



U. S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL INSTITUTE ON STUDENT ACHIEVEMENT,
CURRICULUM, AND ASSESSMENT

FAX COVER SHEET

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DATE: 4/3/97

TO: Bill Kincaid

FROM: Marian A. Robinson (Joe Conaty)
Student Achievement Institute
OERI/US Department of Education
555 New Jersey Ave., NW
Washington, DC 20208-5573

Total # pages: 10

REMARKS:

NOTES

ission of these points, see R.L. Linn and V.L. g Statewide Tests to the National Assessment of ess: Stability of Results," *Applied Measurement in*): 135-155, and L. Bond and R.M. Jaeger, "The ice Between Various State Assessment Tests in the 1990 National Assessment of Educational ol for Grade-8 Mathematics," in *The Trial State ds and Realities: Background Studies* (Stanford, CA: emy of Education, 1993).

uld be necessary to maintain the security of ' items and to protect NAEP from accountability- ould encourage teaching to the test to ensure that of NAEP would not be jeopardized.

CHAPTER 6: PLANNING FOR THE LONG TERM

RECAPITULATION

NAEP PROVIDES RELIABLE AND ACCURATE DATA about student achievement, and, because it has shown its utility for states as well as for the nation, the demands for its use have grown dramatically. Much of this growth has occurred in less than a decade, and growth is likely to continue in coming years. Some advocate the use of NAEP for purposes of school-level accountability, and others would like to use NAEP as an individual student examination system. We believe these are not appropriate uses of NAEP. Instead, we recommend that NAEP be used to provide periodic, up-to-date, state-of-the-art student achievement trend results that inform the ongoing debate about what American students know and/or should know for the 21st century.

We have suggested that NAEP should be providing this information by 2015, but several changes are needed if this goal is to be met. Of prime importance is our recommendation that NAEP adopt a substantially broader definition of achievement than is being



January 29, 1997

Pascal D. Forgione
Commissioner of Education Statistics
National Center for Education Statistics
Office of Educational Research and Improvement
555 New Jersey Avenue NW
Washington, DC 20208

Dear Pat:

On behalf of The National Academy of Education, I am pleased to transmit to you the final report of the Academy's Panel on the Evaluation of the NAEP Trial State Assessment, entitled *Assessment in Transition: Monitoring the Nation's Educational Progress*. In it, the Panel takes a step back from their previous detailed work and considers philosophical, technical, and policy issues concerning the National Assessment of Educational Progress, both in the near term and the long term.

This report has been reviewed and approved by The National Academy of Education's Executive Council, acting as a Committee of Readers. We are confident that it will help clarify issues and spur discussions about the role of NAEP in the 21st century.

I have visited the Panel's working meetings several times over the past four years, and I have always been very impressed with the level of commitment and expertise of its members, the complexity and importance of the issues, and the usefulness and wisdom of its reports. I would like to take this occasion, on behalf of The National Academy of Education, to thank its two distinguished co-chairs, Robert Glaser and Robert Linn, who have devoted countless hours and prodigious brain power to the task, as have the members of the Panel and its superb project director, George Bohrnstedt of the American Institutes for

Research. The Academy also thanks staff members from AIR, some of whom have been with this project throughout its six-year duration, as well as Debbie Leong-Childs, executive director of the Academy, for her expert administrative role. Finally, I would like to thank your predecessors in the Commissioner of Statistics office, Emerson Elliot and Jeanne Griffith, for their support and collegueship, as well as Sharif Shakrani and other NCES staff members who have been involved in monitoring the project and joining in the long and important dialogue about NAEP. This capstone report is the culminating document of the Panel's evaluation effort. I trust it will be of assistance to NCES and the National Assessment Governing Board as they shape both the policies and the content of NAEP, striving to maintain NAEP as the "nation's report card," while accommodating new assessment techniques, changing education ideas, and changing practices in the nation's classrooms.

Sincerely,

Carl Kaestle

Carl F. Kaestle
President, The National Academy of Education

EXECUTIVE SUMMARY

THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP) is the nation's leading indicator of what American students know and can do. The high, technical quality of the assessment and its independence from unwarranted influences and political pressures have enabled NAEP to monitor trends in education achievement reliably since its inception in 1969. Moreover, as the only assessment administered to a large and representative sample of American students, NAEP has accurately tracked changes for educationally important subgroups of students, as well as for the student population as a whole.

Furthermore, in less than 10 years, NAEP has expanded the number of assessed students approximately four-fold; has undergone substantial changes in content, design, and administration; and has drawn to itself veritable legions of stakeholders and observers. Taken singly, each of these changes represents a notable advancement for NAEP. Taken together, however, they have produced conflicting demands, strained resources, and technical complexities that potentially threaten the long-term viability of the entire program. Some of the most significant developments contributing to the current strain on NAEP include:



UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE SECRETARY

NAEP Long Term
Trans

FAX TRANSMITTAL

TO: Bill Kincaid

ORGANIZATION: _____

PHONE NUMBER: _____

FAX NUMBER: _____

FROM: Kevin Sullivan

PHONE NUMBER: _____

FAX NUMBER: ~~301-401-3000~~MESSAGE: NAEP - Key Facts.August 28 In release
just Mike & Dnt F.CONFIDENTIALITY NOTICE

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FACSIMILE TRANSMITTAL SHEET

TO: <u>Kevin Sullivan</u>	FROM: <u>Kelly Weddel</u>
COMPANY:	DATE: <u>8/7/97</u>
FAX NUMBER: <u>401-0596</u>	TOTAL NO. OF PAGES INCLUDING COVER: <u>5</u>
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☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

As promised, the fact sheet + most significant findings from the NAEP 1996 Trends in Academic Progress report follow. I also sent them electronically. Please see your ccm ail for further details on these attachments.

Thank you,
Kelly Weddel

1996 Trends in Academic Progress

- **Short-Term Trends**
 - No changes in performance 1994 to 1996
- **Long-Term Trends**
 - Improvements in science, mathematics, and reading performance
 - Decline in 11th grade writing scores
 - Improvement most consistent for 9-year-olds
 - Decrease in many gaps between race/ethnic groups and between genders
 - Higher-level course-taking in science and mathematics

NAEP 1996 Trends in Academic Progress Main Points

1. No significant changes in performance between 1994 and 1996.

Between 1994 and 1996, there were no changes in average academic performance in any subject tested—science, mathematics, reading, or writing. This was true regardless of age, grade, or population subgroup (race/ethnicity or gender). We would not expect to observe much change in such a short period, as educational progress takes time.

2. Long-term improvements in science, mathematics, and reading performance.

Since the initial administration of the long-term trend assessment in the early 1970s, there have been overall trends toward higher performance in science, mathematics, and reading.

- Science. Scores generally declined through the 1970s, but then turned upward during the 1980s. These improvements have been sustained during the 1990's.
- Mathematics. Mathematics scores have trended upward for all age groups since the earliest assessment of this subject in 1973.
- Reading. Reading scores have trended upward since 1971, but the amount of change has been slight.

3. In writing, improvement for 4th- and 8th-graders since 1990, but scores of 11th graders have declined somewhat over the years.

Differences in revising strategies between the older and younger grades may be associated with differential performance in writing. Students at grades 4 and 8 reported they increased the extent to which they do "process writing" techniques, while 11th graders did not report any increase in these. For example, higher percentages of 4th graders in 1996 than in 1984 reported that more than half the time they take out parts of drafts they don't like, and higher percentages of 8th graders reported moving sentences and paragraphs within their compositions (also more than half the time), while the frequency for 17-year-olds did not change for these revising strategies. On the other hand, the percentage of 17-year-olds who reported rewriting their papers more than half the time declined, a change not reported by the younger age groups.

4. Improvements in academic performance at all age groups, and 9-year-olds have made the most consistent improvement.

The performance scores of 9-year-olds in 1996 were higher than those in the early 1970s in science, mathematics, and reading; their writing performance has also improved since 1990. The performance of 13-year-olds was higher in mathematics and reading in 1996 compared with the earliest assessment, and their writing score was higher than in 1990. Seventeen-year-olds, on the other hand, had a lower score in science in 1996 than in the earliest assessment year, though there has been improvement during the 1990s. Eleventh graders have declined in writing performance since 1984, however.

Many factors may account for the greater consistency of improvement in the younger groups over the long term. While some of these factors may not be measured by NAEP, data are collected on various relevant background characteristics. For example, the percentage of 17-year-olds who report that they read for fun daily has declined, and the percentage who report never reading for fun has increased. These patterns were not observed for the younger age groups. In addition, the percentages of 9- and 13-year-olds who report reading more than 20 pages per day in school and for homework have increased, while no change was reported by 17-year-olds.

Finally, changes in television differed between 17-year-olds and the younger age groups. Lower percentages of 9- and 13-year-olds reported watching 6 or more hours of television per day in 1996 than in 1982, while there was a small increase in this frequency of television watching reported by 17-year-olds. (The percentage of 17-year-olds who reported watching 6 or more hours of television in 1996, however, was less than that for the younger age groups.)

5. Decrease in some gaps between race/ethnic groups and between genders over the years.

Science. The black-white gap has decreased for 9- and 13-year-olds, and there was an overall pattern of decreasing gaps between males and females at ages 13 and 17.

Mathematics. The gap between black and white students narrowed at all three ages, and the gap between white and Hispanic students narrowed at ages 13 and 17. The male-female gap narrowed for 17-year-olds, but widened slightly in favor of males at ages 9 and 13.

Reading. The black-white gap decreased at ages 9 and 17. The white-Hispanic gap was about the same in 1996 as in 1975. The male-female gap narrowed at ages 13 and 17.

Writing. There has been no significant change in gaps between race/ethnic groups or genders between 1984 and 1996.

6. Students are taking higher-level courses in science and mathematics.

Science. There was a trend toward greater percentages of 17-year-olds taking biology and chemistry between 1986 and 1996. The percentages of black and Hispanic students taking chemistry increased considerably, and women were more likely to study biology, chemistry and physics in 1996 than in 1986.

Mathematics. A higher proportion of 13-year-olds were taking prealgebra, and more 17-year-olds were taking algebra II, precalculus, or calculus in 1996 compared with 1986. The percentages of black and Hispanic 17-year-old students taking algebra II have increased, and women were more likely to take algebra II as well as precalculus or calculus.