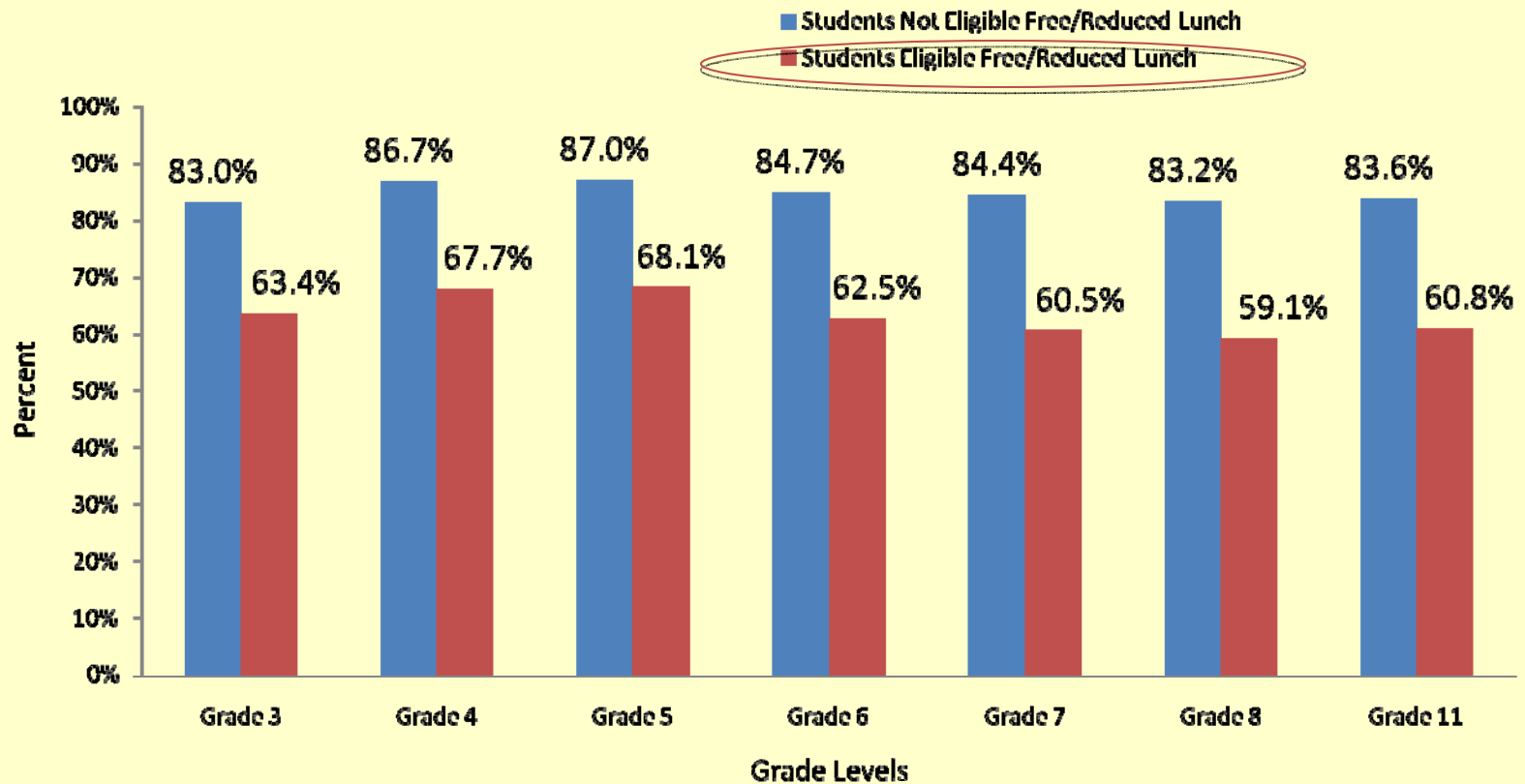
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Percent of Students Proficient in *Reading*, 2007-2008



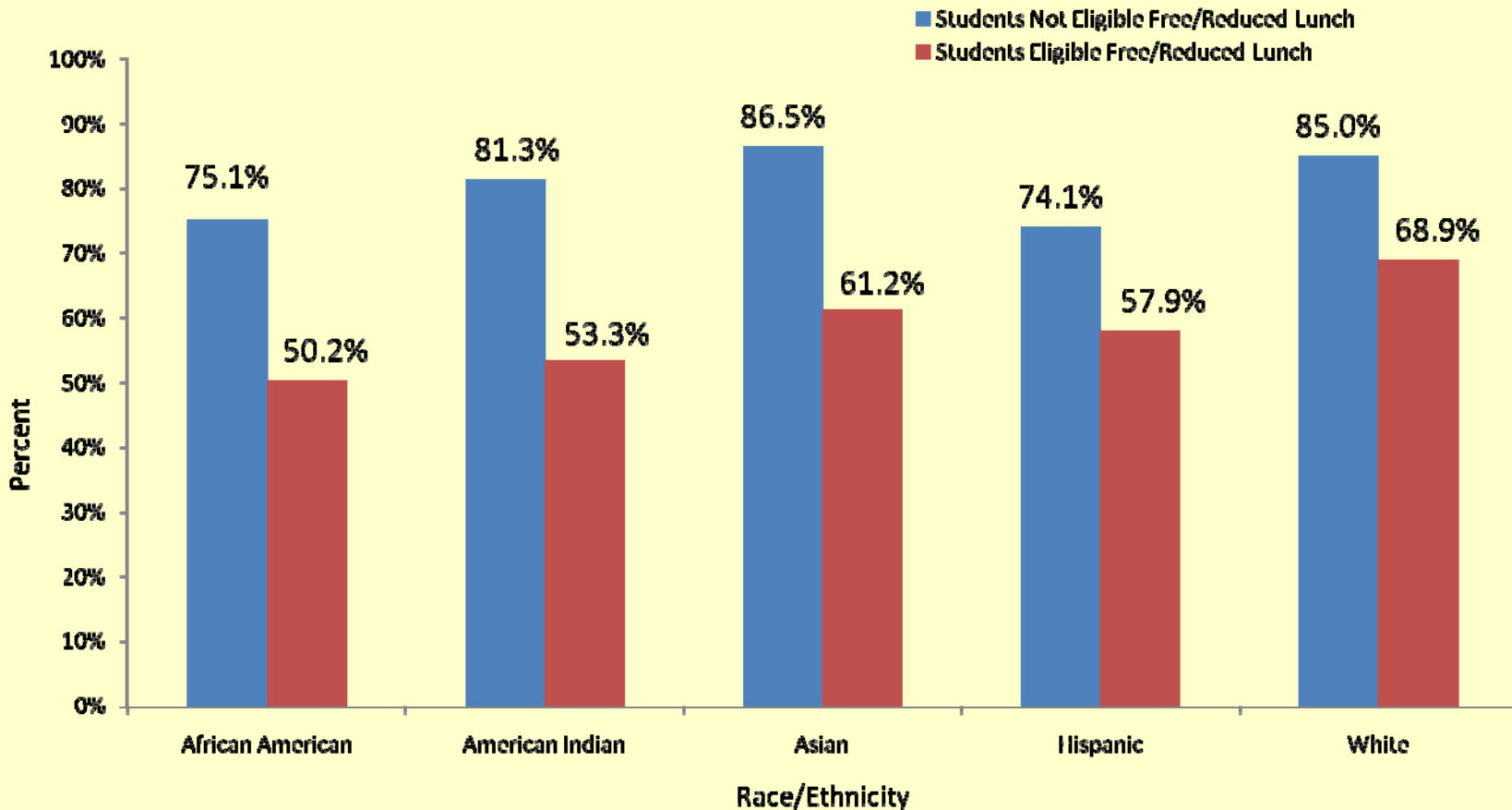
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Percent of Students Proficient in *Mathematics*, 2007-2008



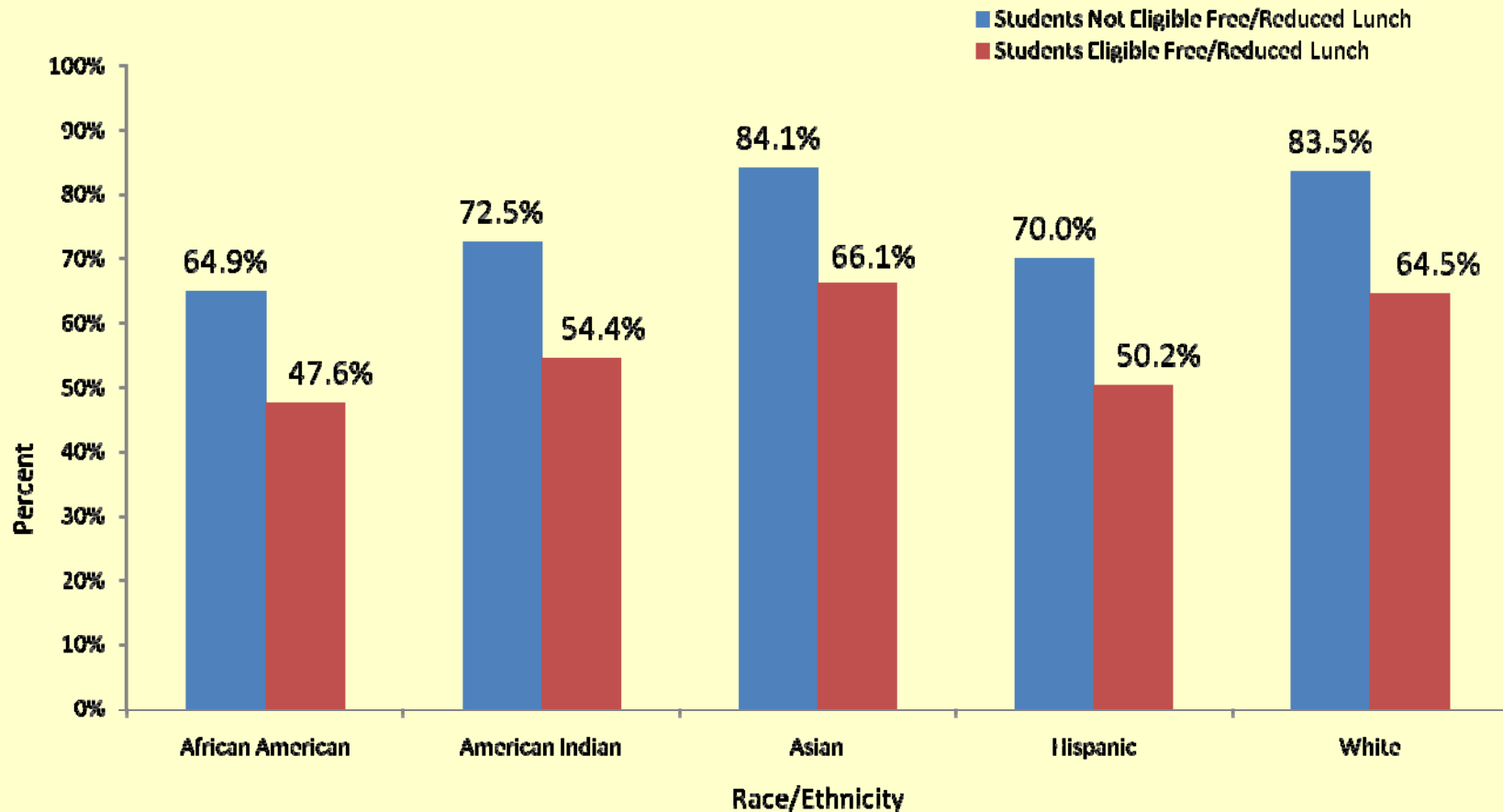
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Grade 4 Reading by Race/Ethnicity, 2007-2008



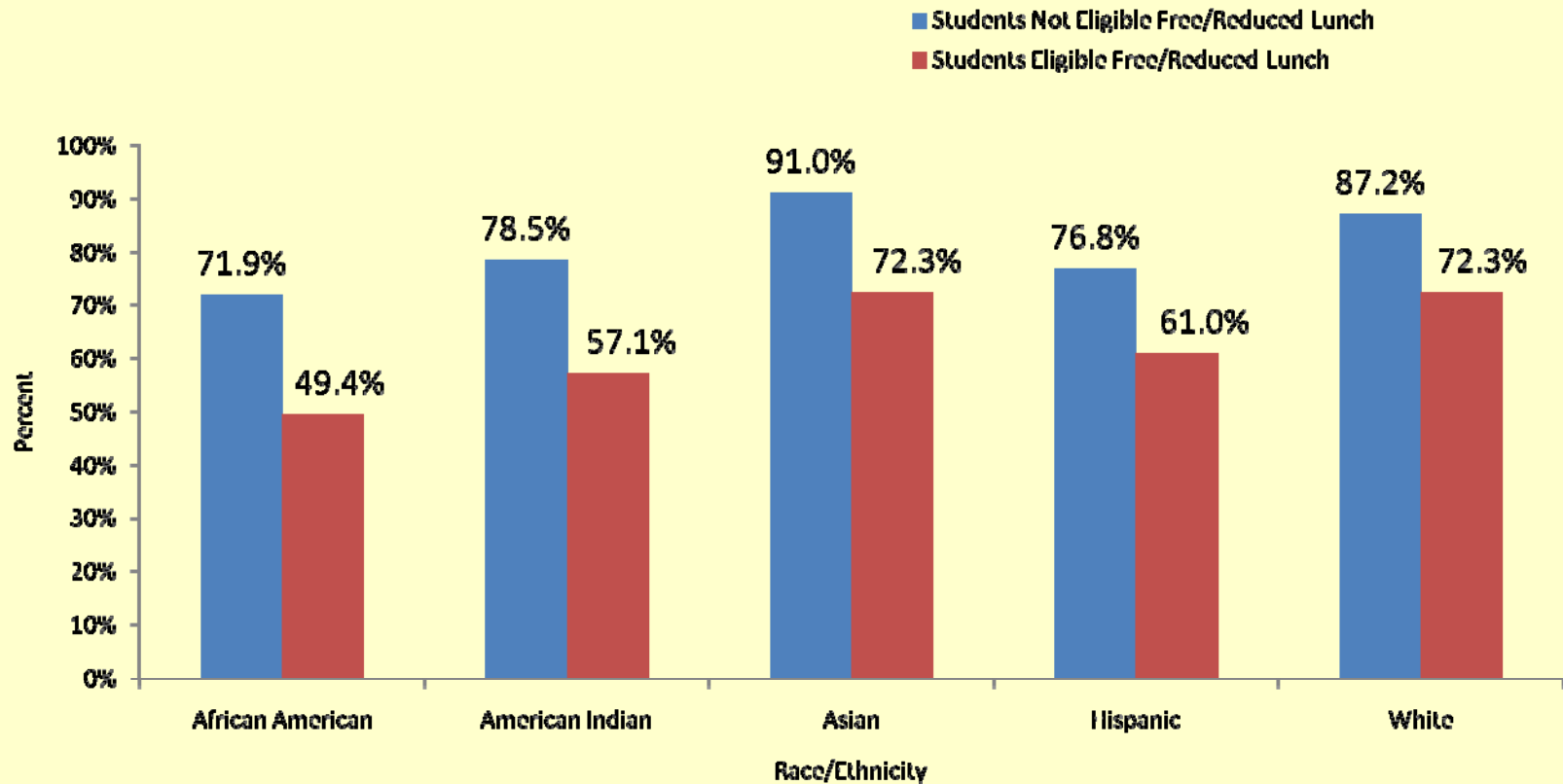
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Grade 11 Reading by Race/Ethnicity, 2007-2008



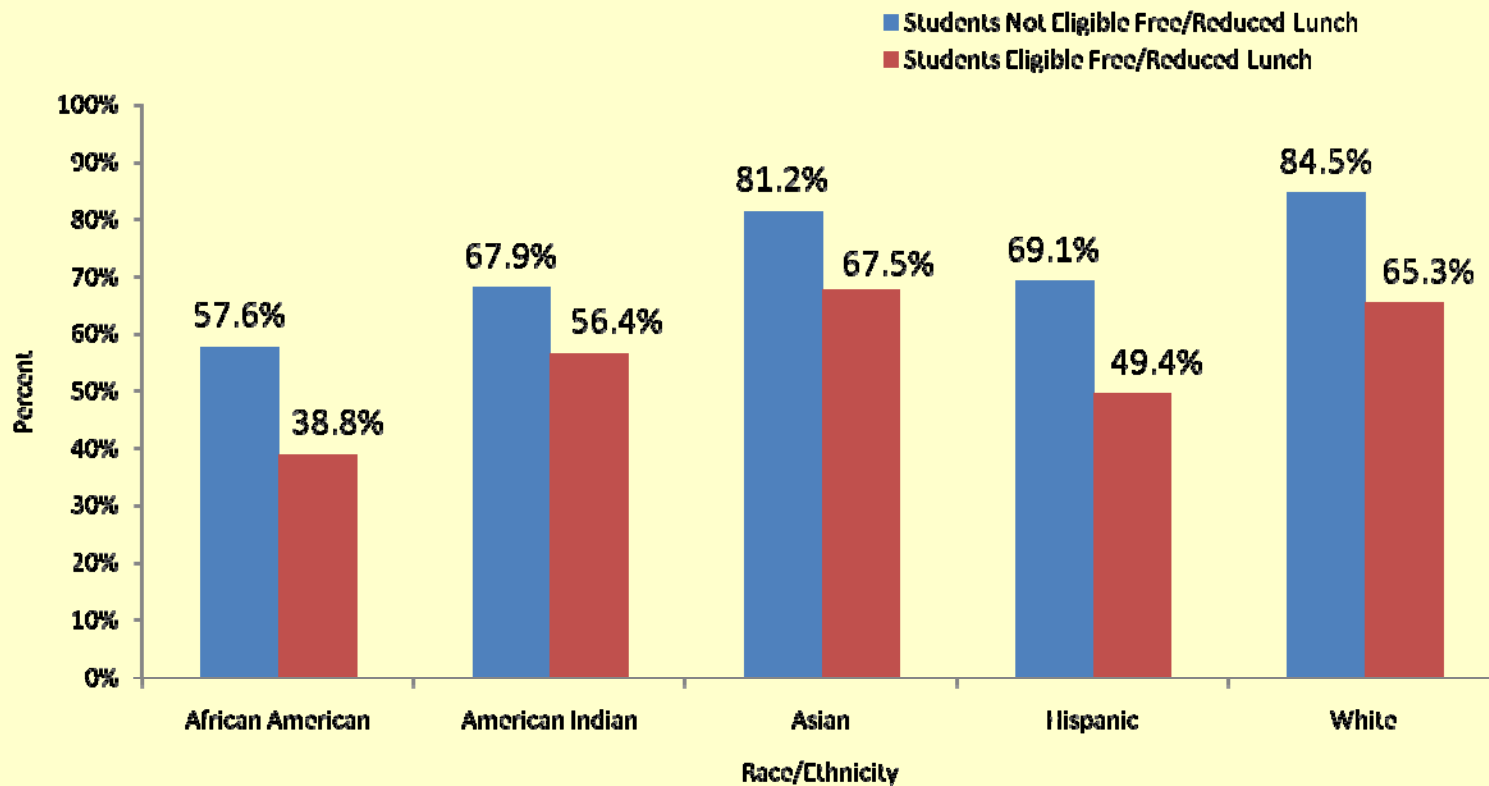
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Grade 4 Mathematics by Race/Ethnicity, 2007-2008



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Grade 11 Mathematics by Race/Ethnicity, 2007-2008



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Iowa Data

Graduating Class of 2008	Number of Students	Average ACT Mathematics	Average ACT Science Reasoning
On-time Public School Graduates	31,130		
ACT Test-takers (Public and Nonpublic)	22,950	22.0	22.3
Matched to the ID System and EASIER	19,252	22.0	22.3
With Grade 9 ITED Scores in 2004-2005	16,138	22.1	22.4

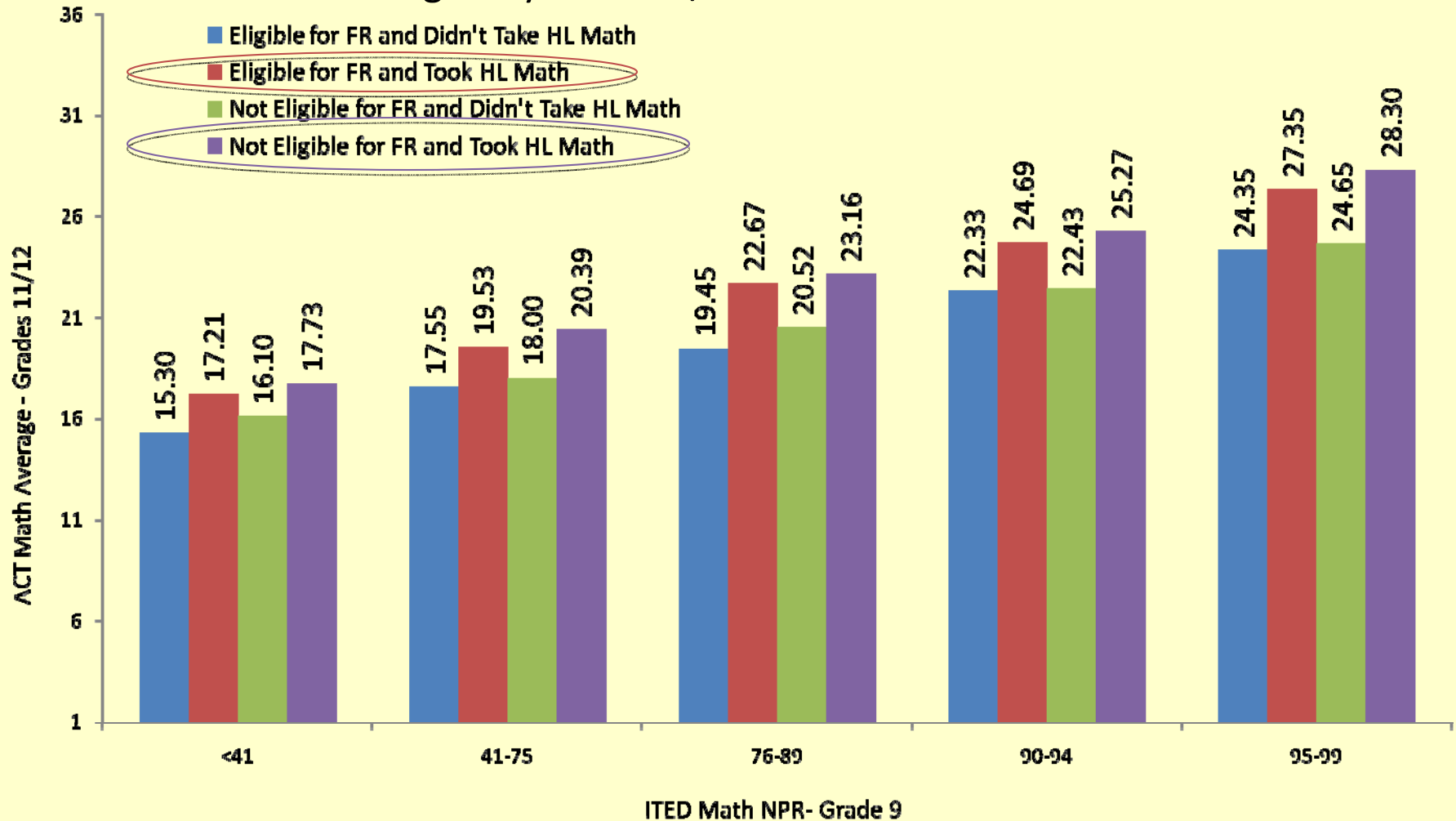
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List of Higher-Level Mathematics Courses

Pre-Calculus
Calculus
Trigonometry
Statistics
Advanced Placement Mathematics

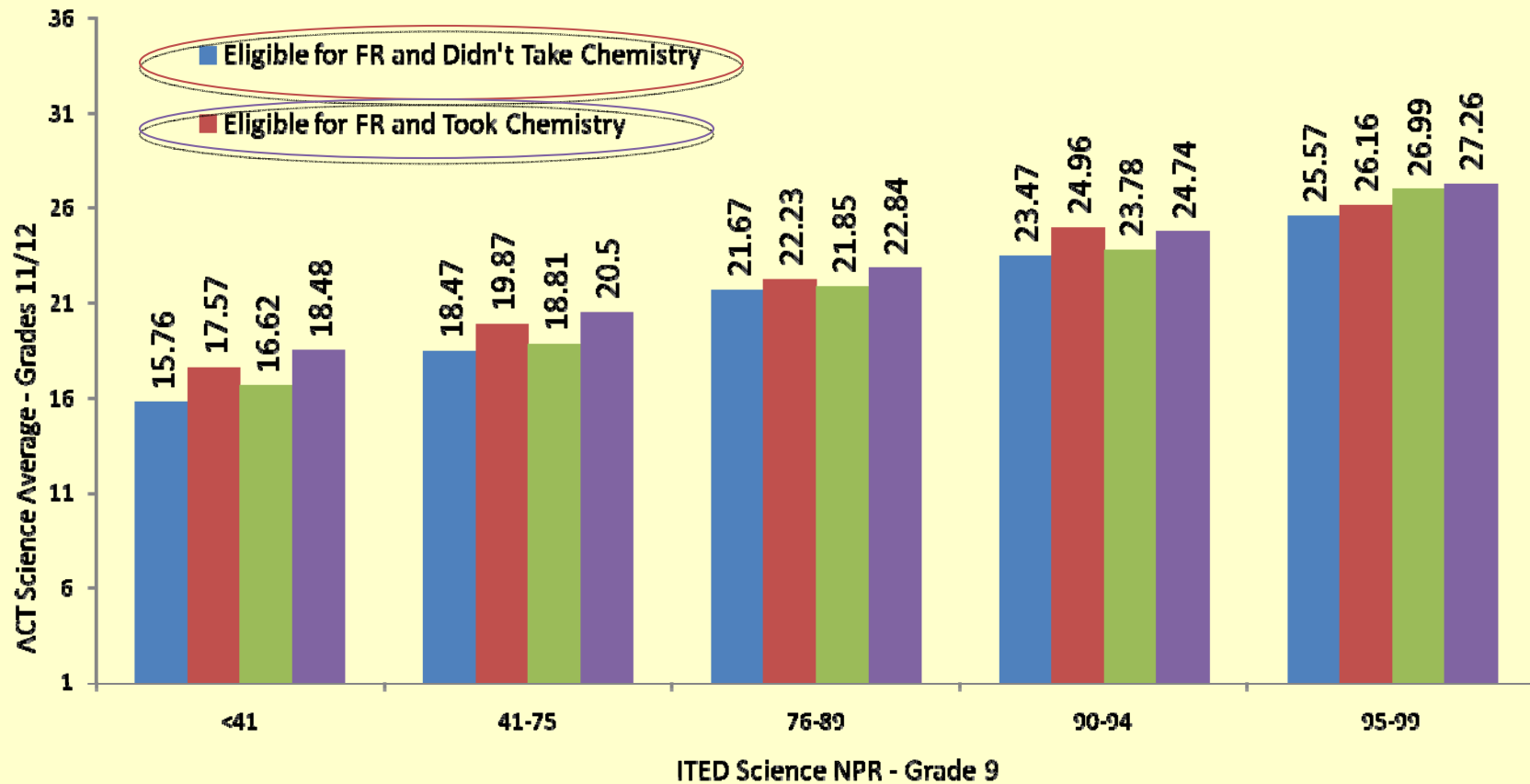
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Average ACT Mathematics vs. Higher-Level Mathematics Course Taken and Eligibility for Free/Reduced-Price Lunch



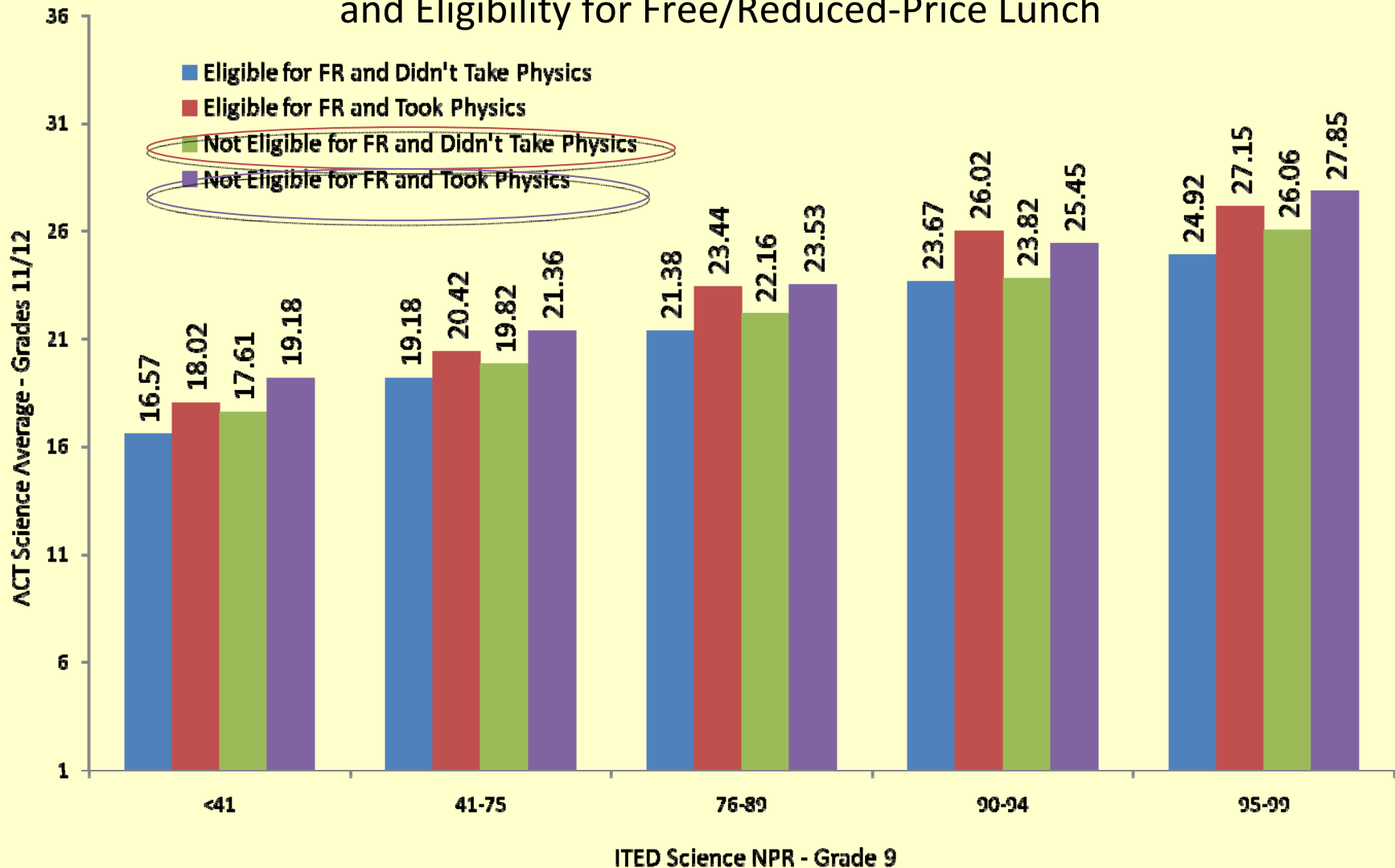
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Average ACT Science Reasoning vs. Chemistry Course Taken and Eligibility for Free/Reduced-Price Lunch



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Average ACT Science Reasoning vs. Physics Course Taken and Eligibility for Free/Reduced-Price Lunch



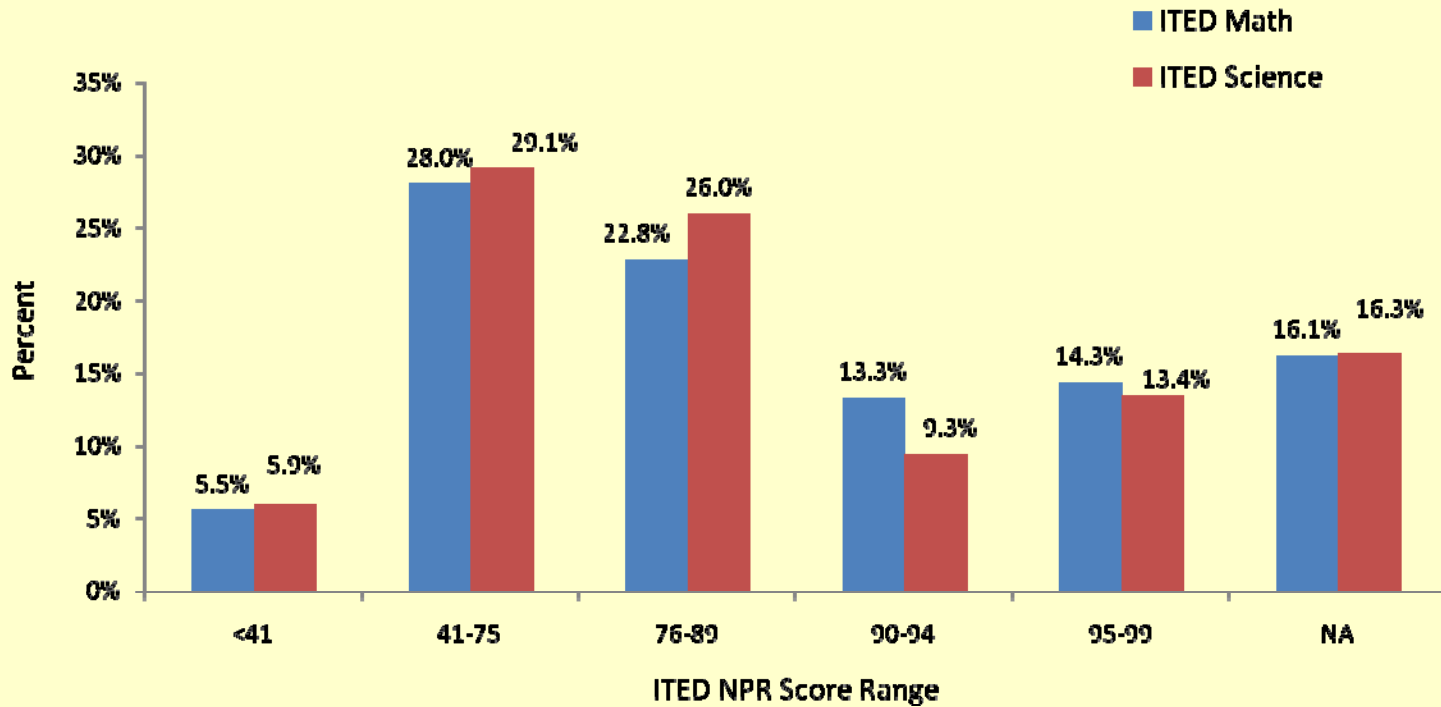
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Distribution of ITED NPR Scores for the 2004-2005 Grade 9 Students Who Took ACT in Grade 11 or 12 and Those Who Did Not

Free/Reduced Eligible	ITED NPR Score Range					ITED NA
	<41	41-75	76-89	90-94	95-99	
Number of Students with ITED and ACT Math Scores	1,064	5,401	4,387	2,555	2,755	3,109
Number of Students – Free/Reduced NOT Eligible	845	4,720	4,003	2,361	2,588	2,746
Number of Students – Eligible for Free/Reduced	219	681	384	194	167	363
Percent Students Eligible for Free/Reduced	20.6%	12.6%	8.8%	7.6%	6.1%	11.7%
Number of Students with ITED Math Score – No ACT	7,258	7,679	2,437	843	656	119
Number of Students – Free/Reduced NOT Eligible	3,333	4,604	1,714	641	524	52
Number of Students – Eligible for Free/Reduced	3,925	3,075	723	202	132	67
Percent Students Eligible for Free/Reduced	54.1%	40.0%	29.7%	24.0%	20.1%	56.3%

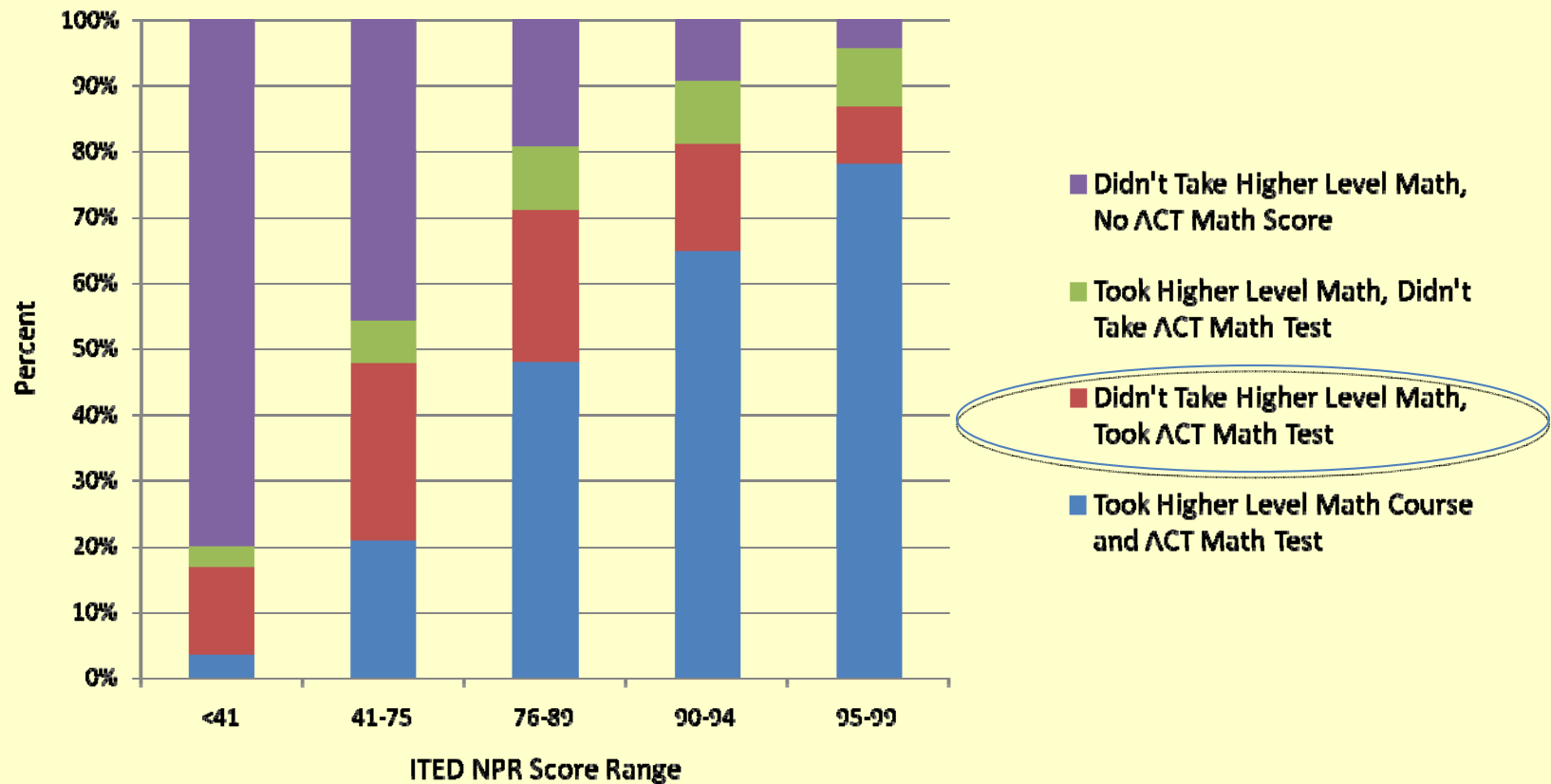
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Appendix B-6
ITED NPR Score Distributions of Ninth Graders in 2004-2005
who Took ACT in Grades 11/12



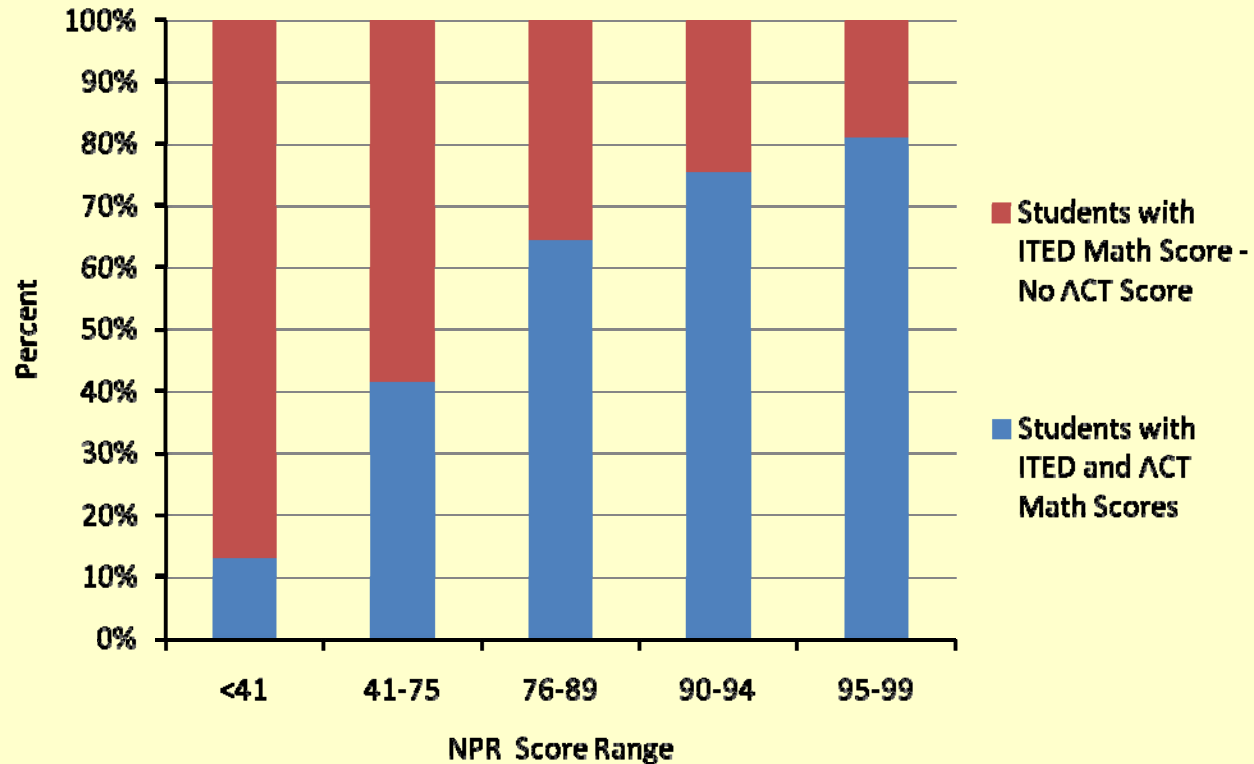
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Appendix A-1 Distributions by ITED Mathematics NPR



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Appendix A-2
ITED NPR Score Distributions –
Students Who Took ACT vs. Students Who Did Not



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Appendix B-2 Race/Ethnicity Distributions

Race/Ethnicity	Percent for Students with ACT Mathematics Scores	Percent of 9th Graders in 2004-2005
African American	2.2%	4.7%
American Indian	0.2%	0.6%
Asian	2.1%	1.7%
Hispanic	1.8%	4.9%
White	93.7%	88.1%

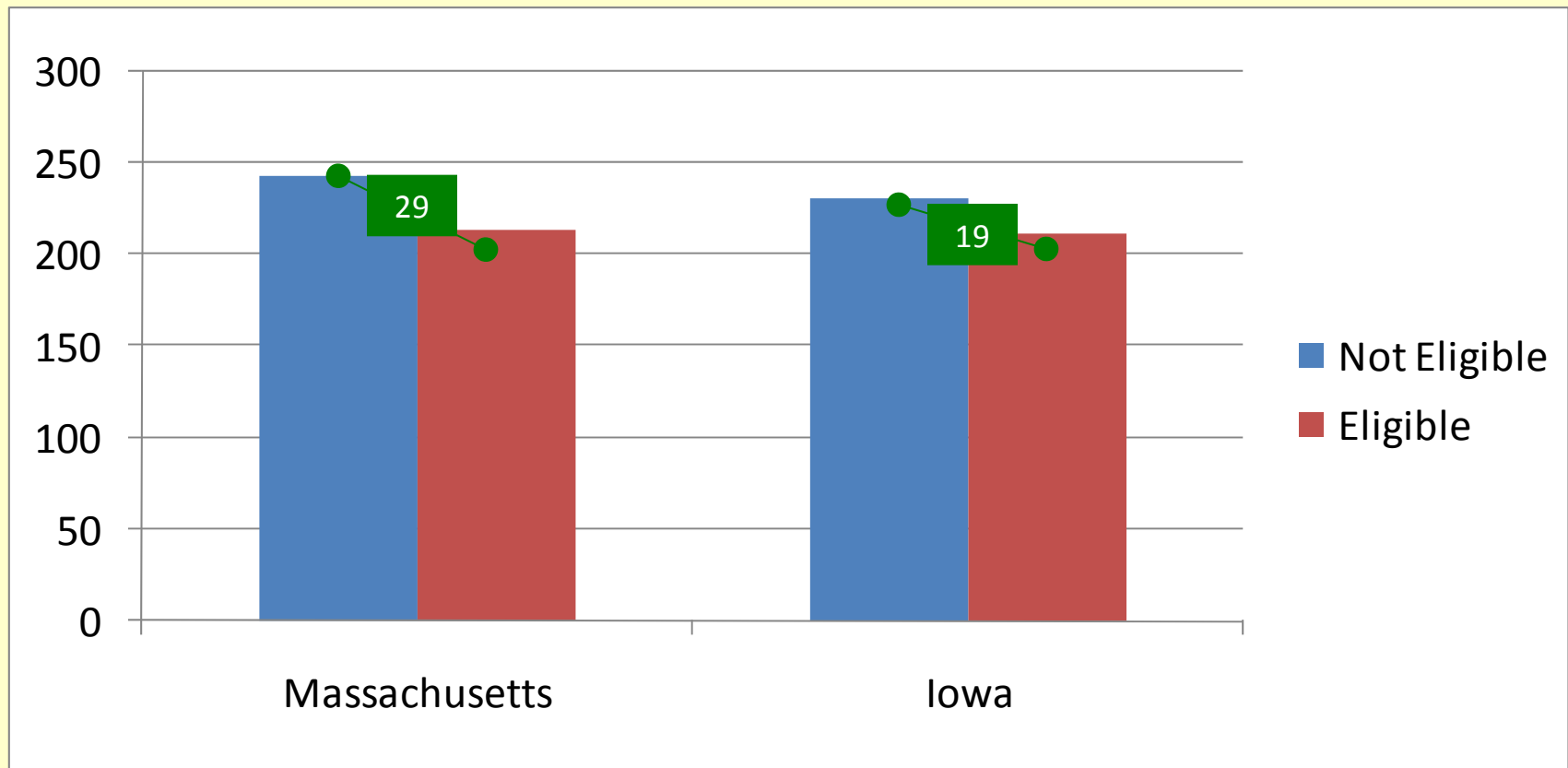
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Appendix B-4 Percent of Students Who Took at Least One Higher-Level Mathematics or Science Course

	Students with ACT Scores	Students in Graduating Class of 2008
Higher-Level Mathematics	59.6%	37.1%
Chemistry	82.9%	59.4%
Physics	38.8%	24.8%

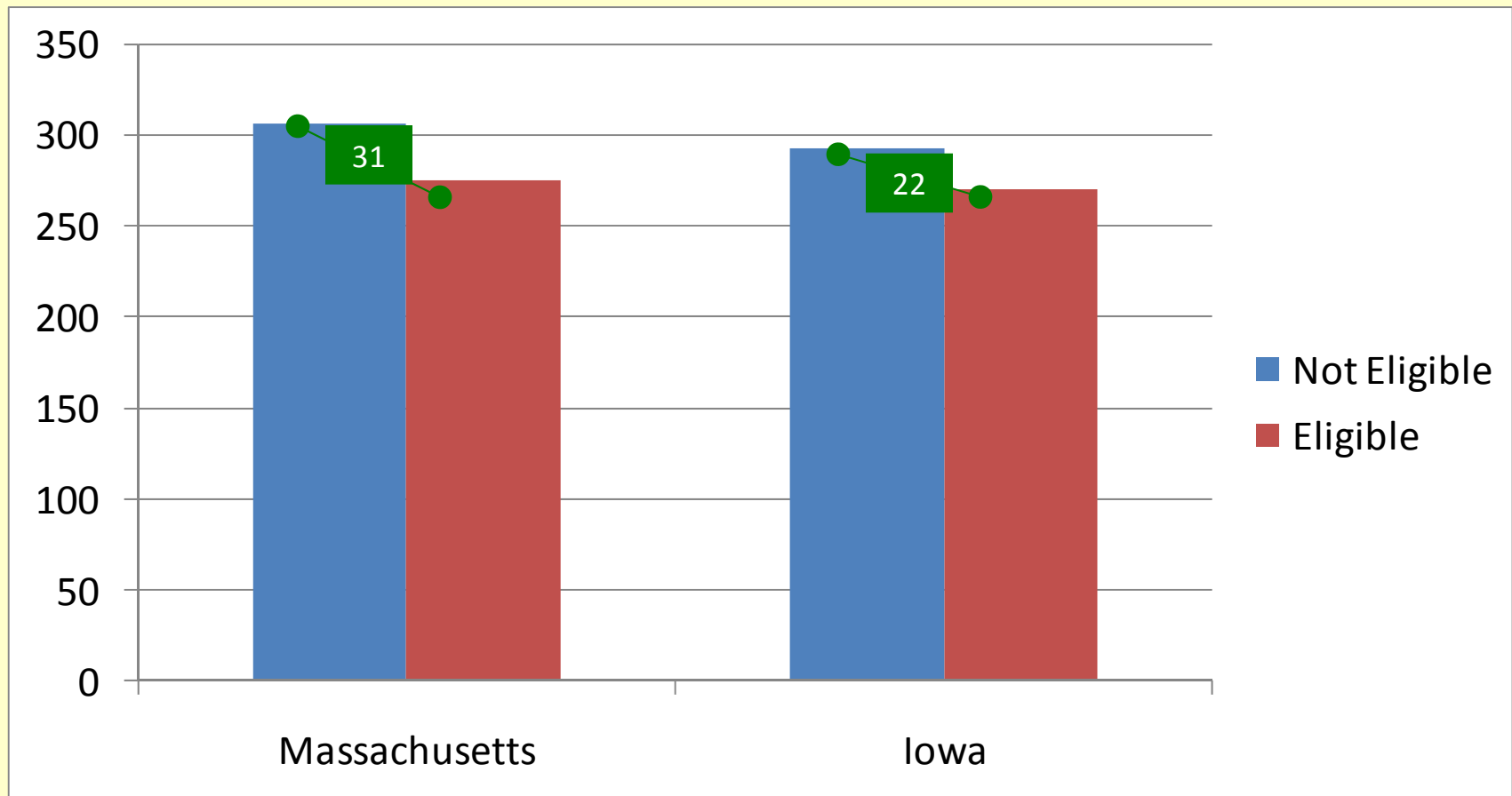
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2007 NAEP Reading Poverty Gaps Grade 4



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2007 NAEP Mathematics Poverty Gaps Grade 8



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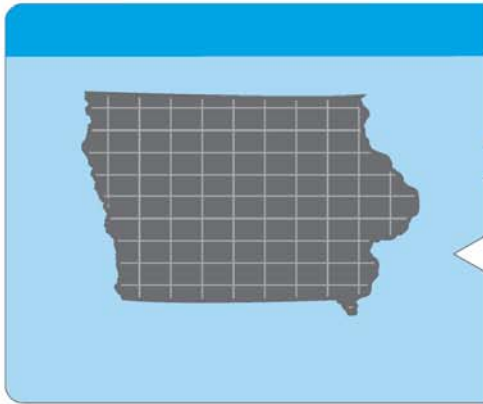
ACT District Examples

District	Average ACT Math	Average ACT Science Reasoning	Grade 11 ITED Math	Percent Took Higher-Level Math	Percent Took Chemistry	Percent Took Physics	High School Size	Percent Free/Reduced Lunch
Characteristics for the few selected districts with ACT scores above the state average								
A	22.6	22.4	78.1%	42.4%	65.7%	22.2%	220-499	30.2%
B	22.0	22.3	81.1%	51.7%	60.0%	26.2%	500-999	30.9%
C	22.1	22.4	86.1%	65.4%	73.6%	14.6%	1000-1300	20.6%
D	23.5	23.5	77.5%	48.1%	59.3%	30.9%	220-499	37.2%
E	22.2	22.4	91.5%	54.0%	68.6%	26.3%	500-999	25.7%
F	22.8	22.6	80.8%	45.7%	48.2%	42.8%	1000-1300	37.5%
G	23.4	23.2	78.1%	58.3%	62.6%	33.1%	500-999	28.1%
Characteristics for the few selected districts with ACT scores below the state average								
H	17.6	18.0	69.2%	15.6%	48.9%	13.3%	220-499	50.9%
I	18.9	19.8	66.7%	16.9%	61.0%	20.3%	220-499	19.9%
J	20.5	20.3	71.0%	25.3%	61.5%	21.8%	500-999	32.9%
K	19.7	20.4	84.5%	20.6%	34.9%	11.1%	220-499	33.4%
L	20.1	21.1	76.4%	20.4%	64.8%	11.1%	220-499	31.4%
M	19.7	20.1	66.7%	6.8%	41.5%	8.5%	500-999	48.6%
N	19.5	21.2	87.3%	21.4%	68.6%	20.0%	220-499	28.4%
State	22.0	22.3	78.7%	37.1%	59.4%	24.8%	200-499	33.4%
Most districts listed had at least 50% of the graduates that took ACT.								

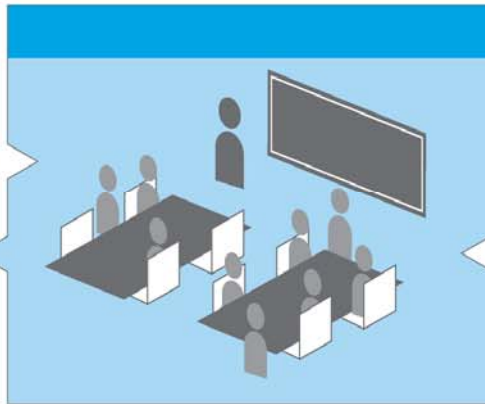
Desired State

***Core concepts & skills for
all students regardless of
postsecondary goals or career track.***

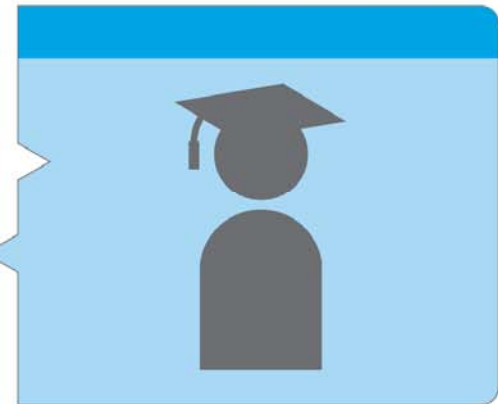
Iowa Core Curriculum



STANDARDS
AND BENCHMARKS



CORE 



STUDENT
ACHIEVEMENT

Iowa Core Curriculum

Iowa Core Curriculum

Essential Skills & Concepts

- Reading
- Math
- Science
- Social studies
- But more...



Iowa Core Curriculum

21ST Century Skills

- Financial Literacy
- Health Literacy
- Technology Literacy
- Civic Literacy
- Employability Skills
- Global Literacy – *to come*

Beyond “Basics”

99%

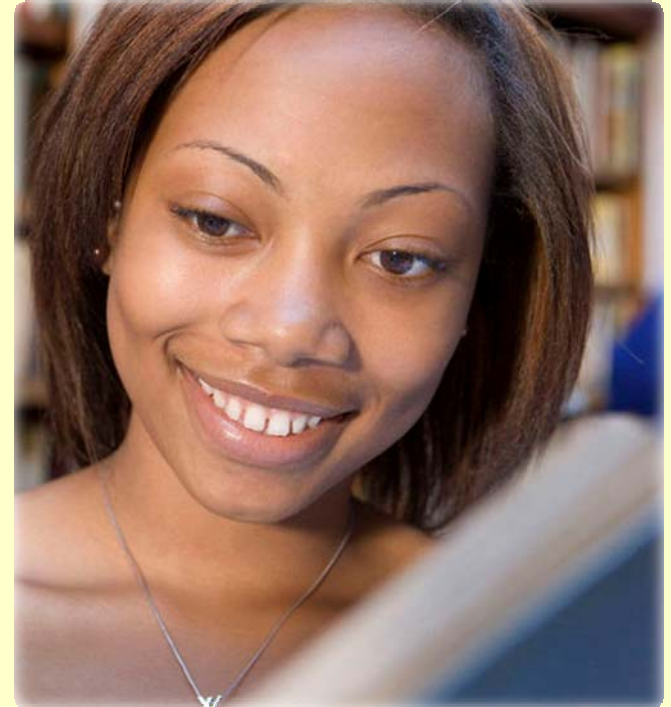
- Of voters say our country's future economic success is teaching & learning 21st century skills

80%

- Of voters say the skills students need for today's jobs is different than 20 years ago

Benefits to Our Students

- Ensures that students will grasp big ideas
- Moves students to deep conceptual and procedural knowledge
- Provides students opportunities to learn rigorous, robust content through effective instruction
- Enhances student engagement by involving students in interesting, relevant learning experiences



Right Time, Right Work,

Right People