

***Class-to-Class Instructional Quality  
Differences  
and How They Matter***

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# ITEMS IN AN INSTRUCTIONAL QUALITY INDEX

## Interesting

- 1. My teacher makes lessons interesting.*
- 2. My teacher makes learning enjoyable.*

## Encouraging (Support and Press)

- 3. The teacher in this class encourages me to do my best.*

## Relentless (Press)

- 4. In this class, the teacher accepts nothing less than our full effort.*
- 5. My teacher works hard to make sure we learn a lot.*

## Rigorous (Press)

- 6. My teacher wants us to use our thinking skills, not just memorize things.*

## Welcomes Questions (Feasibility&Support)

- 7. My teacher in this class likes it when we ask questions.*
- 8. The teacher in this class welcomes questions if anyone gets confused.*

## Multiple explanations (Feasibility)

- 9. If you don't understand something, my teacher explains it another way.*
- 10. My teacher has several good ways to explain each topic that we cover.*

**Aspects of Student Engagement  
Affected by the Quality of Instruction, in ways that  
sometimes differ by race and gender:**

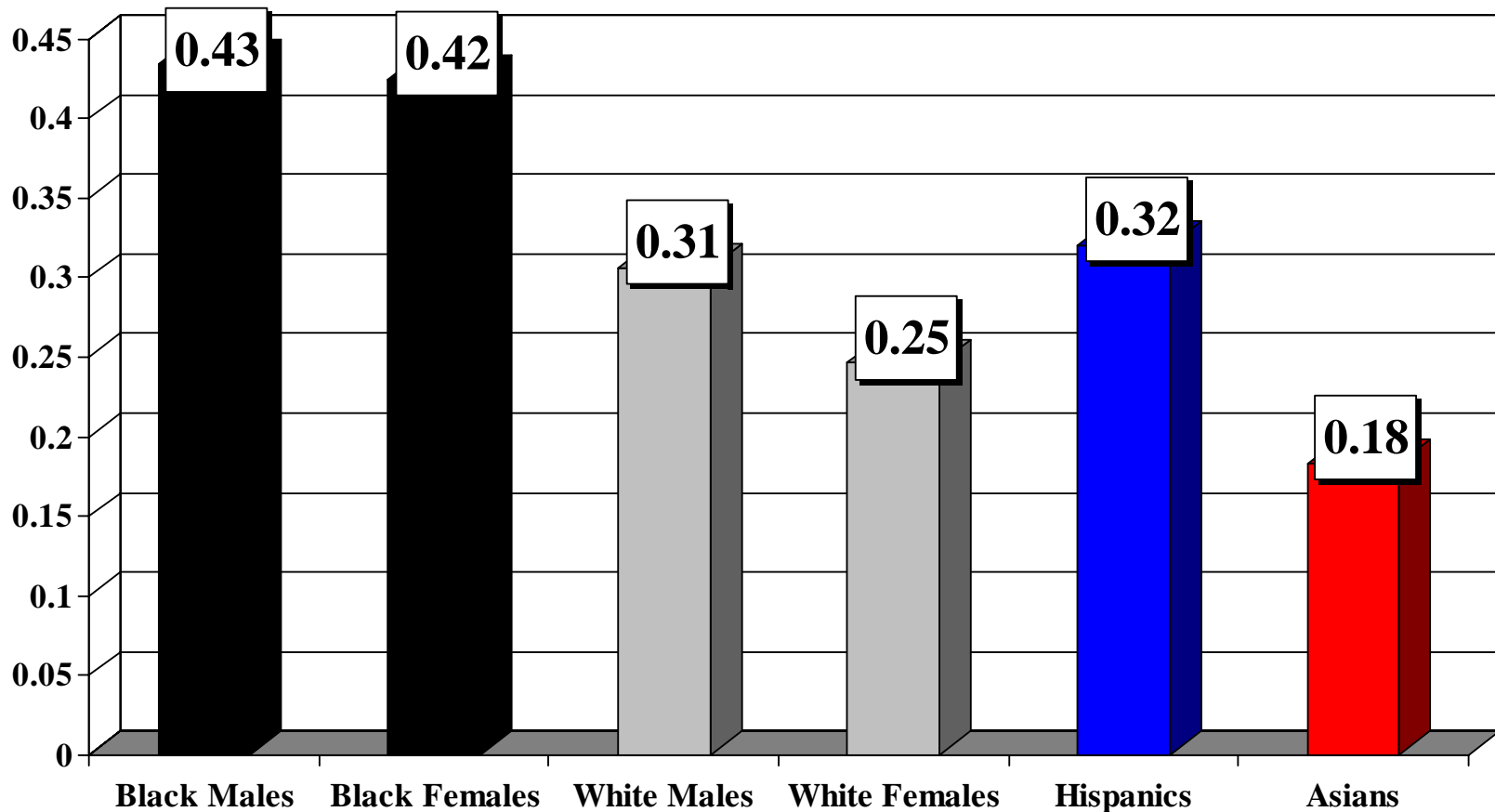
- ✓ **Mastery orientation (focus on learning)**
- ✓ **Help seeking attitudes and behaviors**
  - ✓ **“Good” vs. “Problem” behavior**
  - ✓ **Punctuality and Attendance**
  - ✓ **Sense of efficacy**
- ✓ **Homework completion rates**

**Findings from three-dozen secondary schools  
across eight states**

# Varying instruction affects class-to-class differences in the same students'

## BEHAVIOR.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms. The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)

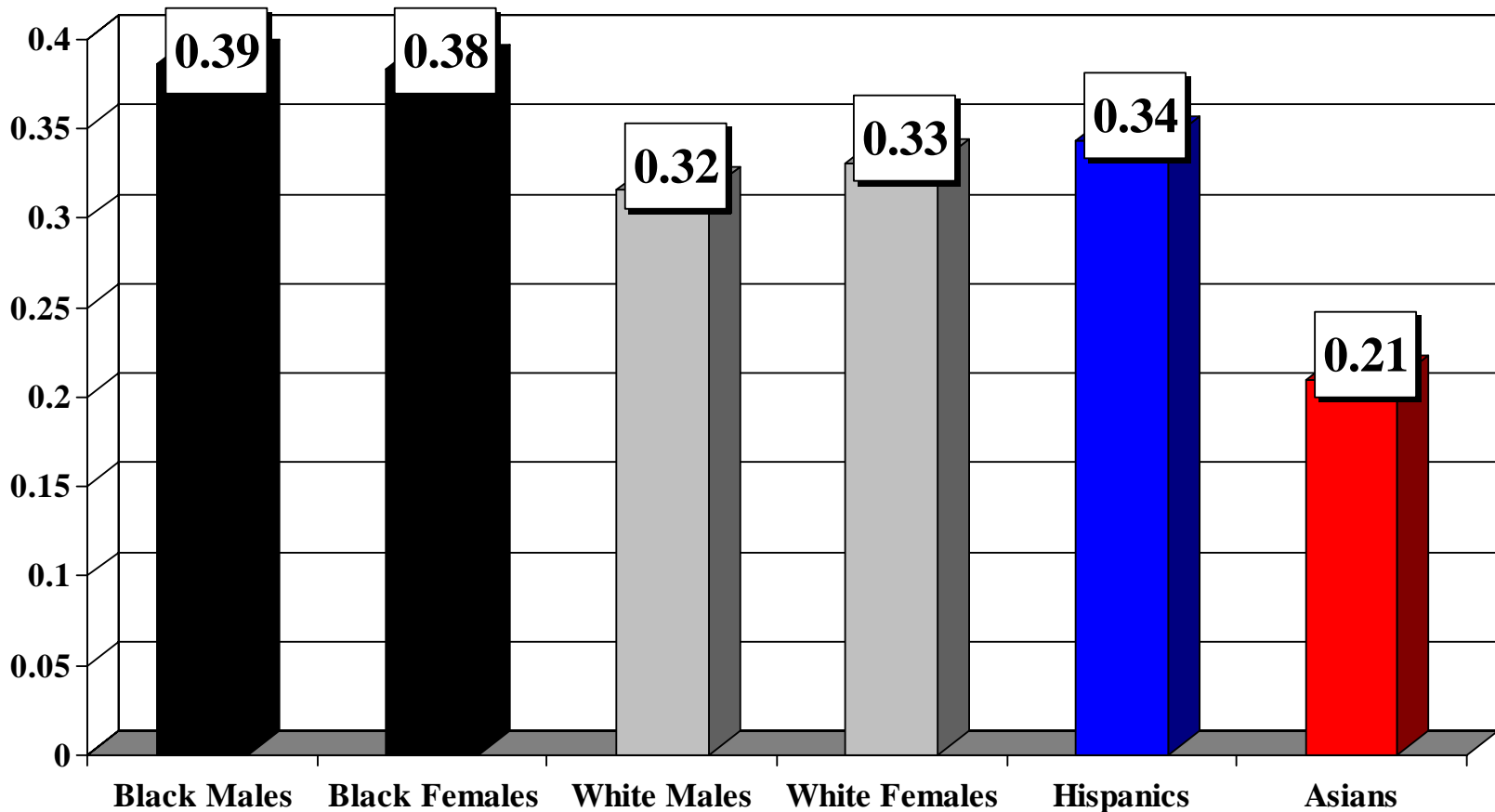


**Note: sample sizes for Hispanics and Asians were too small for separate gender estimates.**

# Varying instruction affects class-to-class differences in the same students'

## CLASS ATTENDANCE AND PUNCTUALITY.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms. The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)

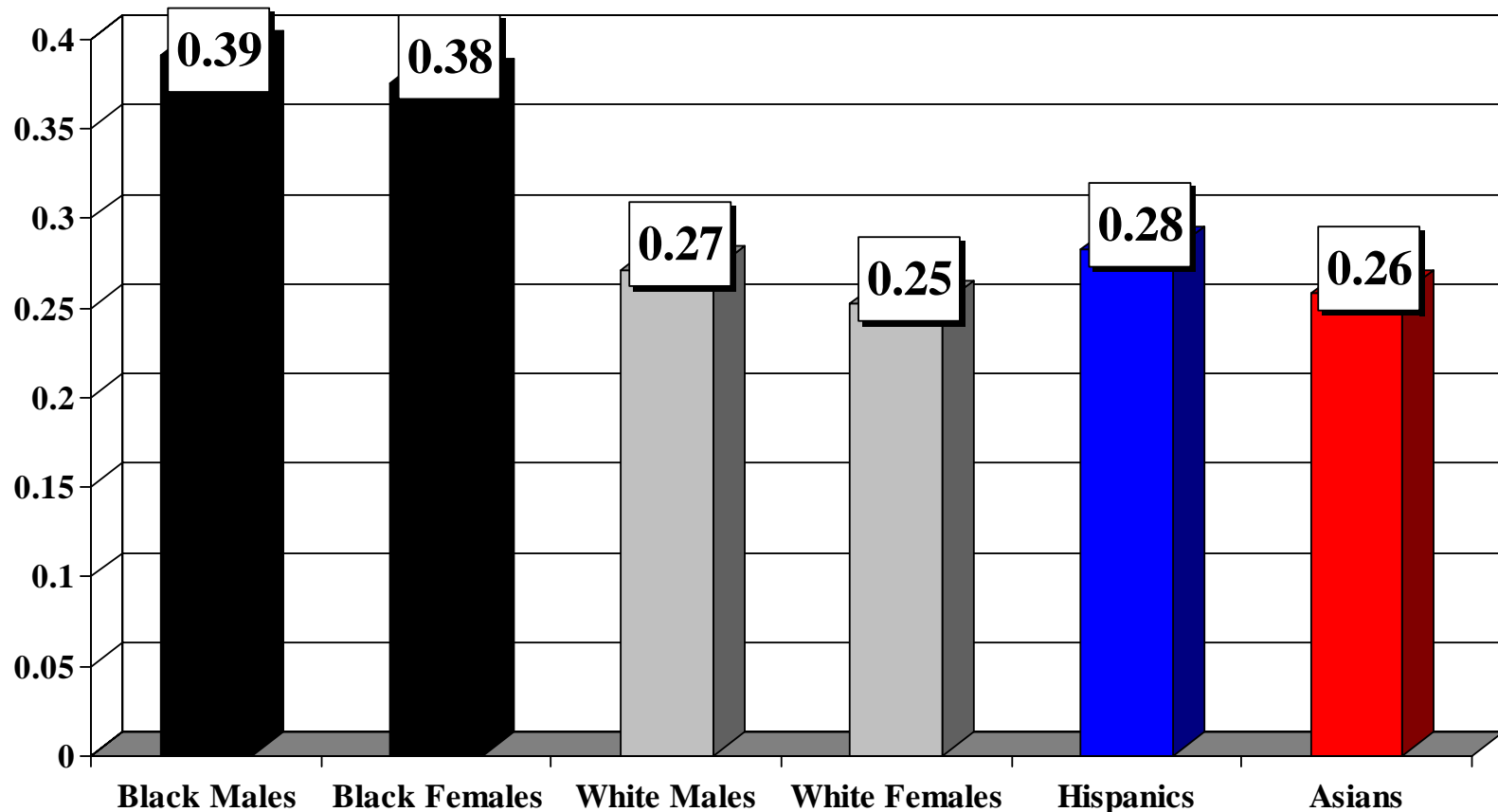


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# Varying instruction affects class-to-class differences in the same students'

## SENSE OF EFFICACY.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms. The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)

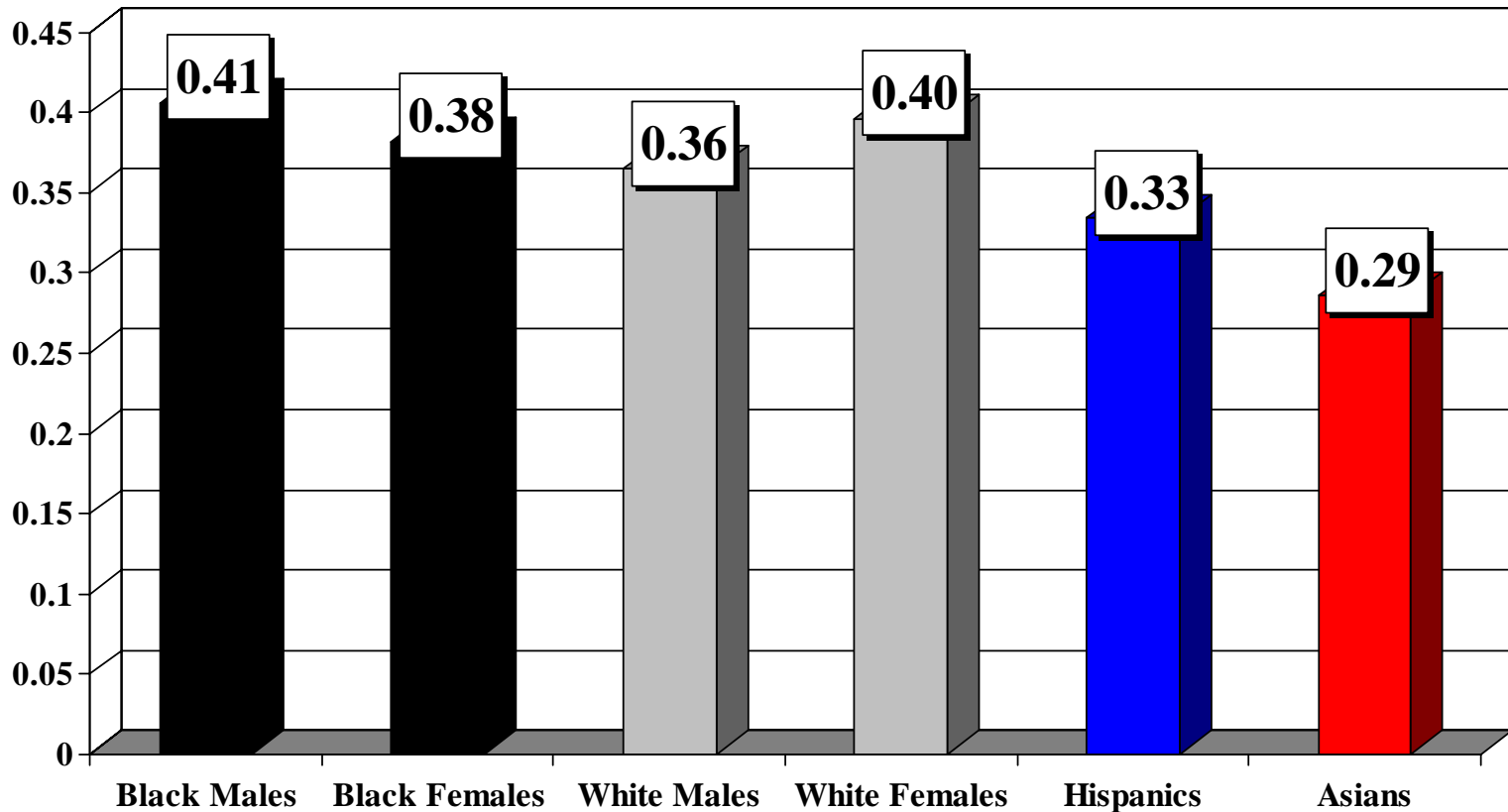


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# Varying instruction affects class-to-class differences in the same students'

## MASTERY ORIENTATION.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms (student fixed effects). The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)

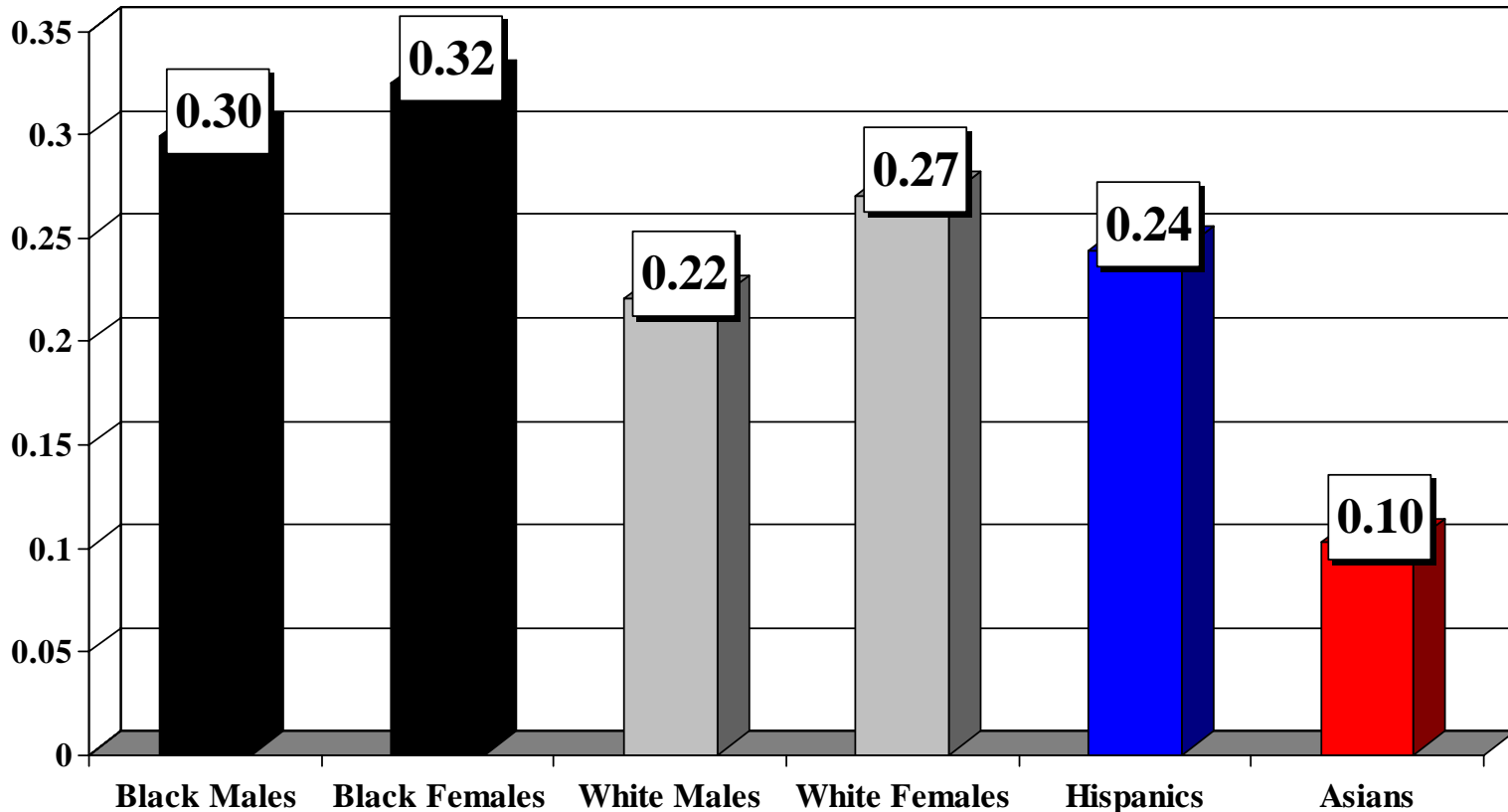


Note: sample sizes for Hispanics and Asians were too small for separate gender estimates.

# Varying instruction affects class-to-class differences in the same students'

## HOMEWORK COMPLETION.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms (student fixed effects). The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)

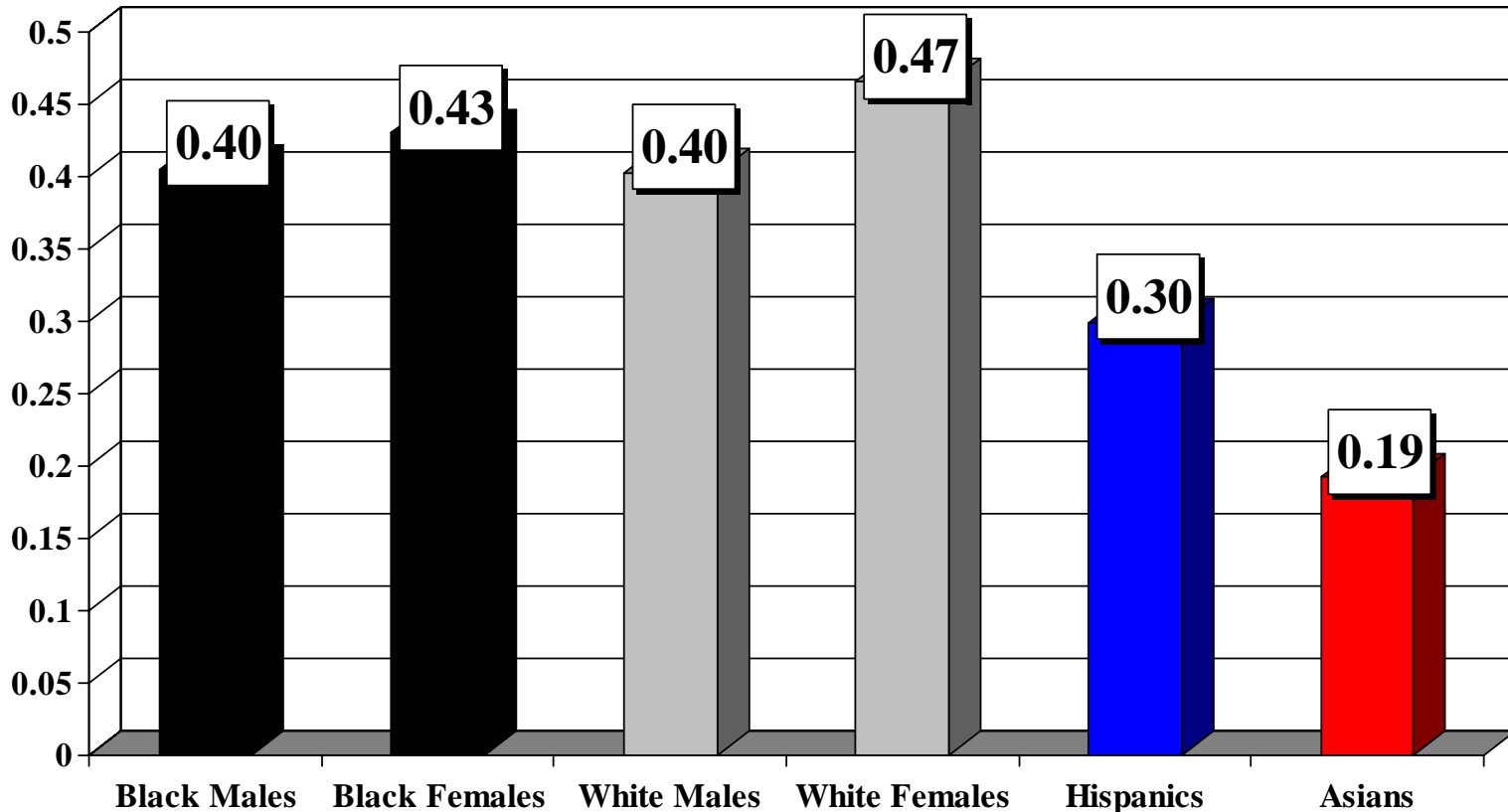


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# Varying instruction affects class-to-class differences in the same students'

## WILLINGNESS TO SEEK HELP FROM THE TEACHER.

The chart shows race and gender patterns for middle & high school students, based on surveying the same students in multiple classrooms (student fixed effects). The instructional quality index is based on ten measures of classroom conditions and omits the student's own response from the classroom composite. (Effect sizes in standard deviations)



Note: sample sizes for Hispanics and Asians were too small for separate gender estimates.

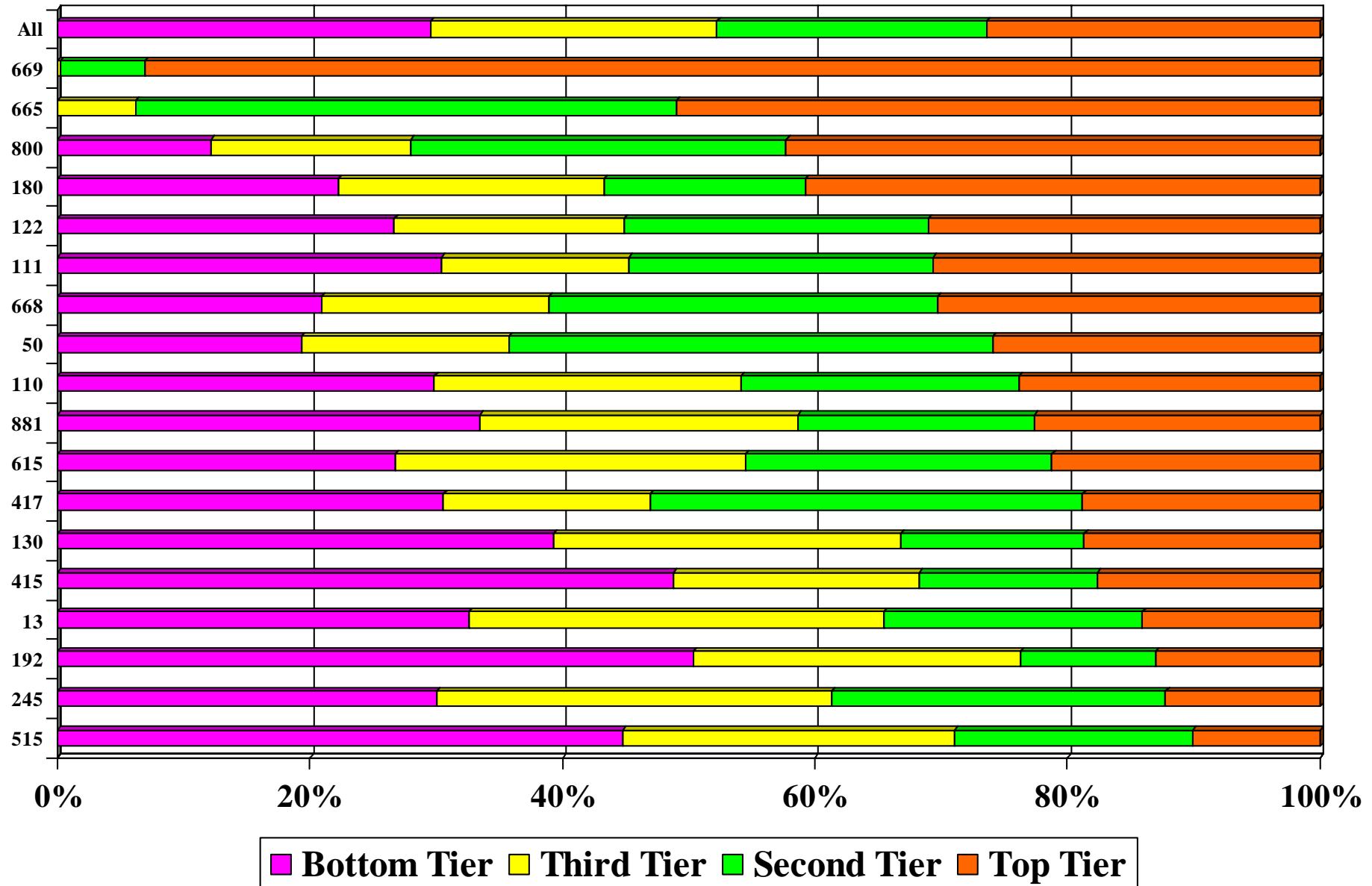
## Percentages in each tier who agree with the statement:

	Teacher Quality Index Tiers:	1	2	3	4
	<b>Interesting</b>				
1.	<i>My teacher makes lessons interesting.</i>	<b>25</b>	<b>40</b>	<b>54</b>	<b>72</b>
2.	<i>My teacher makes learning enjoyable.</i>	<b>23</b>	<b>39</b>	<b>52</b>	<b>70</b>
	<b>Encouraging (Support and Press)</b>				
3.	<i>The teacher in this class encourages me to do my best.</i>	<b>32</b>	<b>48</b>	<b>60</b>	<b>75</b>
	<b>Relentless (Press)</b>				
4.	<i>In this class, the teacher accepts nothing less than our full effort.</i>	<b>36</b>	<b>48</b>	<b>59</b>	<b>71</b>
5.	<i>My teacher works hard to make sure we learn a lot.</i>	<b>40</b>	<b>58</b>	<b>72</b>	<b>86</b>

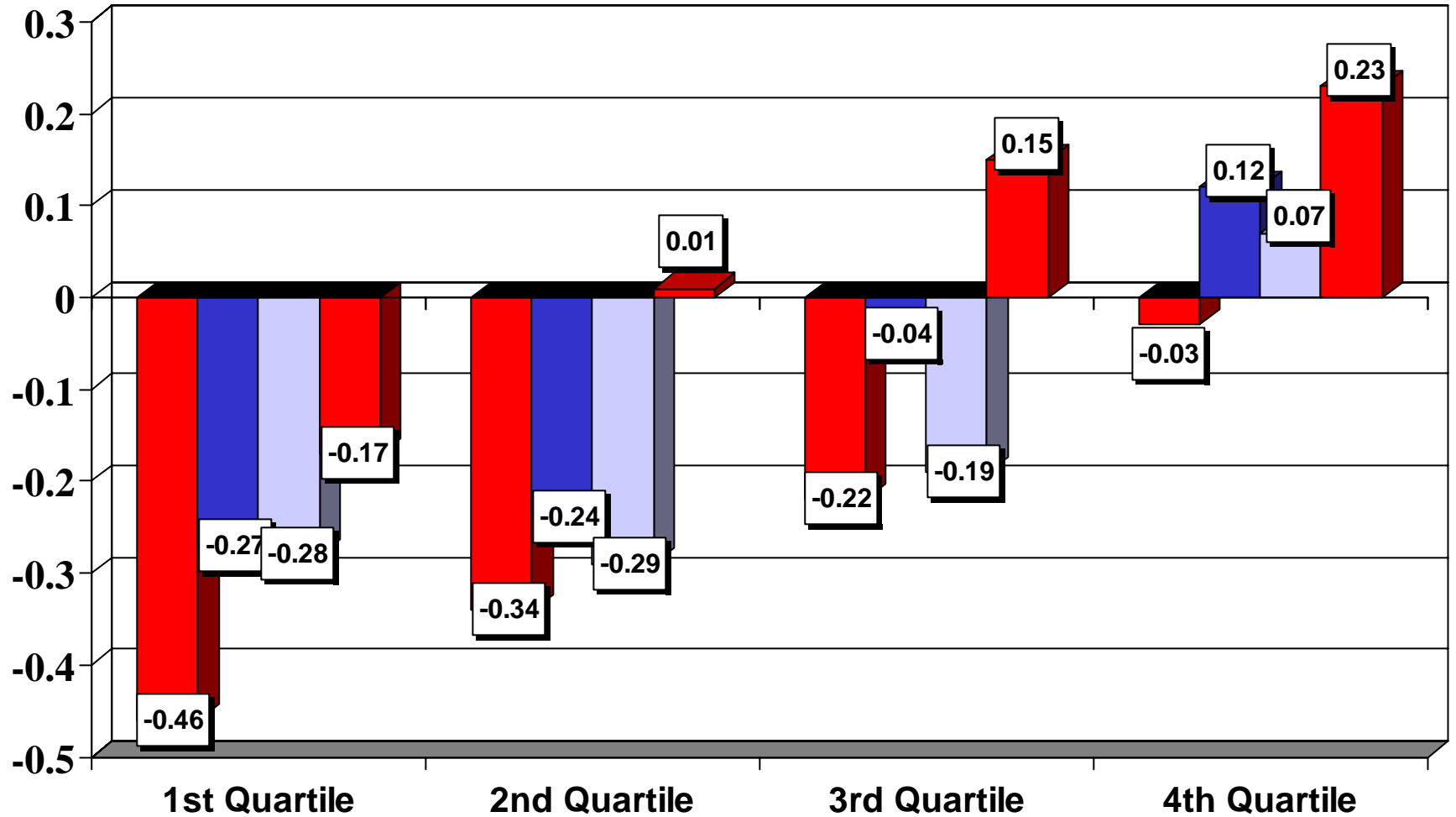
## Table Continued.

		TQI Tiers:			
		1	2	3	4
	<b>Rigorous (Press)</b>				
<b>6.</b>	<i>My teacher wants us to use our thinking skills, not just memorize things.</i>	<b>41</b>	<b>56</b>	<b>66</b>	<b>80</b>
	<b>Welcomes Questions (Feasibility &amp; Support)</b>				
<b>7.</b>	<i>My teacher in this class likes it when we ask questions.</i>	<b>36</b>	<b>53</b>	<b>64</b>	<b>79</b>
<b>8.</b>	<i>The teacher in this class welcomes questions if anyone gets confused.</i>	<b>42</b>	<b>59</b>	<b>70</b>	<b>83</b>
	<b>Multiple explanations (Feasibility)</b>				
<b>9.</b>	<i>If you don't understand something, my teacher explains it another way.</i>	<b>33</b>	<b>53</b>	<b>66</b>	<b>80</b>
<b>10.</b>	<i>My teacher has several good ways to explain each topic that we cover.</i>	<b>29</b>	<b>47</b>	<b>60</b>	<b>76</b>

# Teacher quality distributions for 18 high schools, across four tiers of classroom instructional quality, as rated by students.



Self-reported behavior among males in each quartile of the instructional quality distribution across secondary school classrooms in three dozen secondary schools. (s.d. units)



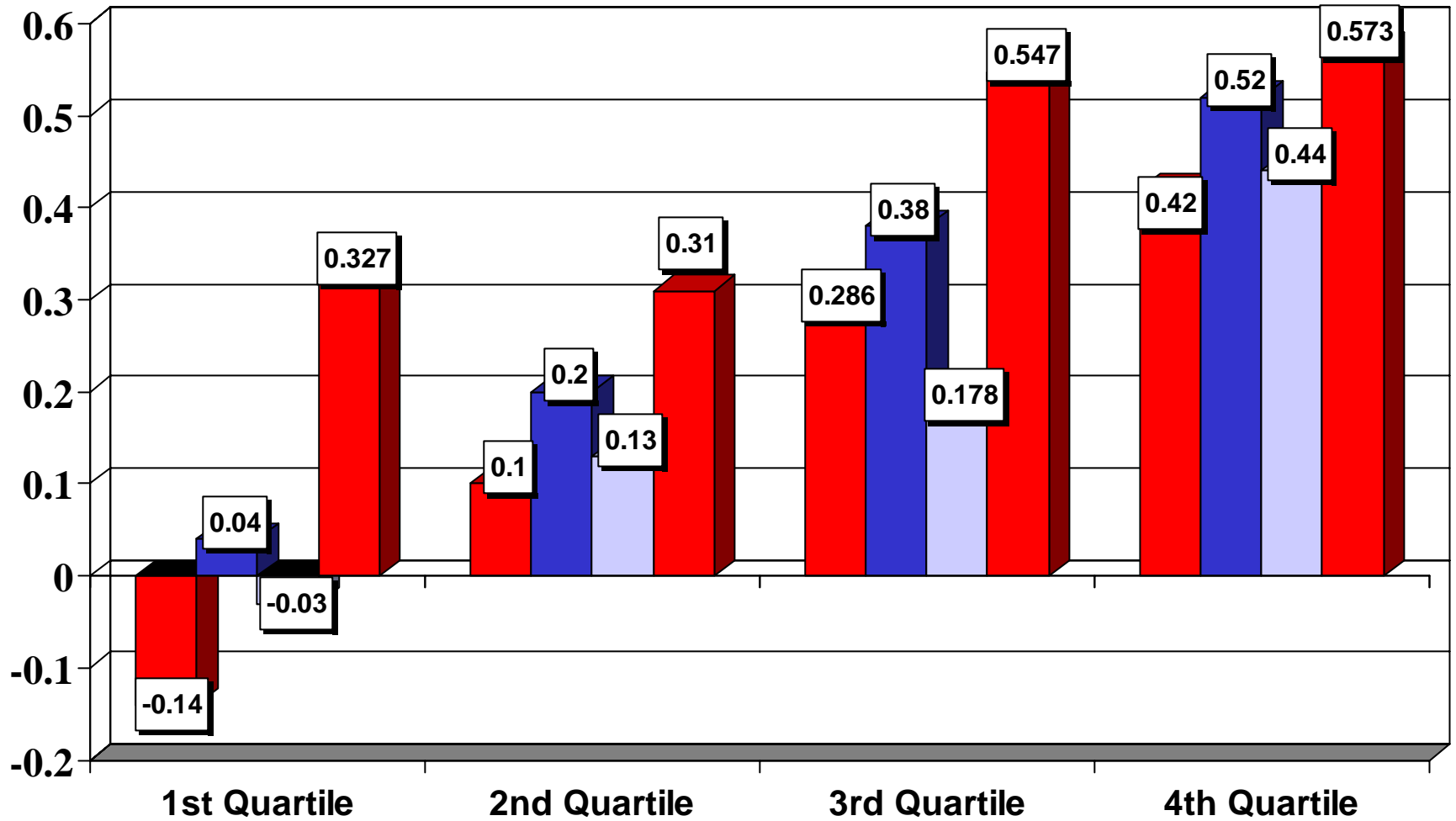
Black Males

White Males

Hispanic Males

Asian Males

Self-reported behavior among girls in each quartile of the instructional quality distribution across secondary school classrooms in three dozen secondary schools. (s.d. units)



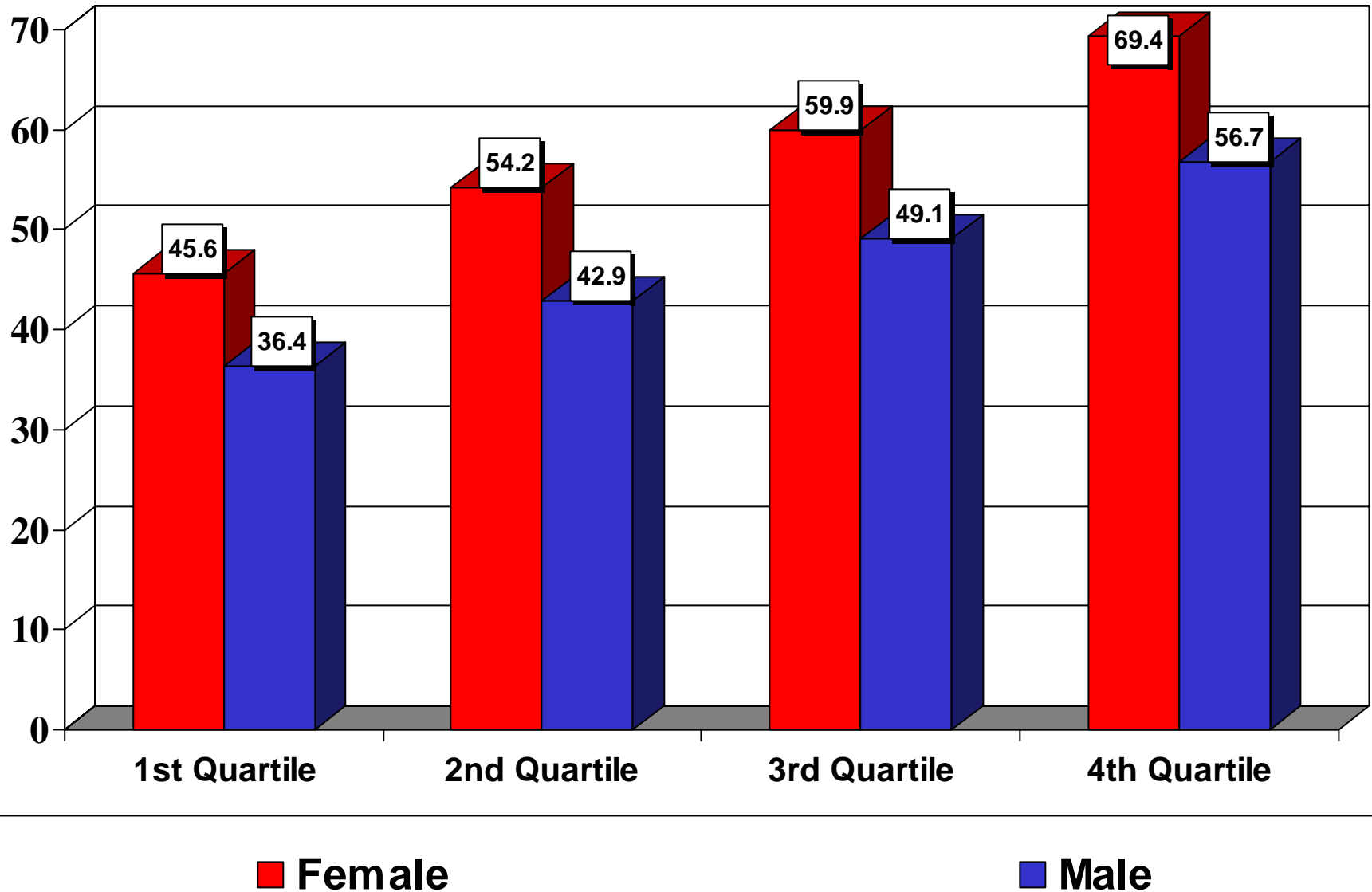
■ Black Females

■ White Females

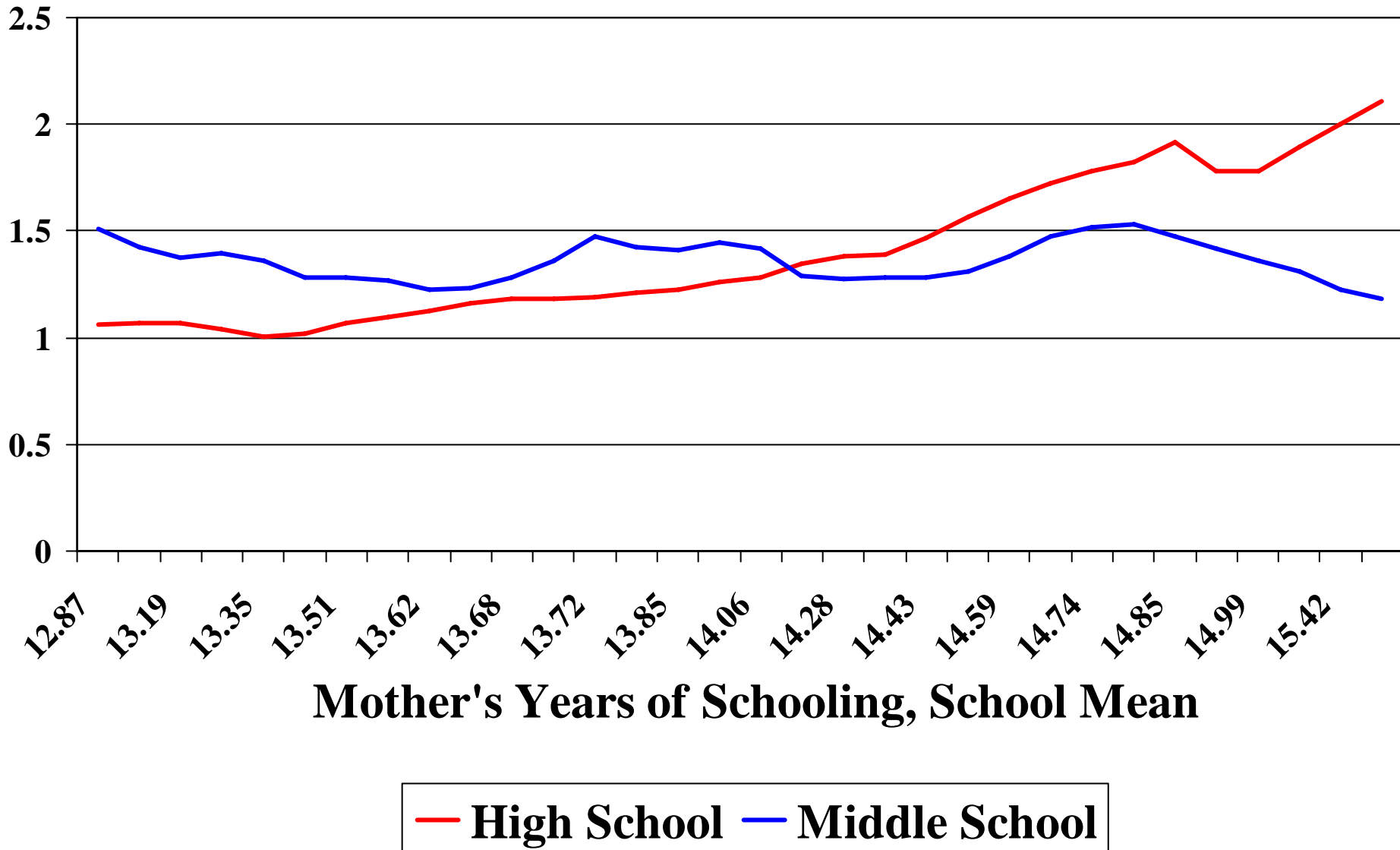
■ Hispanic Females

■ Asian Females

Percent responding “True” or “Mostly True,” to: “I have done my best quality work in this class all year long,” in each quartile of the instructional quality distribution across secondary school classrooms in three dozen secondary schools.



# Hours Per week of Homework for Surveyed Class, School Means for 17 Middle Schools and 19 High Schools (smoothed)



## **Conclusion**

- ✓ The quality of instruction matters!  
Sometimes it matters more for some students than for others, including more for the behavior of blacks than whites.**
- ✓ Further, all qualities of instruction are well represented in most schools.**
- ✓ Our task may be less to turn bad schools into good ones, than to turn bad instruction into better instruction in all types of schools.**