Briefing on High School Transcripts

Summary of Findings, 1982-2004

February 8, 2007

Transcript data sources

Education Longitudinal Study of 2002/04 Transcripts Component

- Transcripts collected from 14,900 students in 2004
- National study representing 2.7 million of 2003-04 high school graduates
- Based on transcripts from over 750 public and private schools
- Includes mathematics and reading achievement test scores of the students
- Transcript studies also conducted as part of longitudinal studies in 1982 (HS&B) and 1992 (NELS)

High School Transcript Study of the National Assessment of Educational Progress

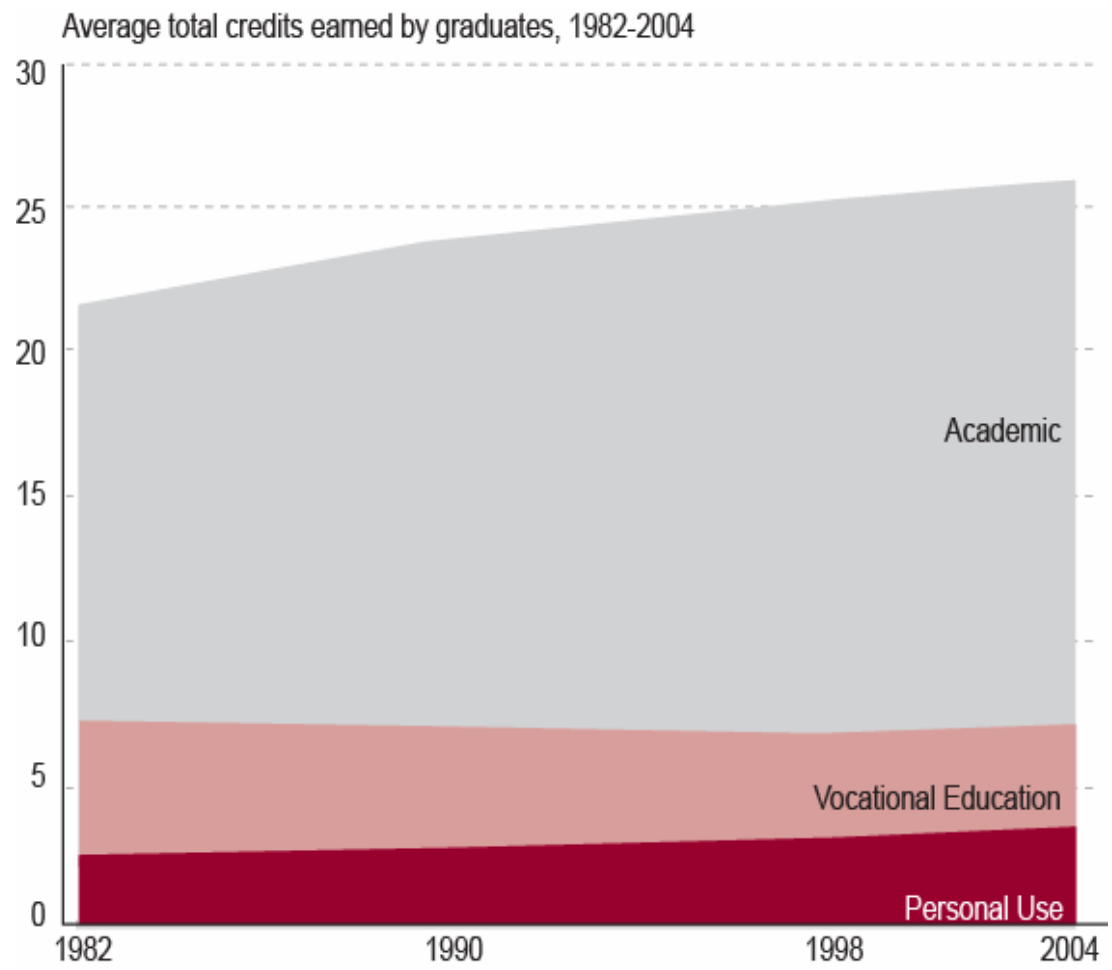
- National study representing 2.7 million 2005 high school graduates
- Transcripts collected from 26,000 students and over 700 schools
- Transcripts linked to NAEP achievement tests of the students
- Transcript studies conducted in 1987, 1990, 1994, 1998, 2000, and 2005

TRENDS IN COURSETAKING

Trends in average credits completed by major program area

Between 1982-2004,

- Total average credits completed by graduates increased from 22 to 26
- Average credits of academic courses increased
- Average credits of vocational education courses decreased

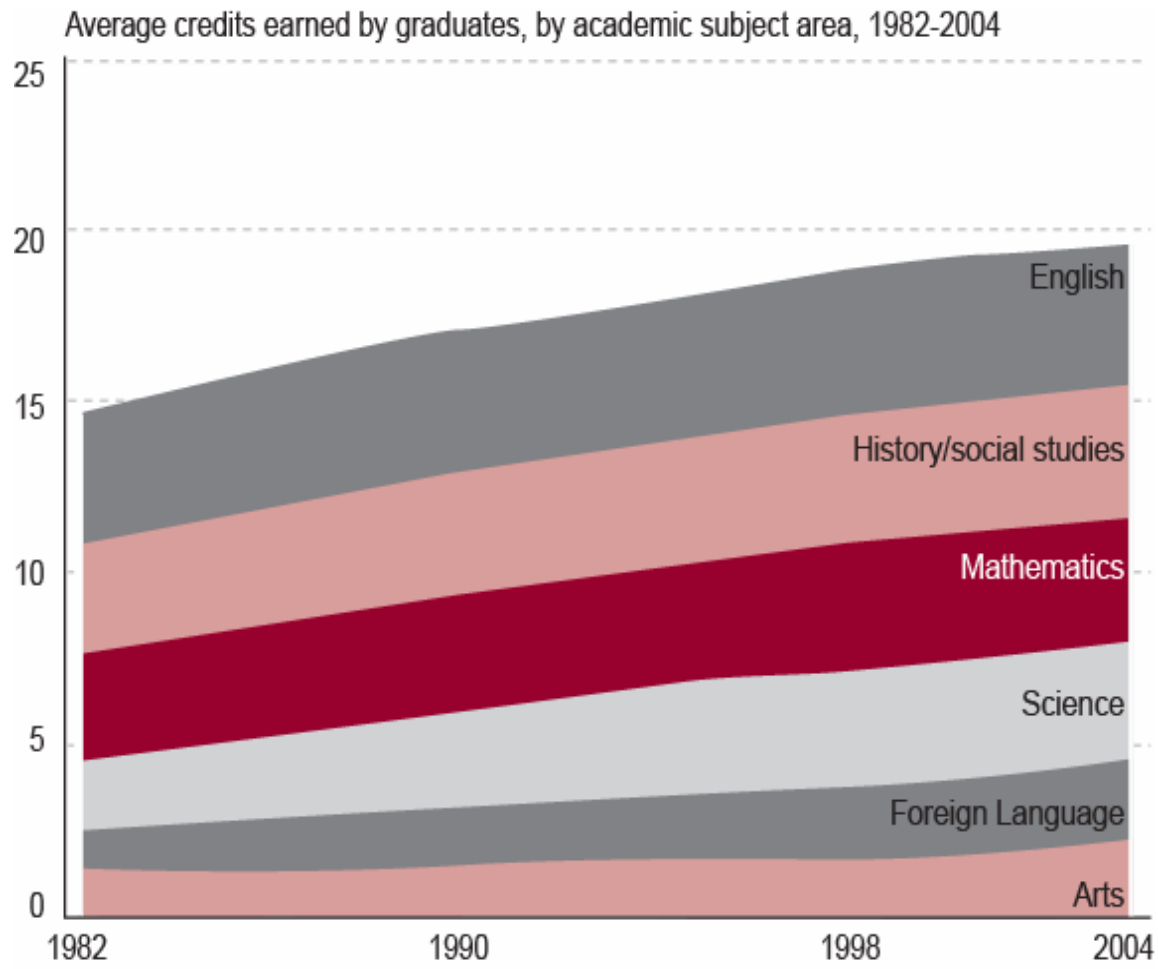


ELS:2002/04; HS&B 1980/82; and NAEP, 1990, 1998, Transcript Components

TRENDS IN COURSETAKING

Trends in courses completed by high school graduates

- Between 1982-2004, average credits earned increased in all academic subject areas



ELS:2002/04; HS&B 1980/82; and NAEP, 1990, 1998, Transcript Components

TRENDS IN COURSETAKING

Trend in average credits of civics and arts completed by graduates

Year	Average credits in civics	Percent increase compared to previous period	Average credits in the arts	Percent increase compared to previous period
2004	0.62	-5	2.03	+8
1998	0.65	+10	1.89	+24
1990	0.59	+9	1.52	+6
1982	0.54	--	1.44	--

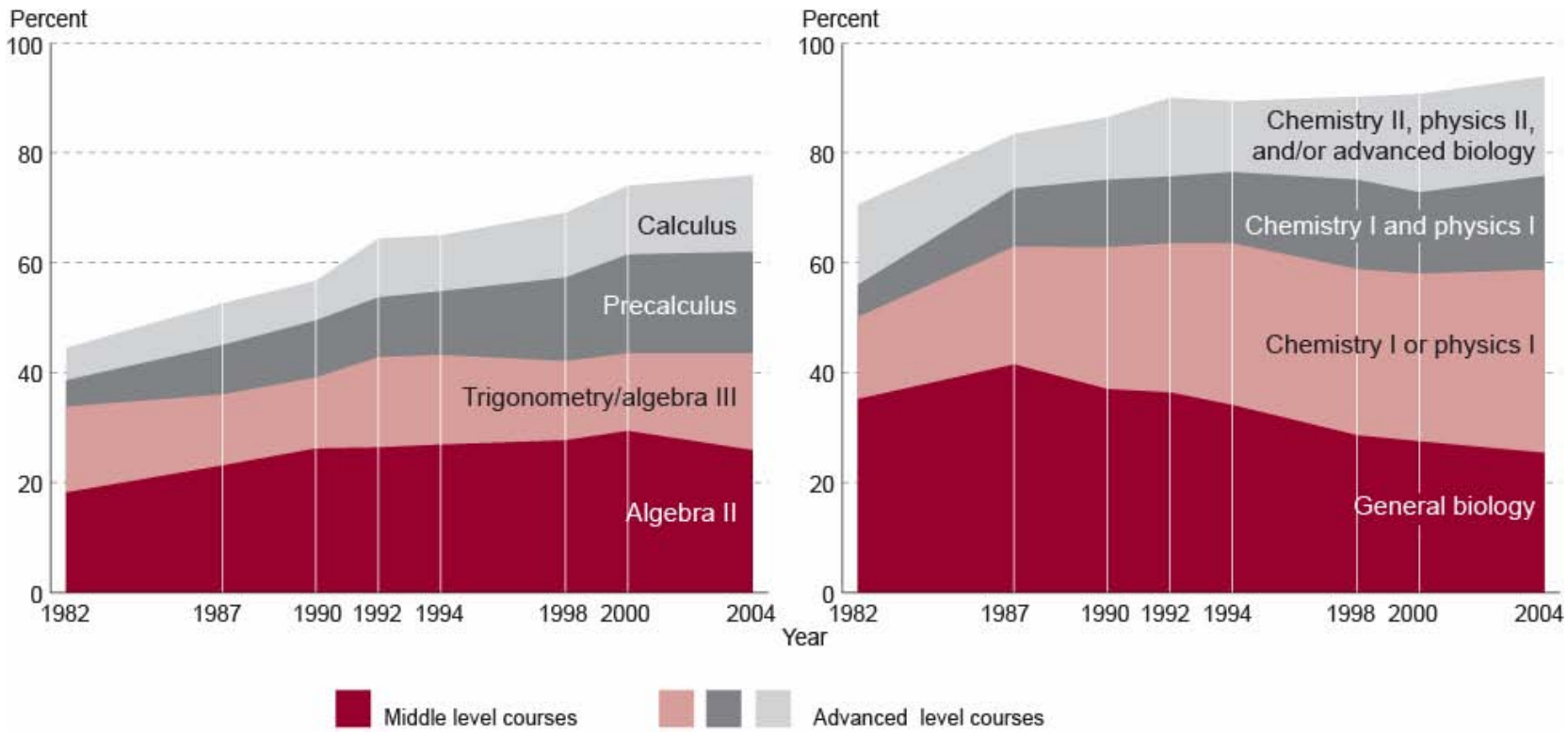
-- Not applicable

ELS:2002/04; HS&B 1980/82; and NAEP, 1990, 1998, Transcript Components

TRENDS IN COURSETAKING

Trends in courses completed by high school graduates

- The percentages of students reaching the Advanced levels of ***mathematics*** and ***science*** course work have increased substantially since 1982

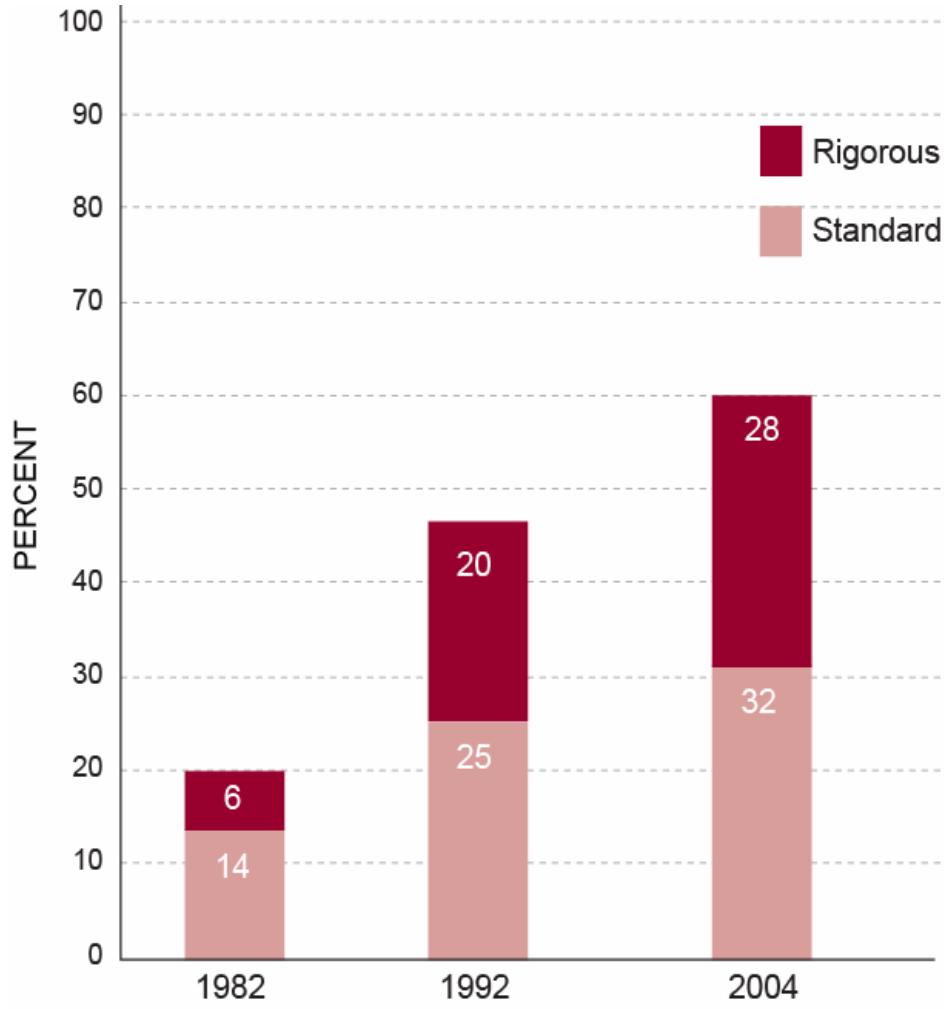


ELS:2002/04; NELS:88/92; HS&B 1980/82 and NAEP, 1987, 1990, 1994, 1998, 2000, Transcript Components

TRENDS IN COURSETAKING

Trends in rigor of academic curriculum completed by graduates

- Sixty percent of all high school graduates completed the requirements for a standard "New Basics" or Rigorous curriculum in 2004
- About 20 percent completed those requirements in 1982



ELS:2002/04; NELS:88/92; and HS&B 1980/82 Transcript Components

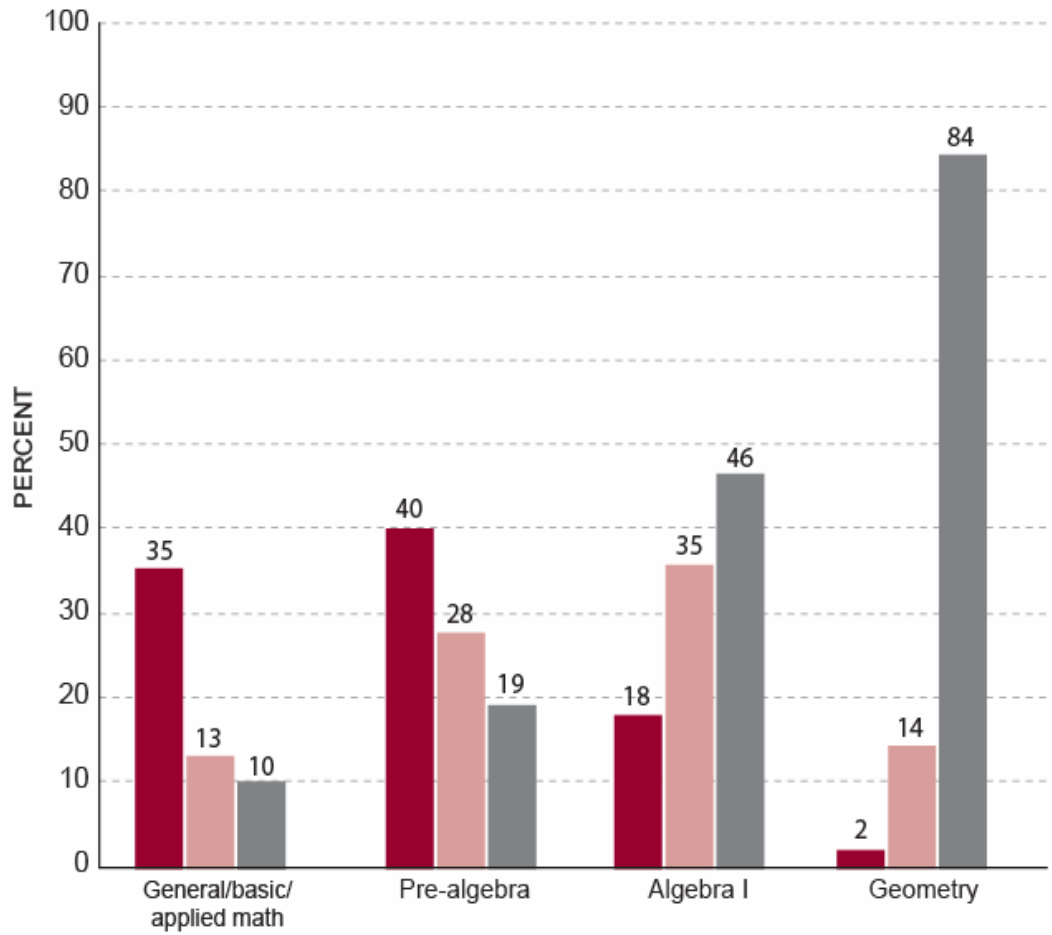
PATTERNS OF COURSE WORK

Ninth and eventual 12th grade mathematics course completed

- Among students who complete geometry in the ninth grade, 84% take Advanced mathematics (trigonometry-pre-calculus or calculus) by the 12th grade
- Among students who take general or applied mathematics in the ninth grade, 10% take Advanced mathematics

Percent completing specific course by end of high school

- Algebra I/geometry
- Algebra II
- Advanced mathematics, including calculus



Mathematics course taken in 9th grade

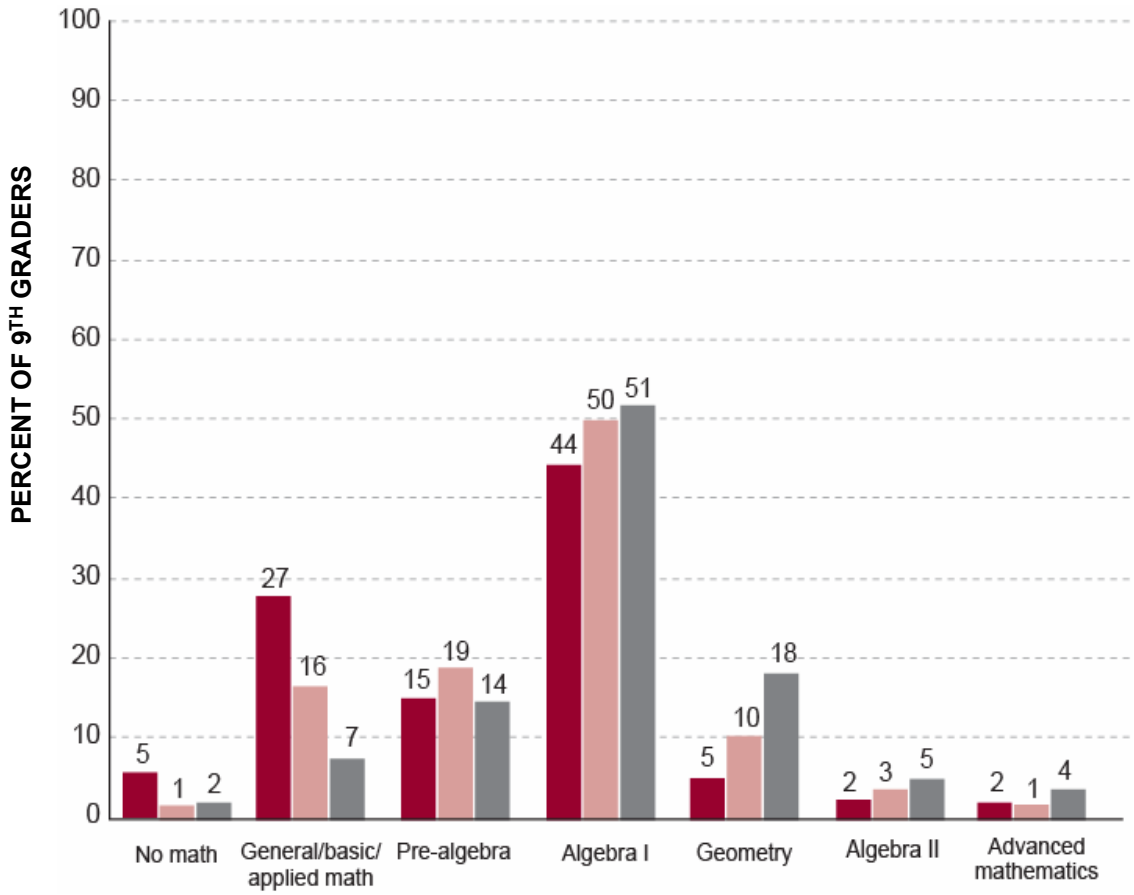
ELS:2002/04 Transcript Component

PATTERNS OF COURSE WORK

Mathematics course taken in the 9th grade

Between 1982 and 2004 the percentage of 9th graders who complete:

- General/basic or applied math has declined from 27 to 7 percent
- Algebra I has increased from 44 to 51 percent
- Geometry has increased from 5 to 18 percent



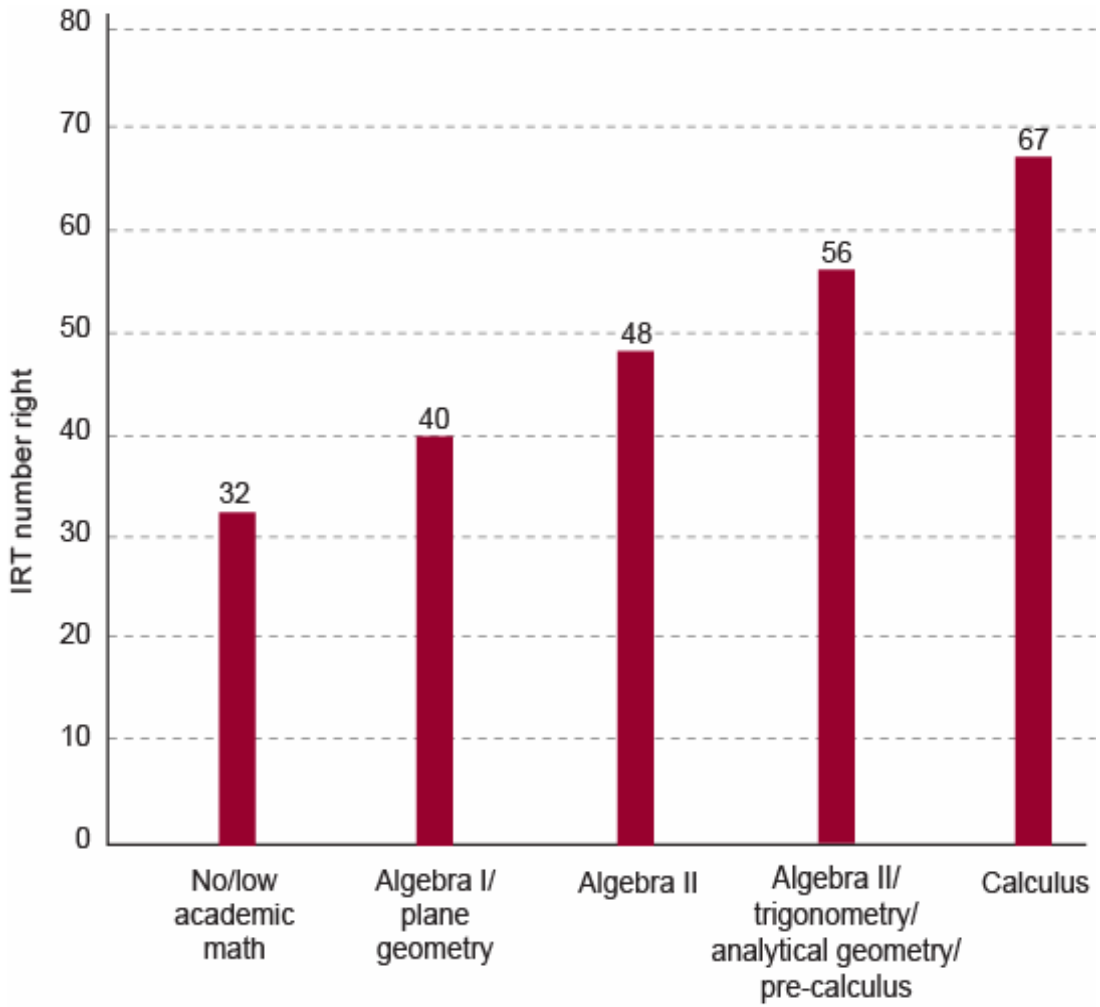
Mathematics course taken in 9th grade

ELS:2002/04 Transcript Component

COURSE TAKING AND ACHIEVEMENT

Advanced level courses and academic achievement, 2004

- Graduates who completed Advanced level courses in mathematics had higher achievement scores than other students in 2004

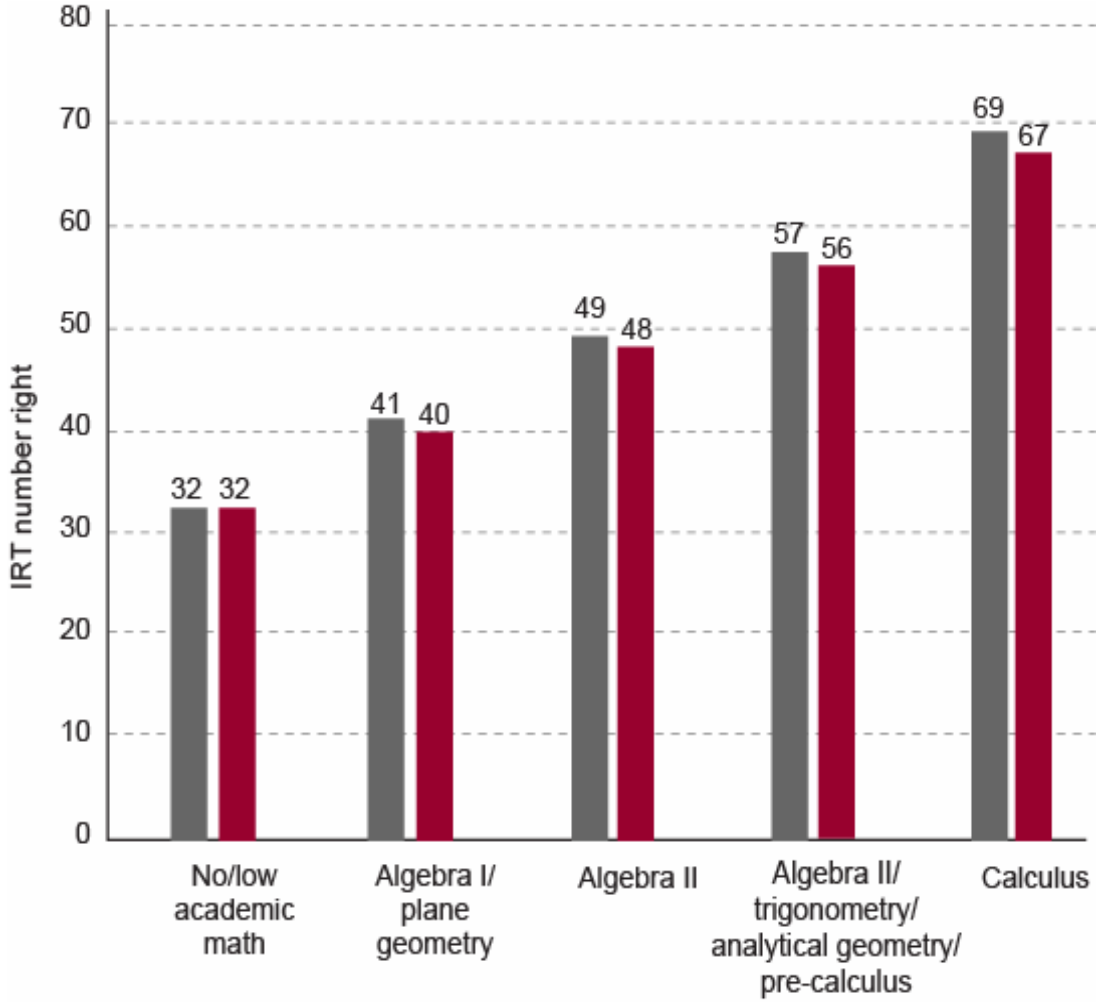


ELS:2002/04 Transcript Component

COURSE TAKING AND ACHIEVEMENT

Advanced level courses and academic achievement, 1992 and 2004

- The increase in mathematics achievement of those who took Advanced level mathematics courses was not statistically different for 1992 and 2004 graduates

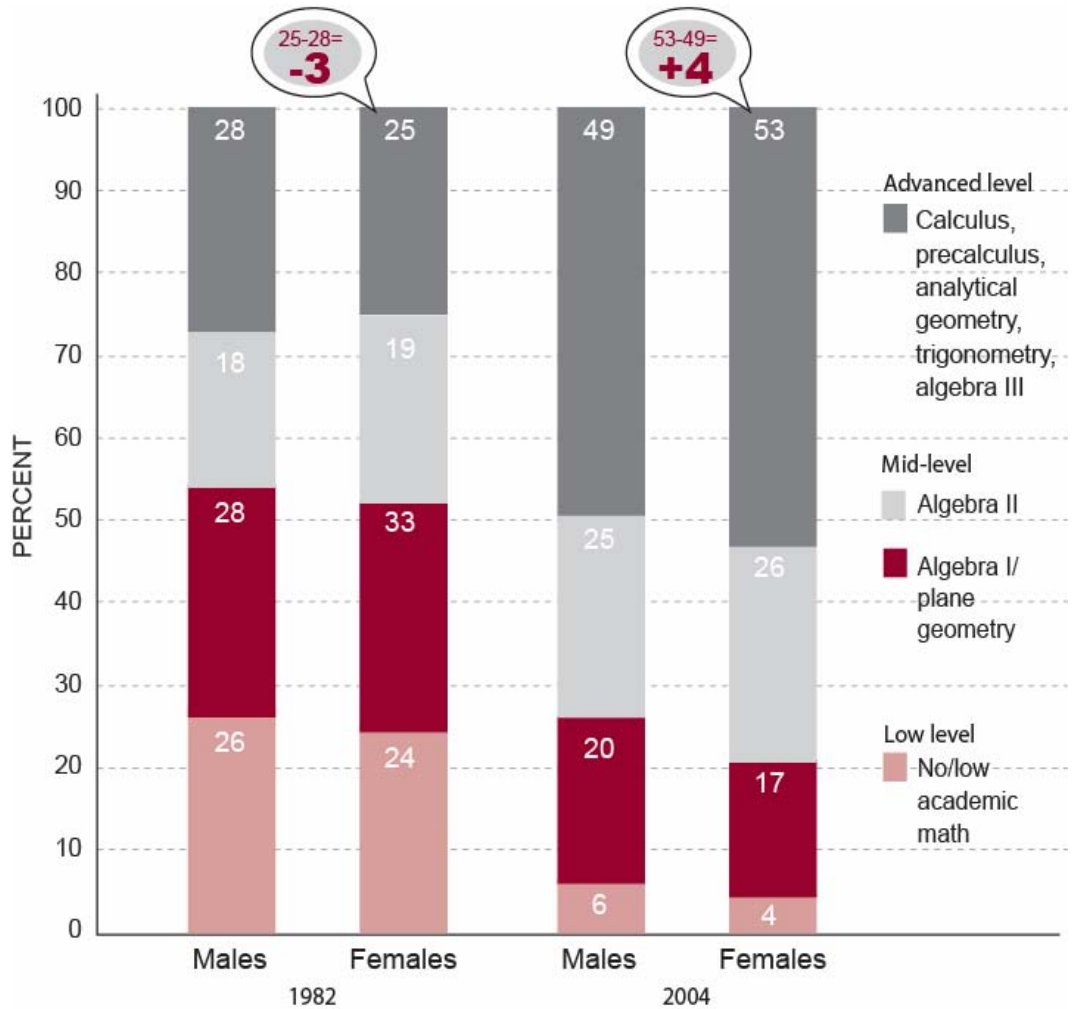


ELS:2002/04 and NELS:88/92 Transcript Components

DIFFERENCES BY GENDER

Differences in course taking level by gender

- Females were <u>less likely</u> than males to complete Advanced level mathematics courses in 1982
- Females were <u>more likely</u> than males to complete Advanced level mathematics courses in 2004

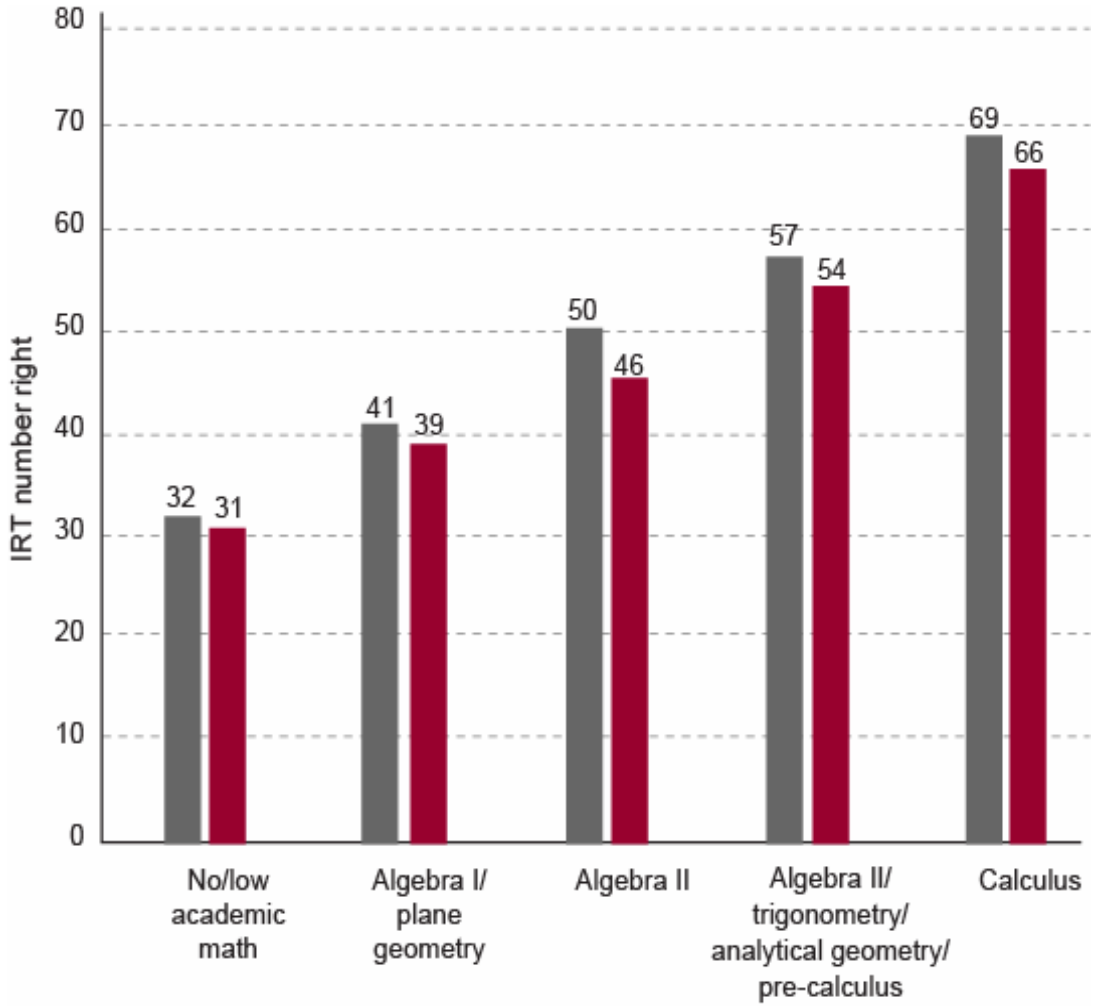


ELS:2002/04 and HS&B 1980/82 Transcript Components

DIFFERENCES BY GENDER

Differences in math achievement by course taking level and gender

- Males generally had higher mathematics achievement scores than females who completed the same level of mathematics courses in 2004.

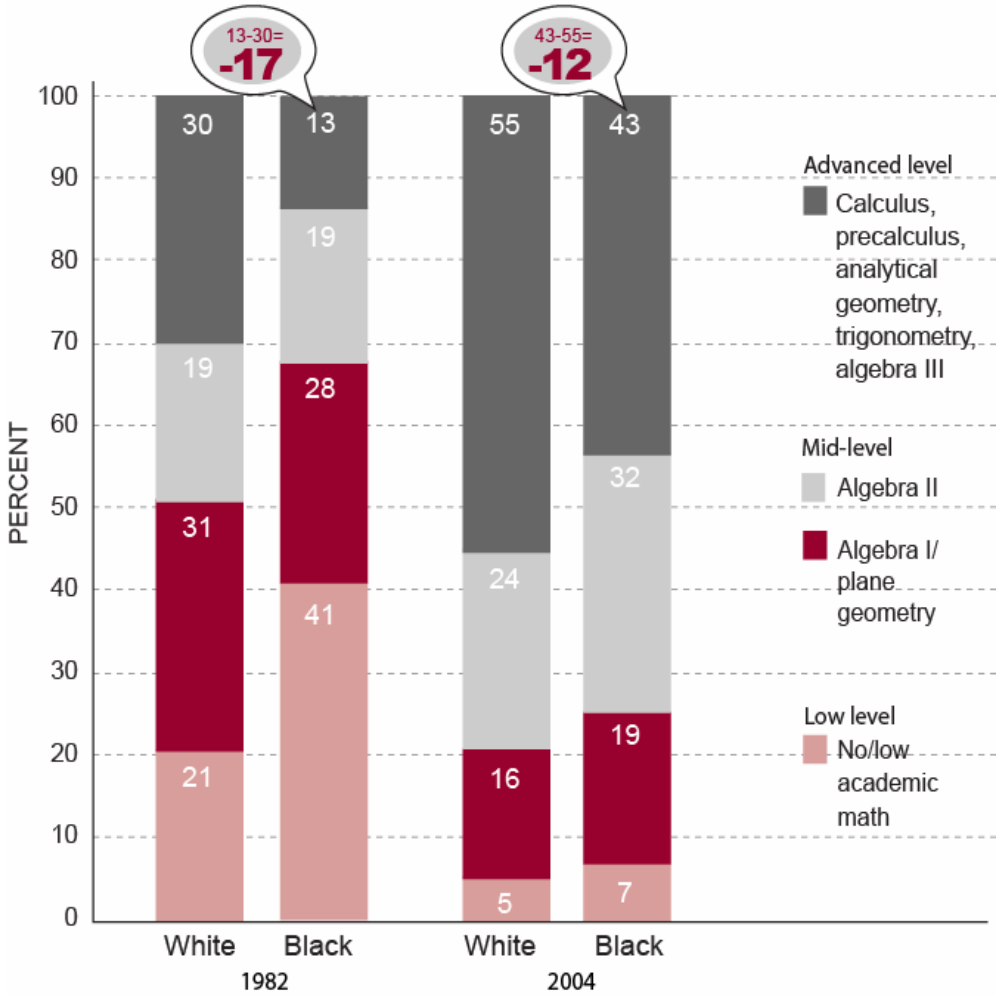


ELS:2002/04 Transcript Component

DIFFERENCES BY RACE/ETHNICTY

Differences in course taking level by race/ethnicity

- The proportions of both Whites and Blacks who reached the Advanced level of mathematics grew between 1982 and 2004

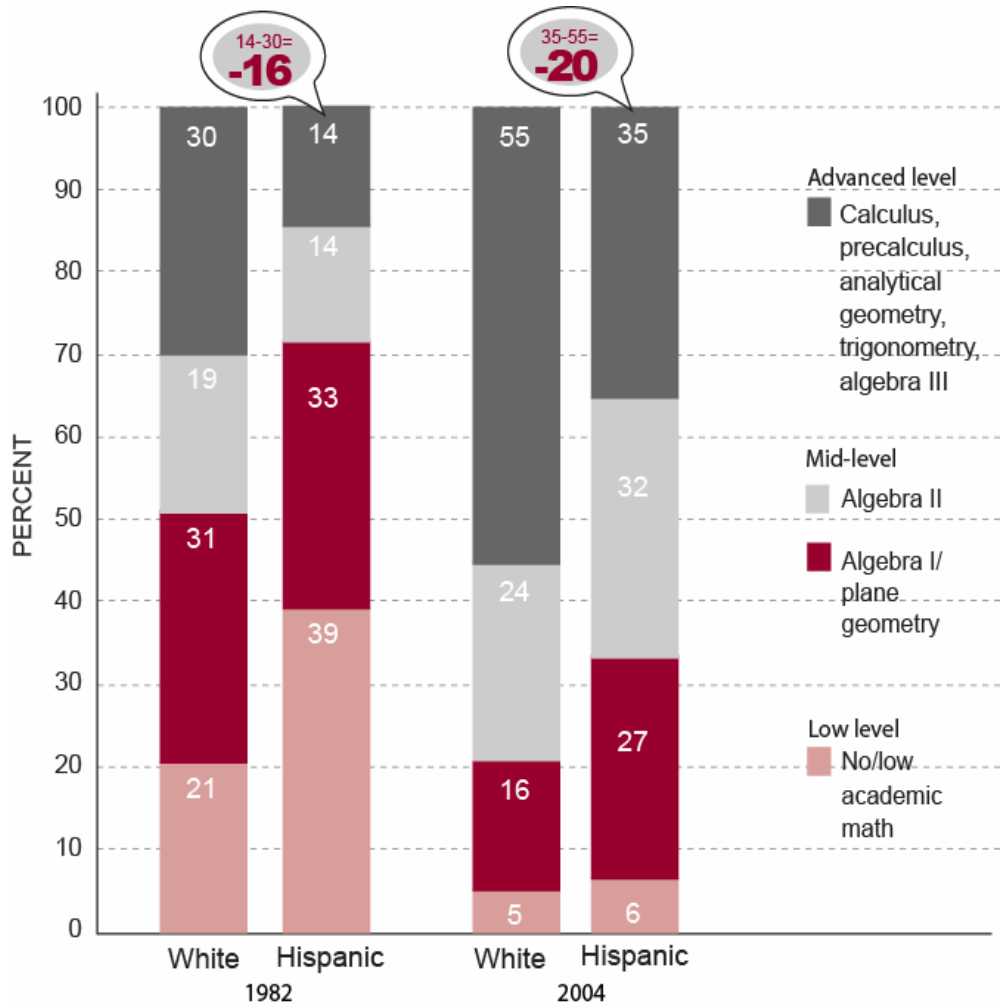


ELS:2002/04 and HS&B 1980/82 Transcript Components

DIFFERENCES BY RACE/ETHNICTY

Differences in course taking level by race/ethnicity

- The proportion of both Whites and Hispanics who reached the Advanced level of mathematics grew between 1982 and 2004

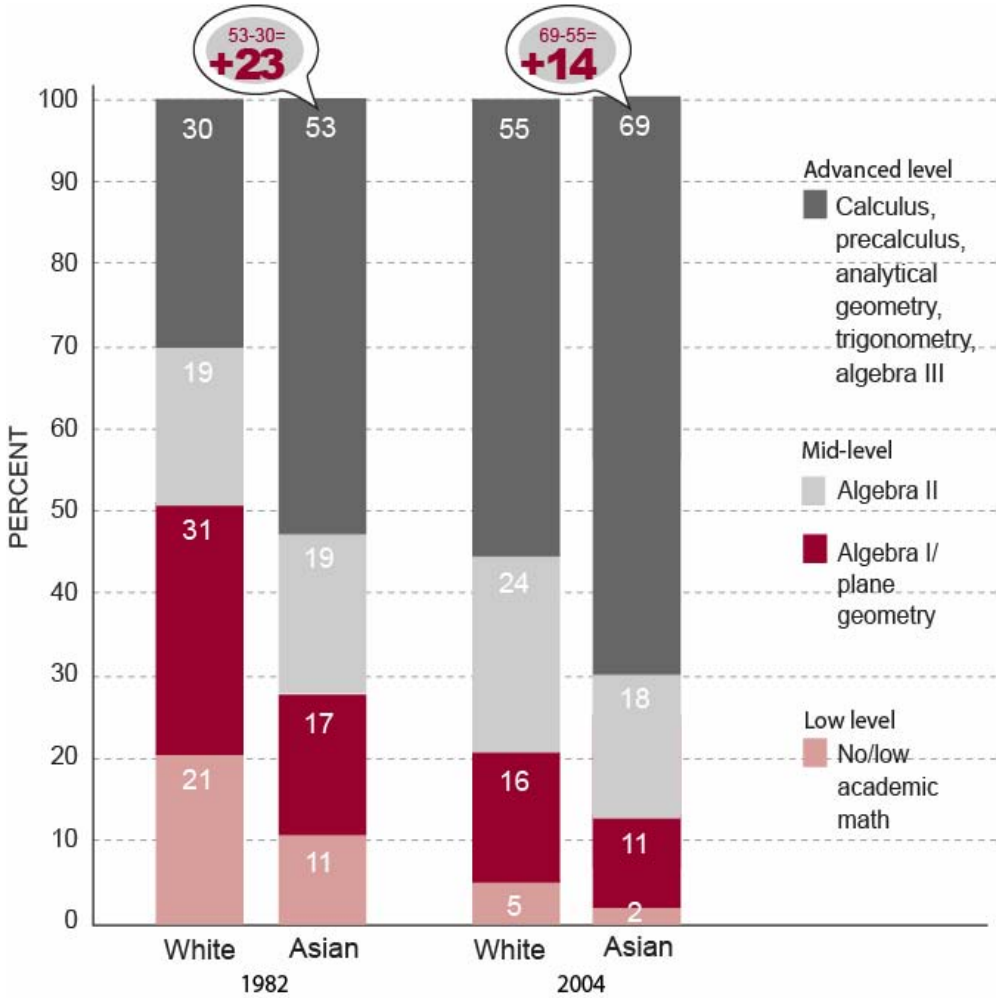


ELS:2002/04 and HS&B 1980/82 Transcript Components

DIFFERENCES BY RACE/ETHNICTY

Differences in course taking level by race/ethnicity

- The proportion of both Whites and Asians who reached the Advanced level of mathematics grew between 1982 and 2004

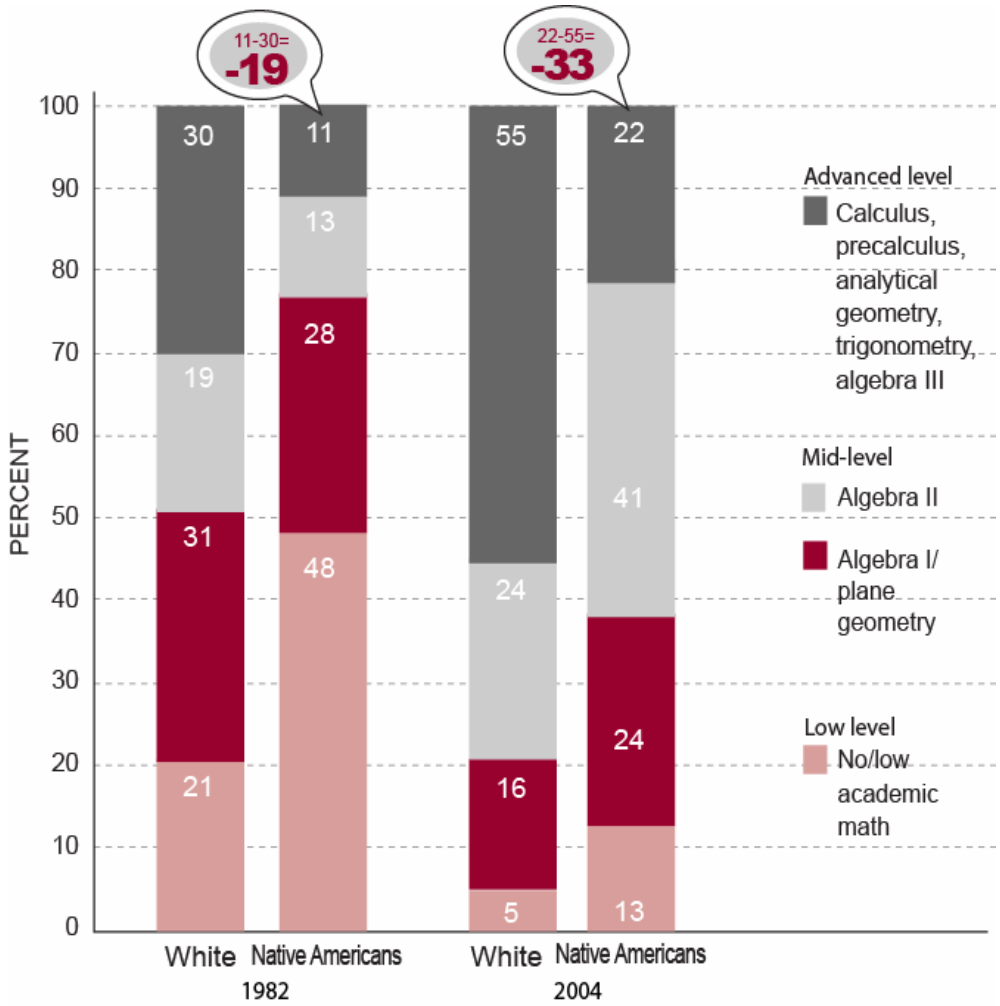


ELS:2002/04 and HS&B 1980/82 Transcript Components

DIFFERENCES BY RACE/ETHNICTY

Differences in course taking level by race/ethnicity

- The proportion of both Whites and Native Americans who reached the Advanced level of mathematics grew between 1982 and 2004

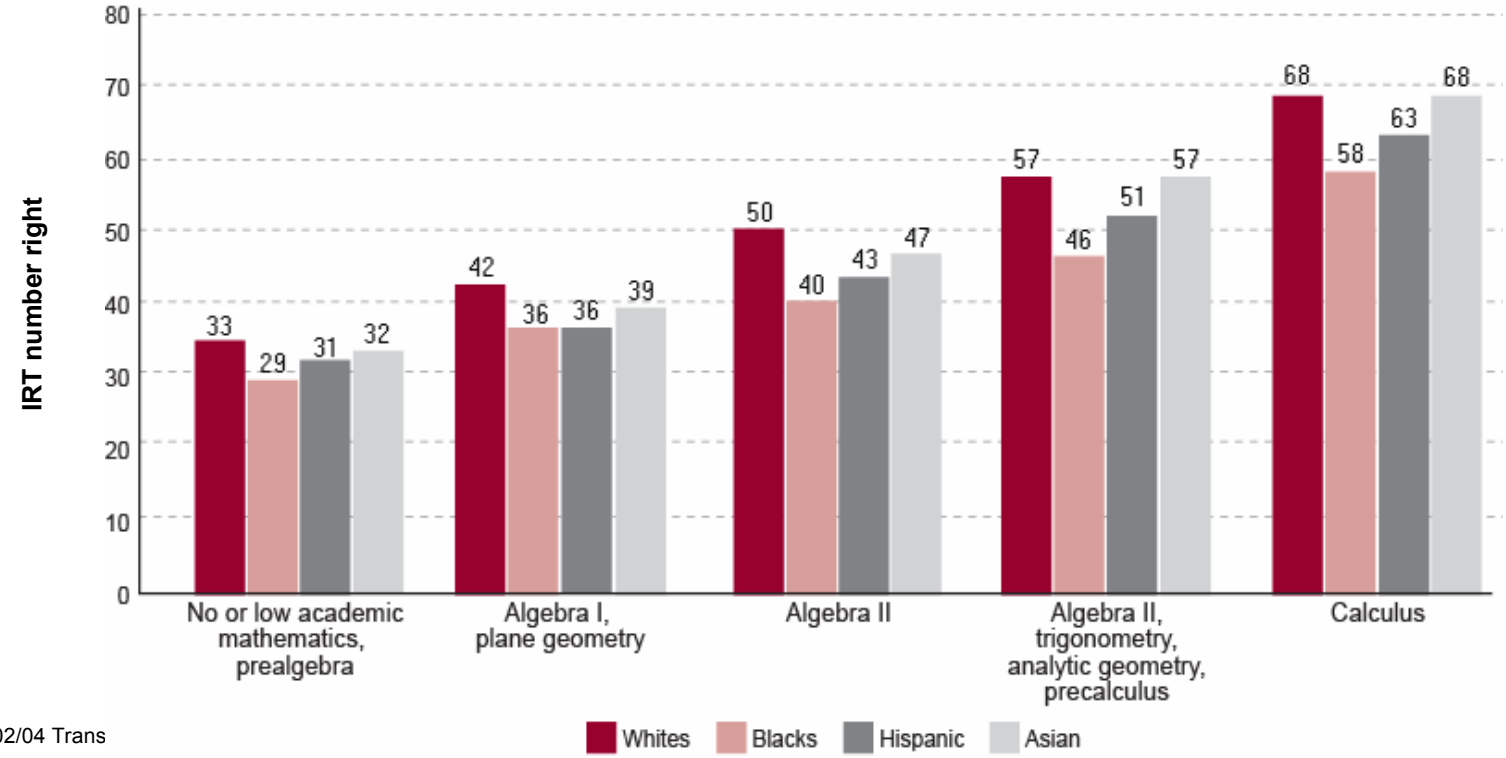


ELS:2002/04 and HS&B 1980/82 Transcript Components

DIFFERENCES BY RACE/ETHNICTY

Differences in math achievement by course level and race/ethnicity

- Whites generally earned higher average mathematics scores than Black and Hispanic graduates completing the same mathematics course by 2004
- The achievement of Asians was generally not significantly different from that of Whites completing the same level of mathematics course by 2004

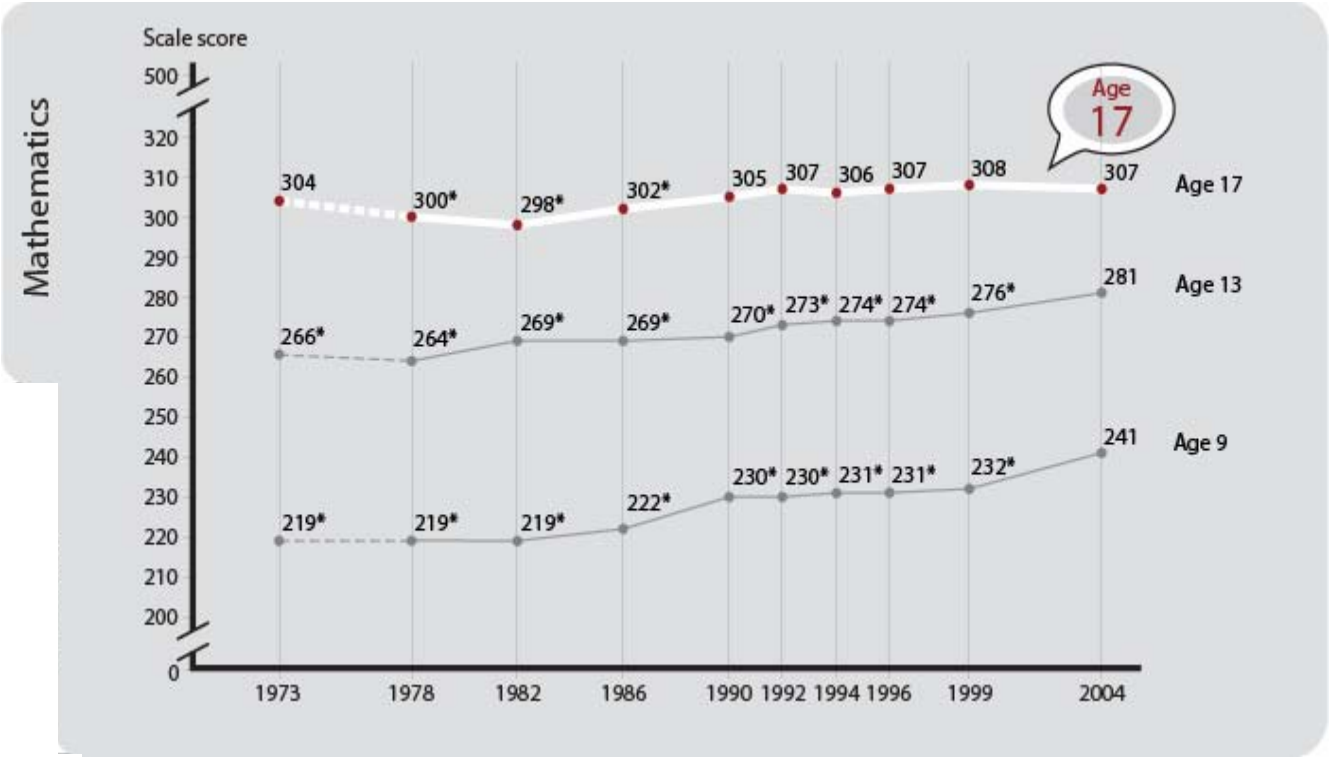


ELS:2002/04 Trans

LONG-TERM TRENDS IN ACHIEVEMENT

Long-term trends in achievement

- Mathematics achievement at age 17 was higher in 2004 than in 1982 and two other years.

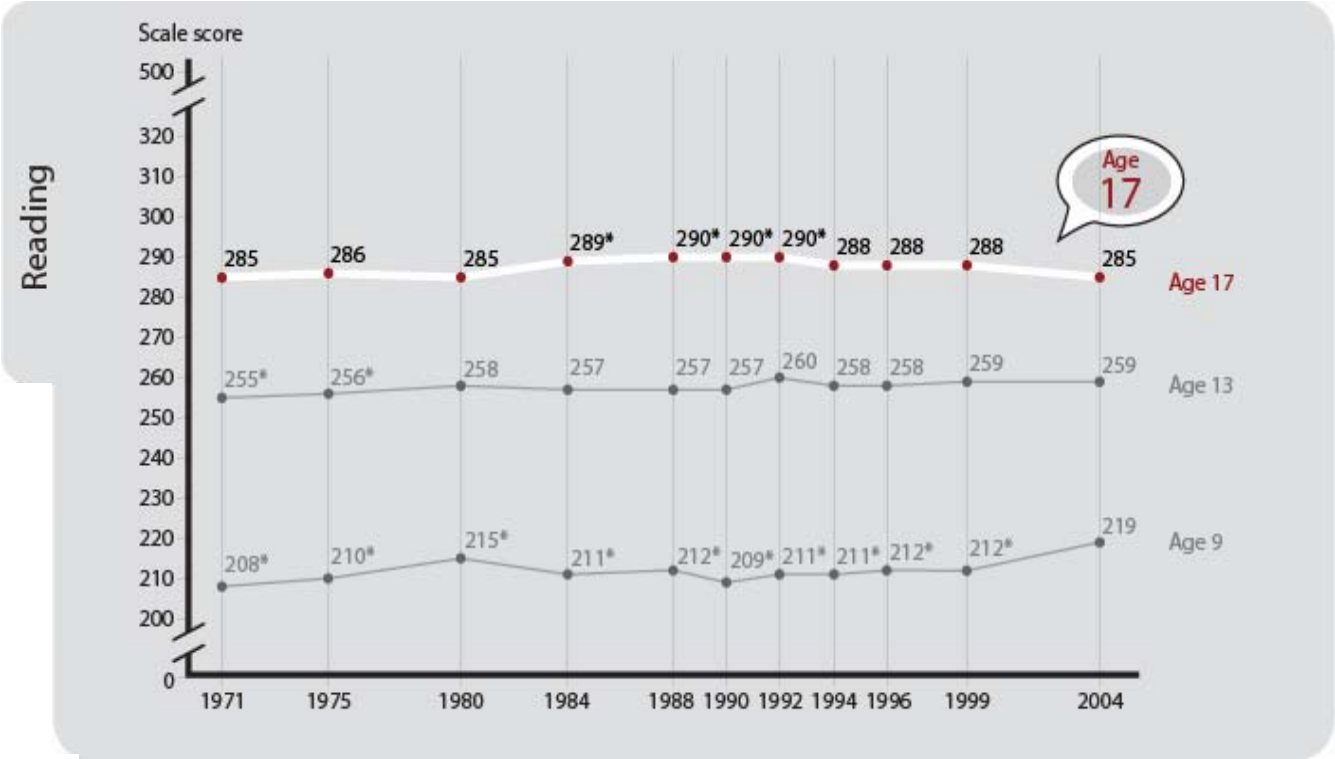


National Assessment of Educational Progress, Long-term Trend Assessment, 2004

LONG-TERM TRENDS IN ACHIEVEMENT

Long-term trends in achievement

- Reading achievement at age 17 was lower in 2004 than in 1984 through 1992



National Assessment of Educational Progress, Long-term Trend Assessment, 2004

Education Longitudinal Study: 2002

NCES Transcript Studies

References

1. Education Longitudinal Study: 2002/04, Transcript Component.
2. National Education Longitudinal Study of 1988: Second Follow-up, Transcript Component.
3. High School and Beyond, 1980 Sophomores, First Follow-up, Transcript Component.
4. National Assessment of Educational Progress, 1987, 1990, 1994, 1998, 2000, Transcript Components.