Impact of Literacy on College and Career Readiness and STEM Success

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Adolescent Literacy's Role in Preparing Students for College and Career Readiness and STEM Success

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ACT Research

- What do we know about middle school students' literacy skills?
- How do these skills affect college/career readiness and success?
- What can we do to improve readiness?

Data Sources

- NAEP
- College Readiness
 - EXPLORE—8th Grade
 - The ACT—12th Grade

Data Sources

- EXPLORE-ACT based on college readiness standards
- Curriculum based
- Measure what students need to know to be ready for college-entry, credit bearing courses without remediation

How Do We Define College and Career Readiness in Reading?

- Based on actual success students experience in creditbearing college-entry social science courses
- Does college readiness=career readiness?

Research Results

- Research shows that the skills needed to enter workforce training programs and to enter college are comparable.
- Level of expectation for students entering jobs offering a livable wage is the same as that needed for college.

* Ready for College, Ready for Work: Same or Different, ACT, 2006

NAEP Results in Reading: 2007

Percentages at NAEP Achievement Levels and Average Score					
Washington (public)					e Score
1998 ^a	23	45	29	2	265
1998	24	44	29	2	264
2002	22	41	33	4	268*
2003	24	43	30	3	264
2005	25	41	31	3	265
2007	23	43	31	3	265
Nation (public	c)			_	
2007	27	43	27	2	261
Percent below Basic Percent at Basic, Proficient, and Advanced					
Below Basic Basic Proficient Advanced					

^a Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 reading achievement levels correspond to the following scale points: Below *Basic*, 242 or lower; *Basic*, 243–280; *Proficient*, 281–322; *Advanced*, 323 or above.

NAEP Results in Reading: 2007

- No significant improvement in percentage of students reaching proficient/advanced
- No significant decrease in percentage of students in below basic category

Current State of College Readiness in Literacy: Middle School Students

Not enough middle school students are on target to be college ready in reading when they leave high school.

Only 40 percent of the nation's 8th-grade EXPLORE-tested students in 2008 are on target to be ready for college-level reading.

Current State of College Readiness in Literacy: Middle School Students

For some groups, substantially fewer students are on target to be ready for college-level reading.



Current State of College Readiness in Literacy: 2008 High School Grads

- Only 53 percent of the 1.4 million 2008 ACT-tested high school graduates are ready for college-level reading.
- Only 68 percent of the 12,000 2008 ACT-tested high school graduates in Washington are ready for college-level reading.

Current State of College Readiness in Literacy: 2008 High School Grads

College readiness in reading has been declining during the past decade:

- 1994: 52 percent
- 1999: 55 percent (peak)
- 2008: 53 percent

Middle school students who are on target in reading are substantially more likely to be on target to be ready in other subject matter areas.

Students who are on target in reading are most likely to be on target in English, math, and science.



Students who are NOT on target in reading in middle school are significantly more likely NOT to be on target in English, math, and science.

Of those 2008 EXPLORE students who did NOT meet the EXPLORE Reading Benchmark:

- Only 38% are on target in English
- Only 14% are on target in Math
- Only 1% are on target in Science

College readiness in literacy has a direct impact on college success. Students who are college-ready in reading are more likely to :

- Enroll in college (74% vs 59%)
- Earn college course grades of B or better (63% vs 36%)
- Earn college GPAs of 3.0 or higher (54% vs 33%)
- Return for the second year at the same college (78% vs 67%)

Reading Between the Lines, ACT, 2006

Better reading skills lead to higher college course grades.



Met Reading Benchmark Did not meet Reading Benchmark

Better reading skills lead to higher college grade-point averages.



What Happens When We Track Same Students Over Time?

More eighth- and tenth-grade students nationally are on target to be college ready in reading than are actually ready when they graduate from high school.

What Happens When We Track Same Students Over Time?

A decline in the percentage of students who are actually ready for collegelevel reading occurs between the **10th and 12th** grades.



Why are Students Losing Momentum in High School?

- Students are not being asked to meet rigorous reading standards within the content areas in high school.
- Not enough students are being exposed to complex texts like those they will encounter after high school.
- States are not focusing on <u>essential</u> reading standards.

College/Career Readiness Pipeline

- Being on target by the eighth grade has the most dramatic impact on college/career readiness by the end of high school.
- Helping more students to be on target in reading by end of eighth grade is single most important step we can take to improve college/career readiness.

"RSVP"

"RSVP":

- Relationships: Interactions among ideas or characters are subtle or complicated.
- Richness: Information is often communicated by data or literary devices (e.g., allusion, metaphor, personification) in sophisticated ways.

"**RSVP**":

- Structure: The text is organized in elaborate and sometimes unusual ways (e.g., out of chronological order).
- Style: The author's chosen way of writing is often intricate (e.g., made up of many levels of diction or displaying careful attention to detail).

"**RSVP**":

 Vocabulary: The words the author uses are frequently difficult and are highly dependent on the use of context clues to communicate their meaning.

"RSVP":

Purpose: The author's intentions are implicit rather than directly stated and may occasionally be difficult to identify.

Recommendations:

- 1. Revise state standards to specify the essential expectations that all students should attain by the end of eighth grade.
 - Make these nonnegotiable for all students.
 - Must be aligned with college and career readiness.

Recommendations:

2. Incorporate increasingly complex reading materials in middle and high school courses so that students have ample exposure and experience with these types of materials.

Recommendations:

3. Provide middle and high school teachers with guidance and support to incorporate and teach to the kinds of complex texts that are most likely to increase students' readiness for college-level reading.

Recommendations:

4. Increase federal and state support for schools to implement intervention programs.

Recommendations:

5. Monitor student progress with college/career readiness assessments so timely interventions can be made.

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