

# What Matters for Graduation and Dropout

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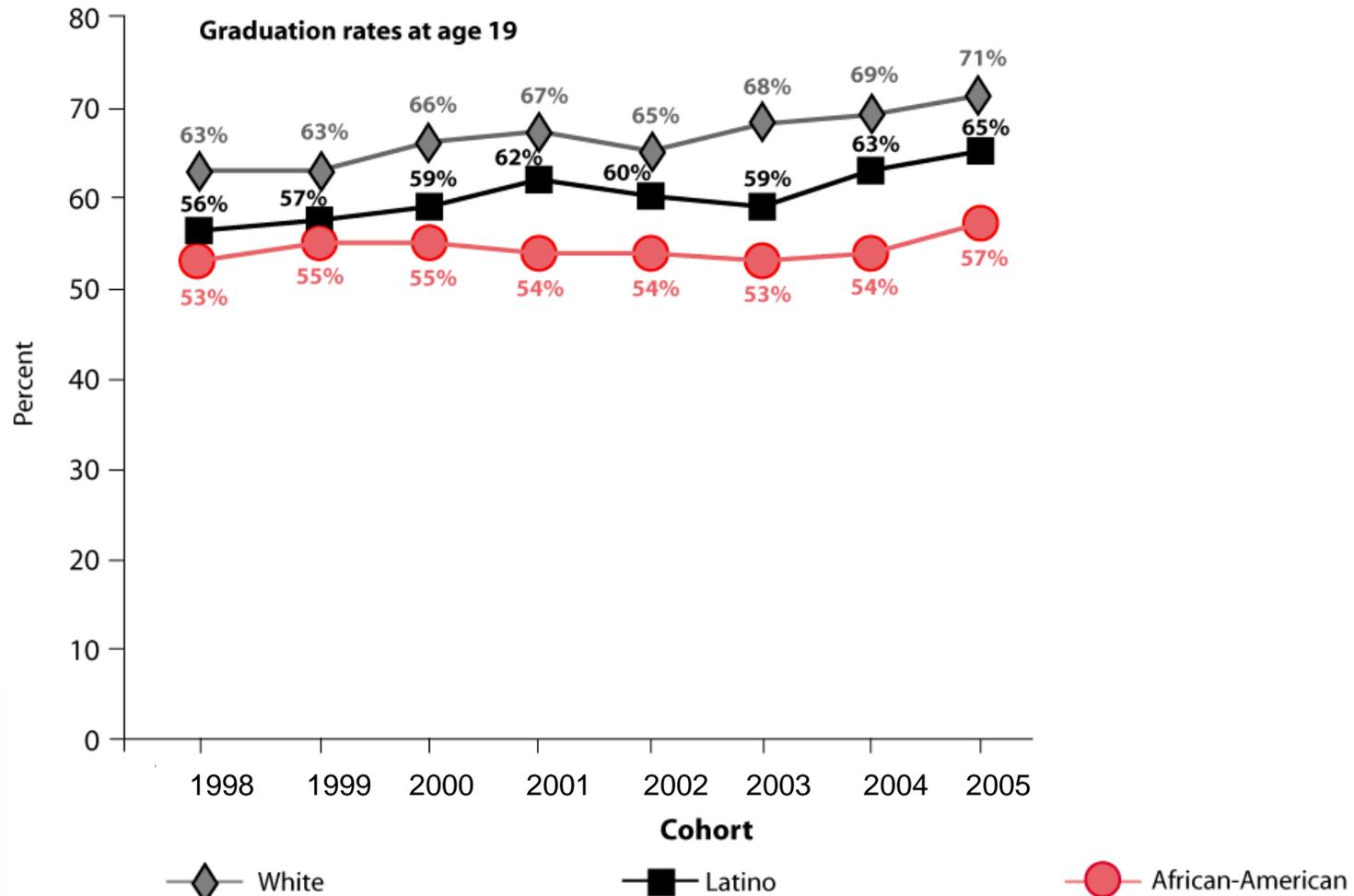
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AT THE UNIVERSITY OF CHICAGO / URBAN EDUCATION INSTITUTE

# Graduation rates in CPS

About two-thirds of girls in CPS graduate

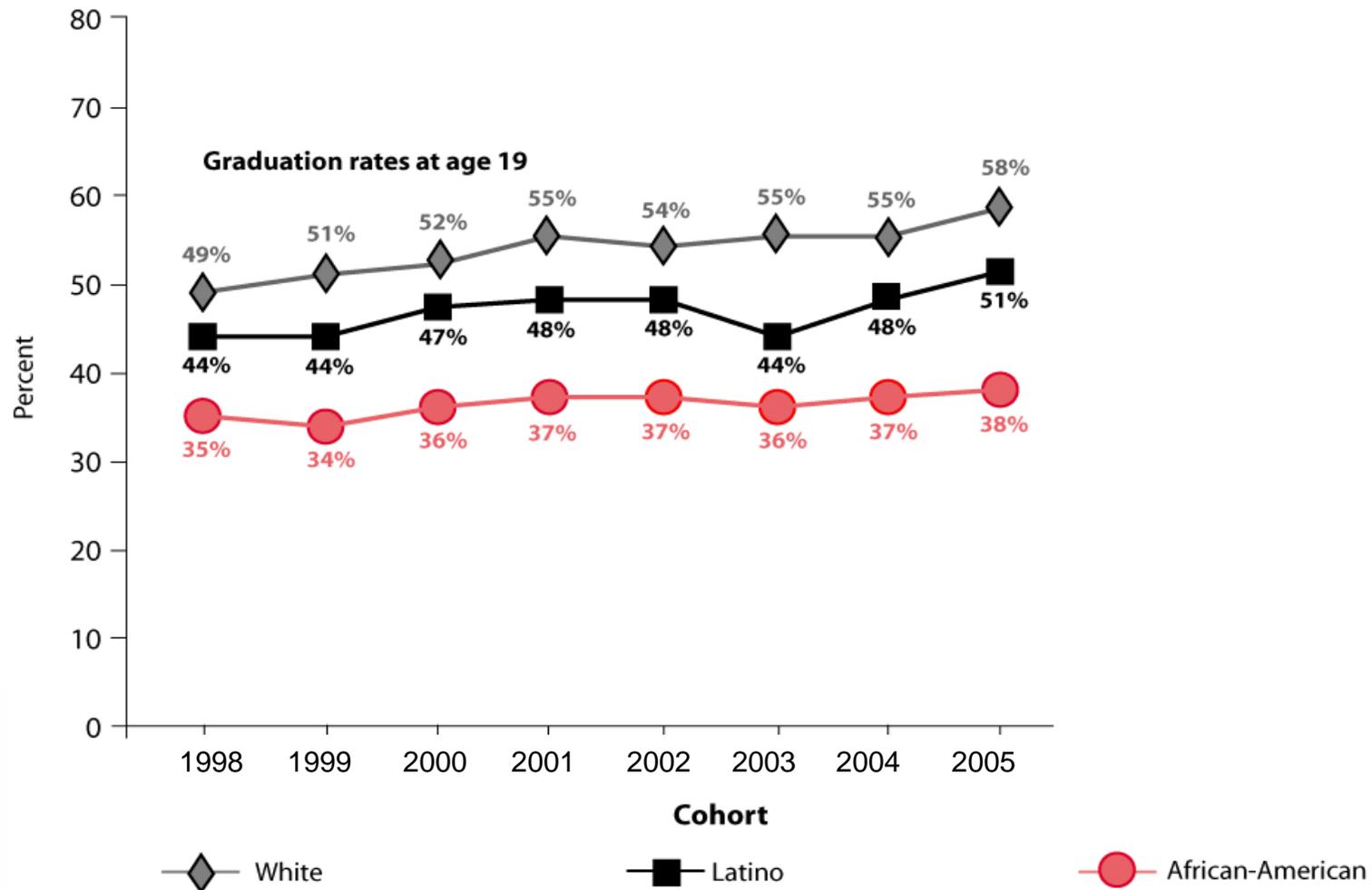
Graduation Rates at Age 19 for Cohorts of CPS Girls by Race/Ethnicity



# Graduation rates in CPS

Boys are much less likely to graduate than girls

Graduation Rates at Age 19 for Cohorts of CPS Boys by Race/Ethnicity



# Who will graduate?

**A number of students' background characteristics have been associated with dropping out...**

- Eighth grade test scores
- Mobility prior to high school
- Over-age for grade
- Race
- Economic status
- Gender
- Neighborhood poverty



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# Who will graduate?

	Prediction of graduates in 4 years	Prediction of non-graduates
<b>Eighth grade test scores</b> <b>Race</b> <b>Economic status</b> <b>Gender</b> <b>Mobility prior to high school</b> <b>Over-age for grade</b>	<b>65%</b> Correctly identified, using all background information	<b>48%</b> Correctly identified, using all background information



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# The “on-track” indicator

## A measure of progress during the first year of high school

- An on-track student has accumulated five full course credits (in any subject)
  - The number required to move to 10<sup>th</sup> grade in Chicago
- An on-track student has no more than one semester F in a core subject
  - English, math, science, or social studies



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# Who will graduate?

Indicator of Future Graduation/Dropout...	Prediction of graduates in 4 years	Prediction of non-graduates
Eighth grade test scores Race Economic status Gender Mobility prior to high school Over-age for grade	<b>65%</b> correctly identified, using all background information	<b>48%</b> correctly identified, using all background information
<b>On-track in 9<sup>th</sup> grade</b>	<b>80%</b> correctly identified, using only the on-track indicator	<b>72%</b> correctly identified, using only the on-track indicator



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# Who will graduate?

Indicator of Future Graduation/Dropout...	Prediction of graduates in 4 years	Prediction of non-graduates
Eighth grade test scores, mobility, overage, race, economic status, gender	65%	48%
On-track in ninth grade	80%	72%
<b>All of the above</b>	<b>81%</b>	<b>72%</b>

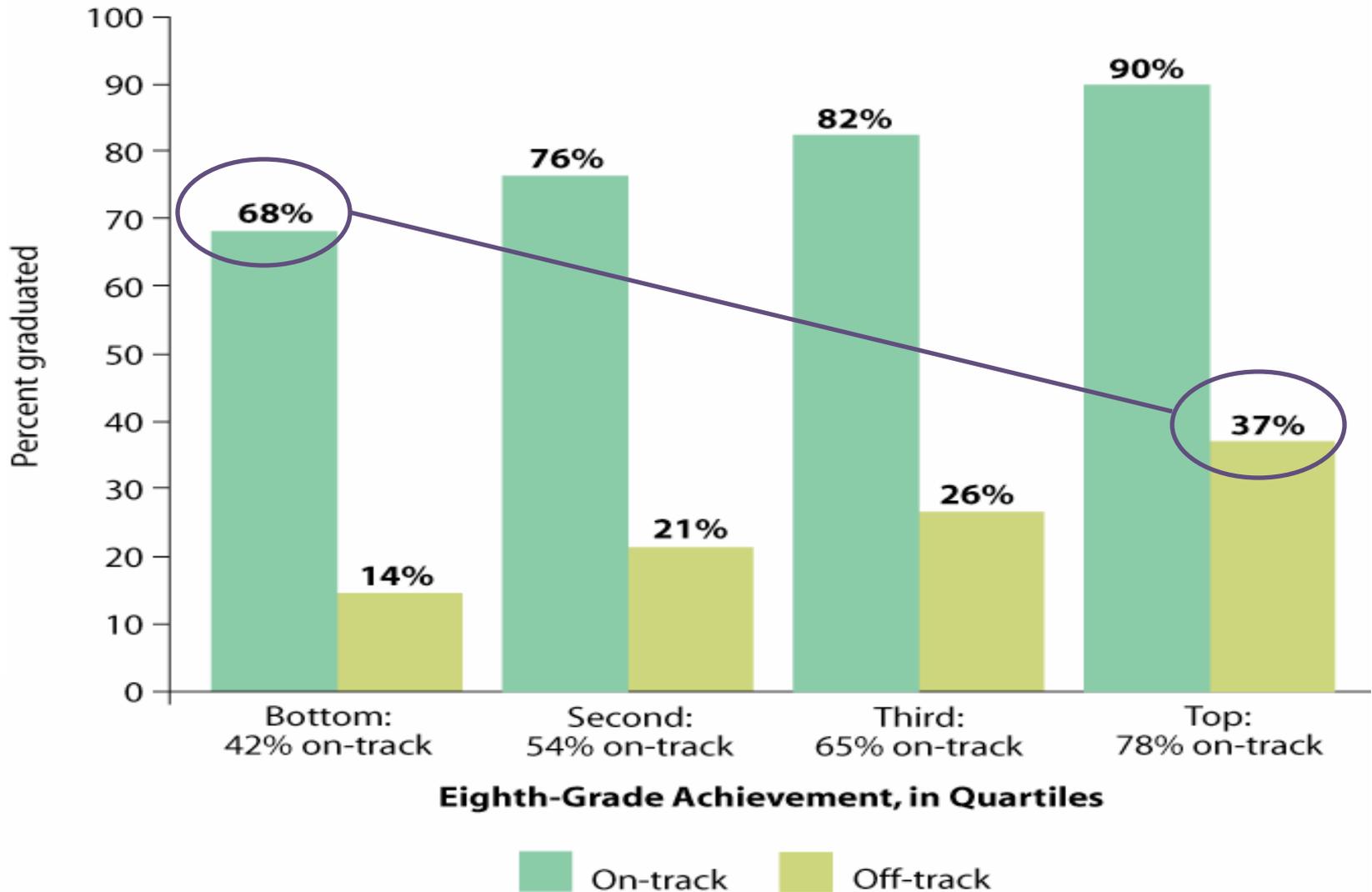


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# Four-Year Graduation Rates by On-Track Status after Freshman Year and Incoming Reading and Mathematics Achievement

*Students entering high school in September 2000*



# Who will graduate?

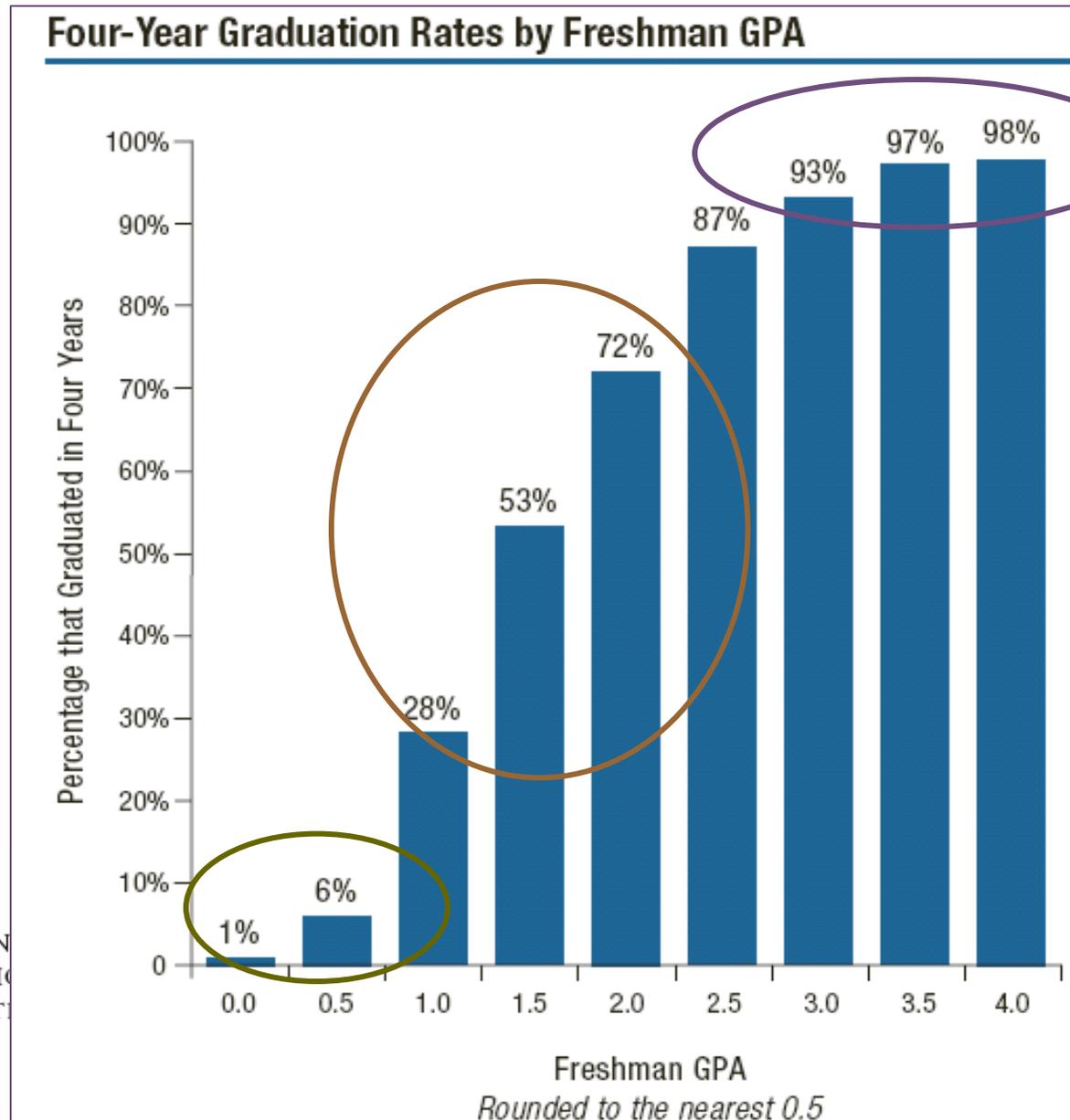
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<b>On-track in 9<sup>th</sup> grade</b>	<b>80%</b>	<b>72%</b>
9 <sup>th</sup> Grade GPA	80%	73%
9 <sup>th</sup> Grade Course Failures	80%	66%
9 <sup>th</sup> Grade Absences	77%	59%



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# Freshman Year Grades & Failures Can Precisely Identify Students' Risk of Not Graduating



Virtually all students with less than a “D” average in their first year will fail to graduate



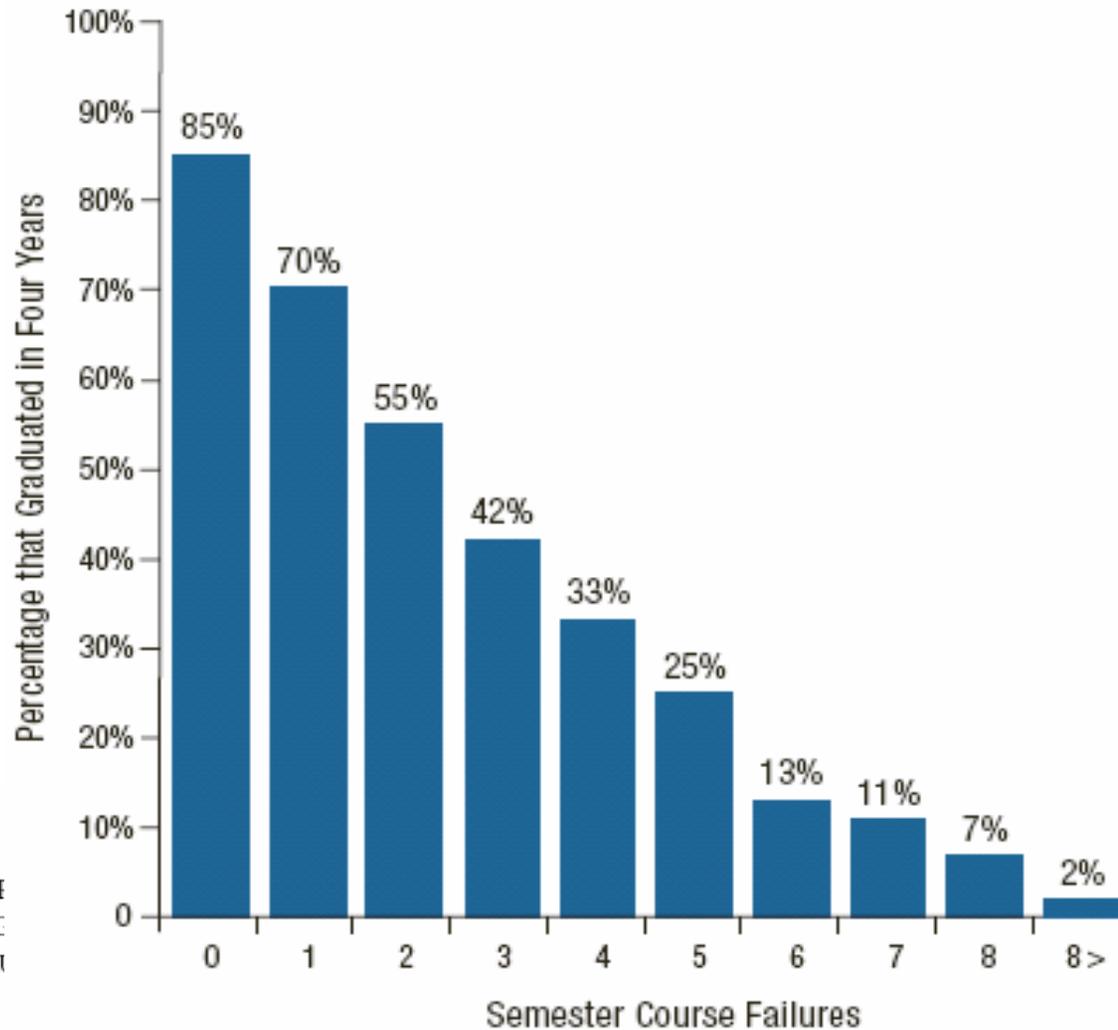
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Virtually all students with a “B” average or higher in their first year will graduate in 4 years

Students with D+/C- GPAs could go either way

# Freshman Year Grades & Failures Can Precisely Identify Students' Risk of Not Graduating

Four-Year Graduation Rates by Freshman Course Failures



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# Why do students fail courses?

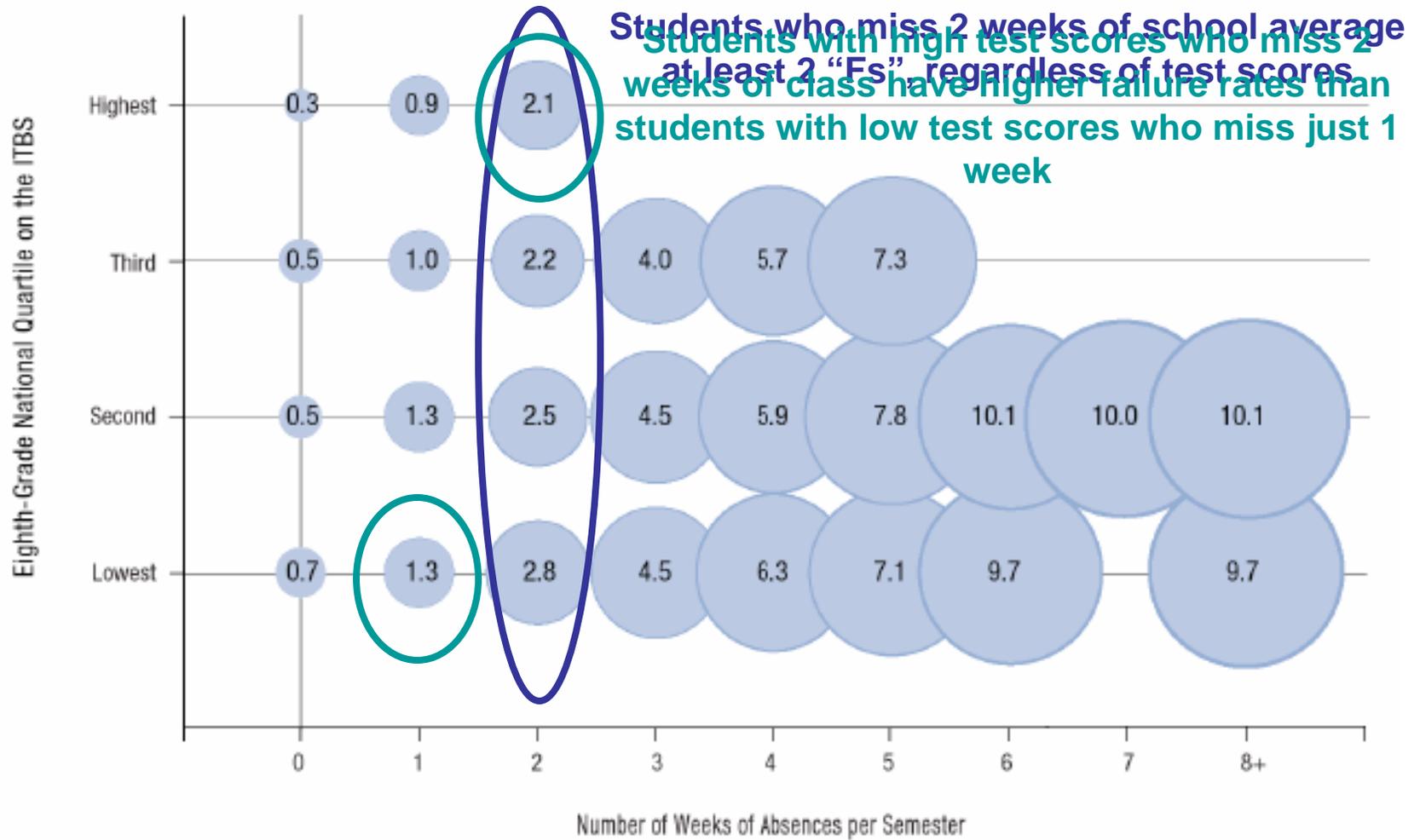
- Attendance is 8 times more predictive of failure than prior test scores
  - Demographic & economic background characteristics explain 7% of course failures
  - Eighth-grade test scores explain an additional 5% (12% total)
  - Student behaviors--absences and effort- explain an additional 61% (73% total)
- Attendance is also the strongest predictor of course grades (As & Bs), although academic skills are also very important for high grades



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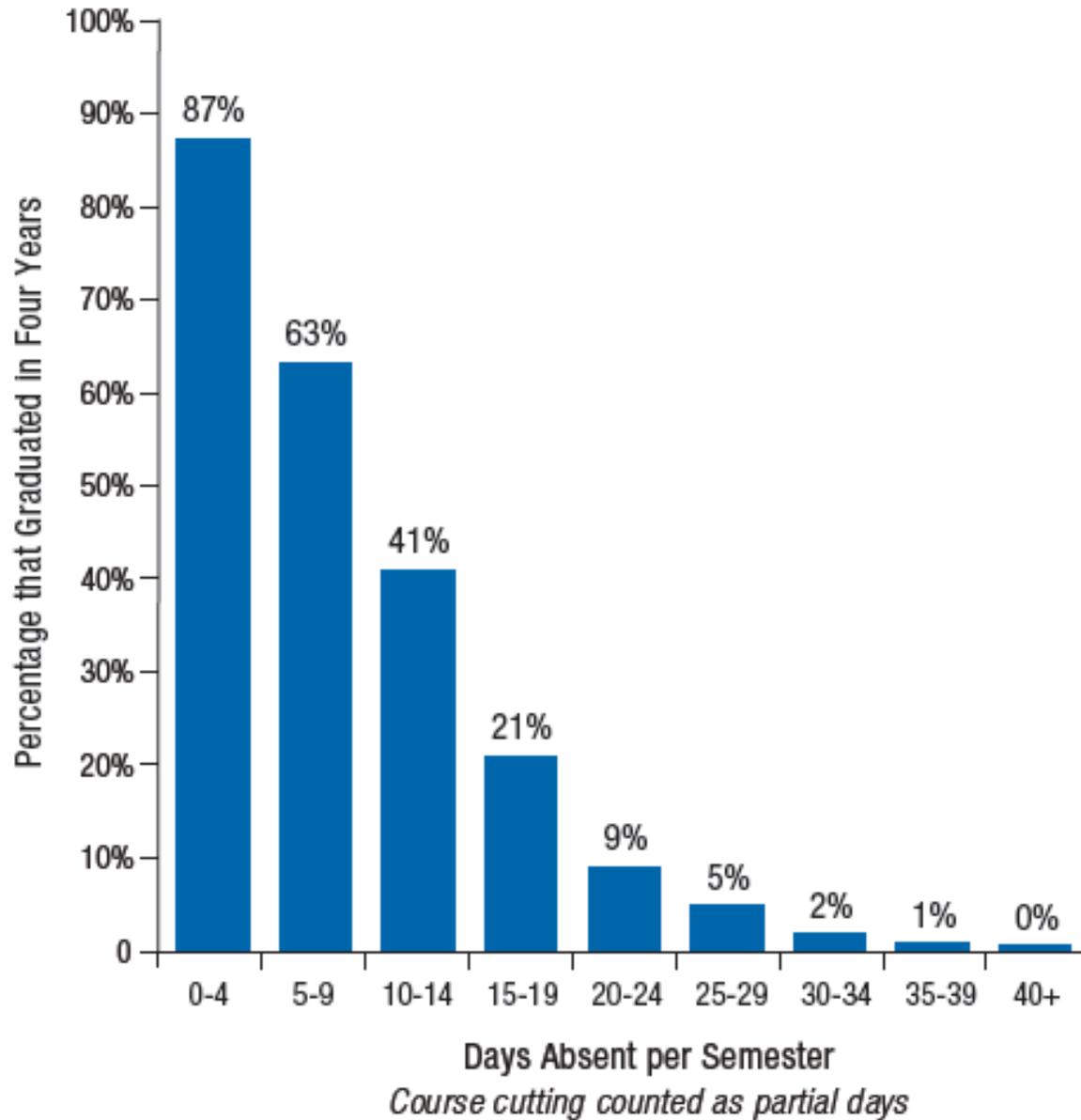
# Failures are much more strongly related to course absence than to incoming achievement.

**Average Number of Fs by Absences and Eighth-Grade Test Scores**



*This figure only includes students still enrolled in school at the end of their freshman year. Only cells with at least 5 percent of students are included.*

## Each week of absence in ninth grade is associated with a dramatically reduced likelihood of graduating



# To improve graduation, focus efforts on improving students' grades

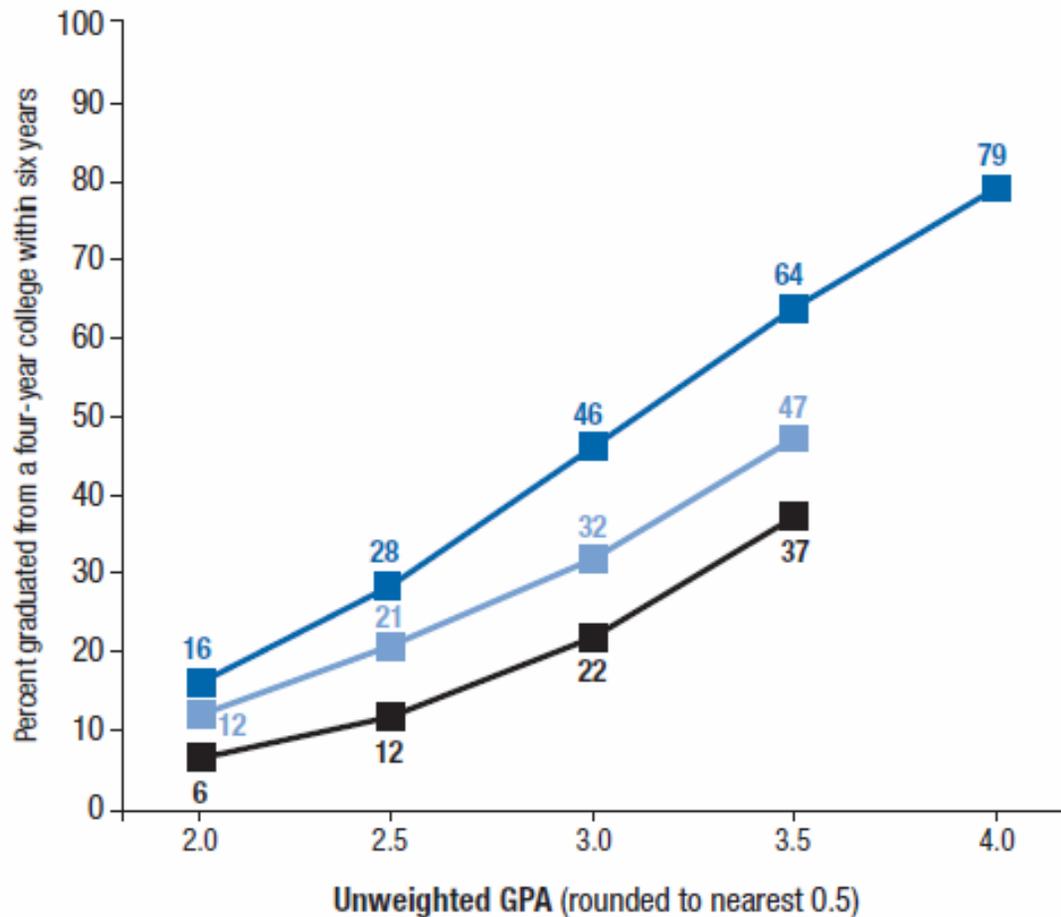
- Effective dropout prevention programs monitor students' grades and attendance
  - E.g., Check & Connect, ALAS
  - Other programs with common elements (case management, mentoring) but without monitoring of performance not successful
- Students do better in their classes where programs help students in their coursework



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# High school grades are more predictive of college graduation than test scores or curricular track

College graduation rates by high school GPAs of students in different curricular tracks



■ High TAP, honors track   ■ Average TAP, limited honors   ■ Low TAP, no honors

# Grades, failure rates and attendance are better at some schools than others

*Comparing similar students at schools that serve similar populations*

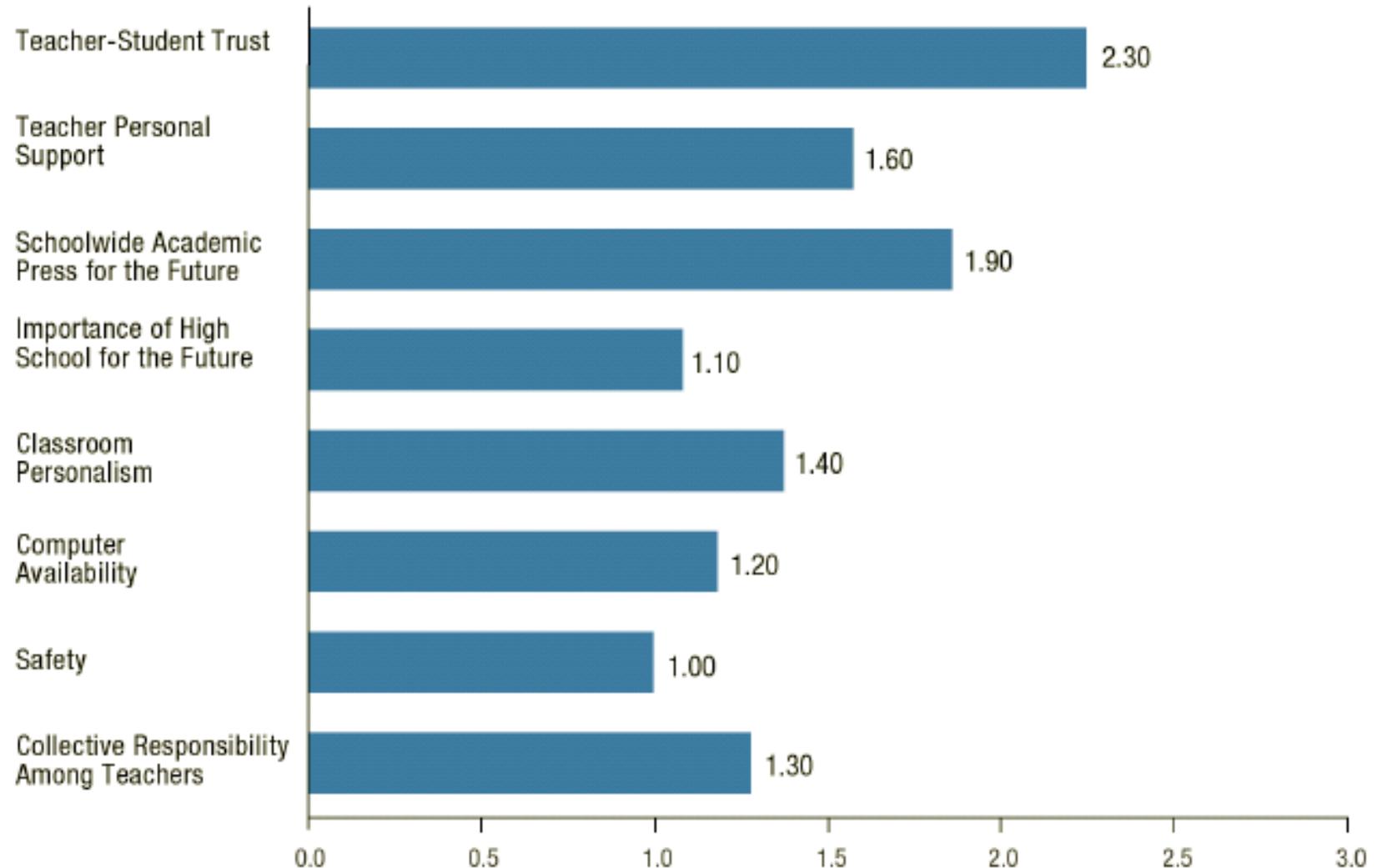
Attendance and grades are better at schools with certain characteristics...

- Good teacher-student relationships
- Where students see high school as relevant for their future and all students are pushed to prepare for college
- Programs and instruction are coordinated and sustained over time
- Also... there is a safe climate and many students are involved in extra-curricular activities



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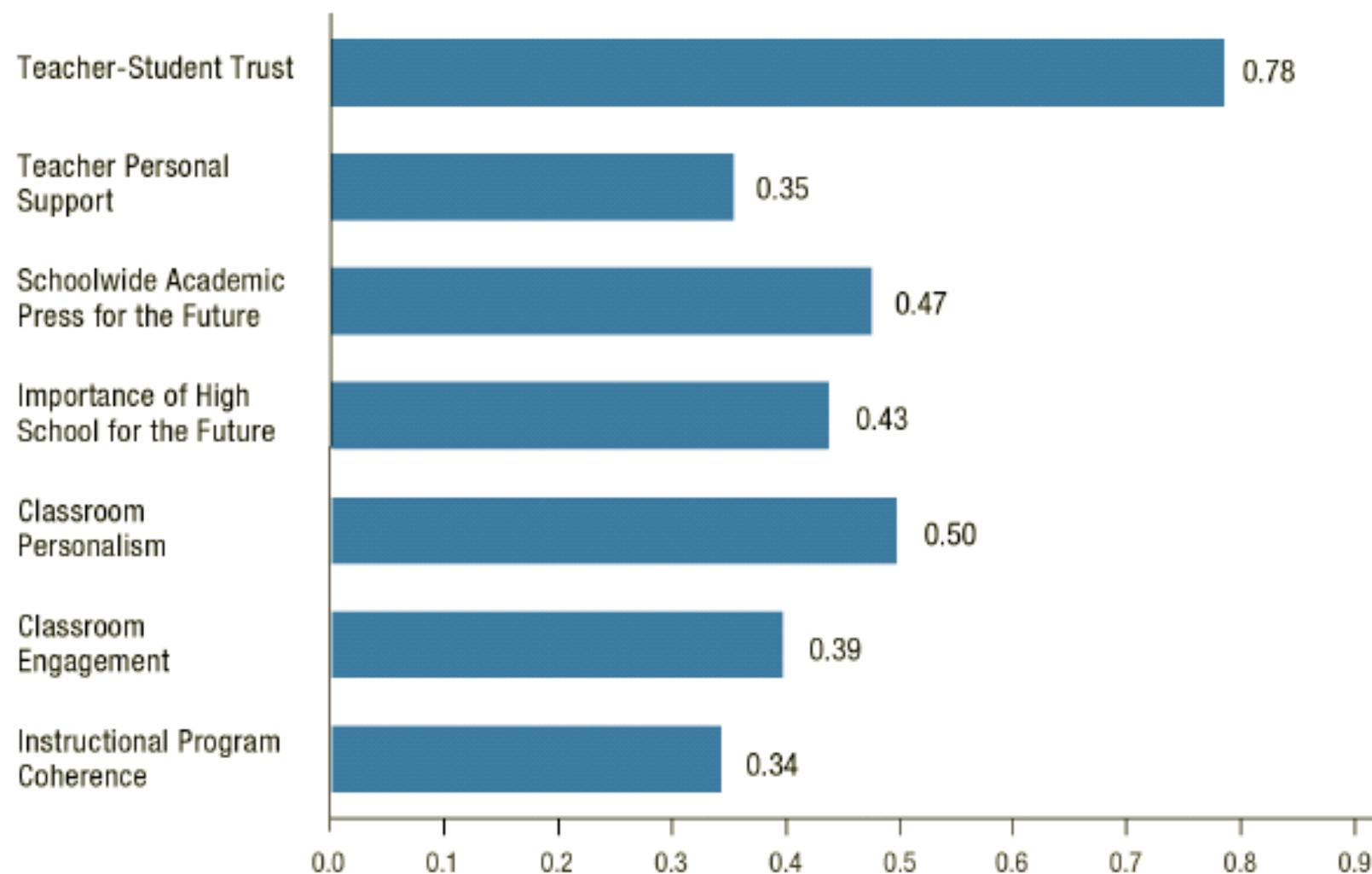
## Relationships of School Climate Measures with Course Absences



Difference in Average Number of Semester Absences  
Between Schools Low and High in Each Measure

*The width of the horizontal axis is approximately 1.5 standard deviations (3.20)*

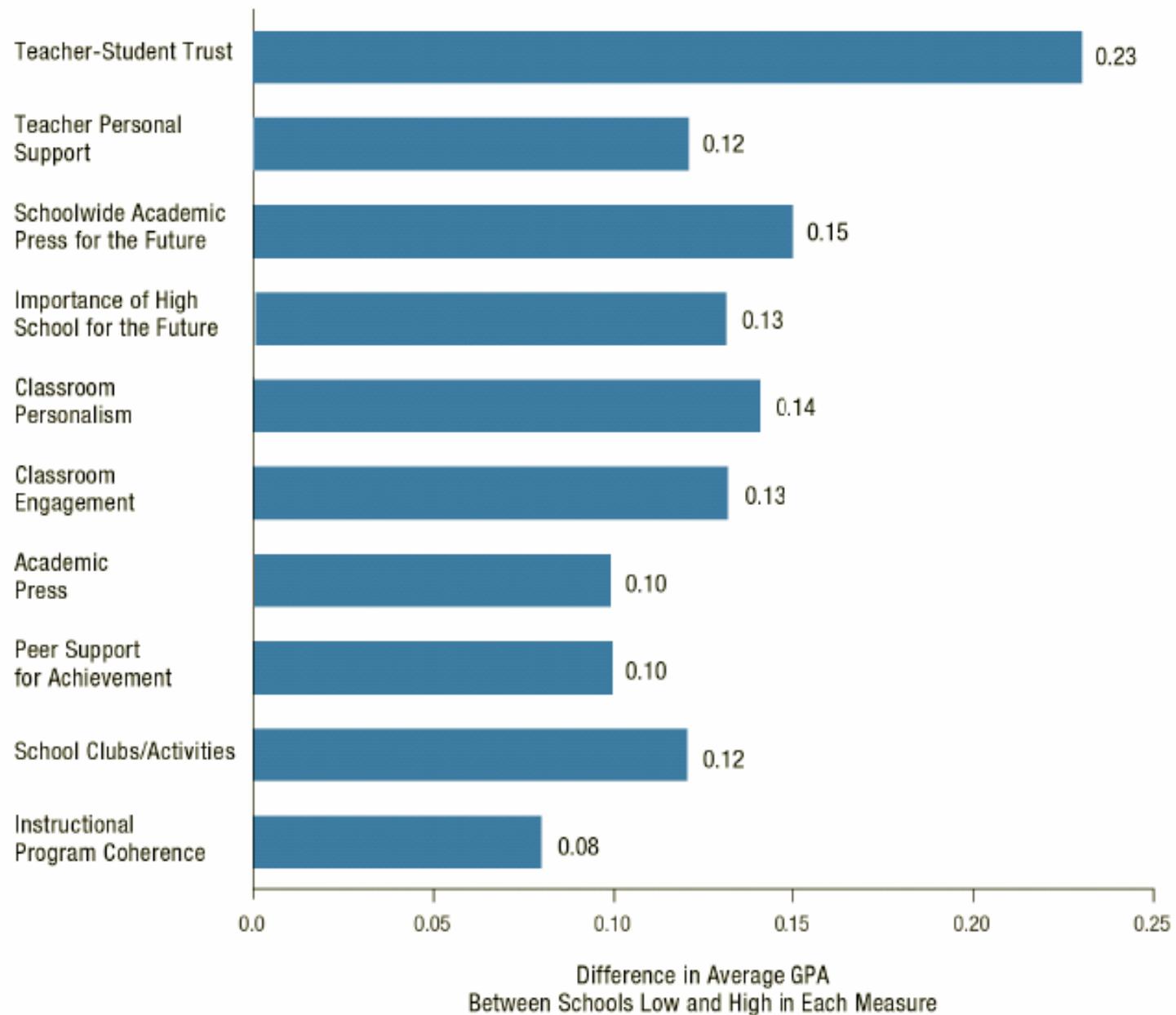
## Relationships of School Climate Measures with Course Failures



Difference in Average Number of Course Failures  
Between Schools Low and High in Each Measure

*The width of the horizontal axis is approximately 1.5 standard deviations (0.94)*

## Relationships of School Climate Measures with Average School GPA



# What happens in ninth grade to affect failure rates?

***New Research on the Transition between 8<sup>th</sup> and 9<sup>th</sup> grade***



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# Common Explanations for Declines in Course Performance from 8<sup>th</sup> to 9<sup>th</sup> grade

- Increased academic demands in high school
  - Students are not prepared for 9<sup>th</sup> grade work
- Changes in classroom contexts in high school
  - Poor classroom organization
  - Weaker teacher support
- Changes in the organization of instruction
  - Different teachers for different subjects
  - Larger school environment



Preliminary evidence does NOT support these common explanations

# Students are not overwhelmed with academic demands in 9th grade, compared to 8<sup>th</sup> grade

- School structure is more complex but not overwhelming
  - Students enjoy the variety of high school classes
  - Classroom contexts are similar in terms of engagement, demand and disruptions
  - Students report similar friends, and benefits of summer programs
- Most students report that 9<sup>th</sup> grade work is the same or easier than 8<sup>th</sup> grade
  - Those who say it's harder don't seem overwhelmed
  - Researcher observations confirm student reports



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# What is different about 9<sup>th</sup> grade?

## Less monitoring

“In [8<sup>th</sup> grade]...you still walk around in groups, you walk in a line. In [high school] you just walk. It’s your choice to go to lunch or English or all those classes. In [8<sup>th</sup> grade] you gotta go to all those classes. You get a choice in [high school]...It’s more free.”

- Class cutting increases dramatically in 9<sup>th</sup> grade, especially first and last periods, and spring term
- Tardiness is a very large problem in many schools



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# What is different about 9<sup>th</sup> grade?

## Increased opportunities for getting into disciplinary trouble

- More students, more likelihood of conflict
  - More chances for misunderstandings
  - More people you do not know
- Gang issues more prevalent
- School policies less lenient



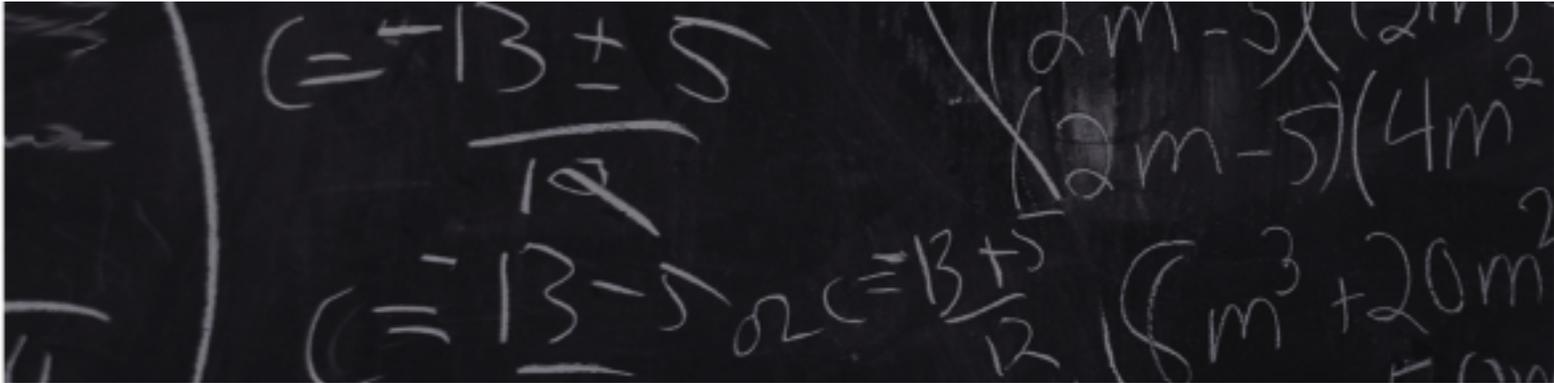
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# *What can school partners do?*

Getting all students to graduate and be college-ready is an extraordinary goal—it will require a dramatic change in practice

## **Keep the focus of efforts on students' course performance**

- **Closely monitor students' attendance and grades**
- **Help students develop the “soft skills” they need to succeed**
- **Work to coherently align programs with instruction**
  - Grades are better in schools where programs and instruction are coordinated and sustained over time
- **Motivate student effort by making the connection to future goals**
  - Attendance & grades are higher the more that students are pushed to prepare for college and see the connection between their work in high school and future goals



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