

FIRST IN THE WORLD CHALLENGE FOR MATH AND SCIENCE EDUCATION

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PROOF THAT THE U.S. CAN COMPETE WITH THE WORLD'S BEST. The First in the World Consortium of Chicago-area school districts participated in the 1996, 41-nation Third International Math and Science Study (TIMSS), the only local school systems in the United States to do so. Eighth grade students in the First in the World Consortium school districts scored among the best in the world in science and math. While overall results (released last November) showed the U.S. 8th graders to be below average in math and slightly above average in science, the Consortium students scored in the top tier of nations in science, and in the top tier of nations below Singapore in math.

Approximately 50 percent of students in the Consortium districts take algebra and geometry by the end of the 8th grade, compared to 20 percent of eighth graders nationally who take algebra. While the U.S. as a whole remains short of the goal of being first in the world in math and science, these results show what is possible when teachers, students, parents and communities set high expectations and work to meet them.

FIRST IN THE WORLD CHALLENGE TO ALL STATES AND COMMUNITIES: USE THE TIMSS TEST TO RAISE STANDARDS. Today, the President is challenging states and school districts across the United States to follow the example set by the First in the World Consortium, to set and work to achieve national standards of excellence, and to begin this work by comparing their own academic standards and achievement levels against the best in the world.

The President's First in the World Challenge: To help spark faster progress the President challenges states and school districts across the country to use the TIMSS test to set high standards for math and science.

- o **Testing:** The U. S. Department of Education announced today it will assist up to 60 states and school districts to take the TIMSS test in 1997 or 1998, interpret the results, and examine their performance against 41 nations to learn how they can do better.

- o **Benchmarking:** The Department of Education will help participating states and districts compare their standards, assessments, teaching and curricula to world-class levels of

excellence.

o **Federal Support for Improved Teaching:** The Education Department and the National Science Foundation will assist participating states and school districts make the most effective use of federal education resources, such as Goals 2000 to help set standards of excellence, the Eisenhower Professional Development program and NSF's Teacher Enhancement Program to help train teachers to teach challenging material, and NSF's Instructional Materials Development Program to provide curriculum materials aligned with national standards.

o **Helping Communities Learn from What Works:** The Education Department and the National Science Foundation will provide support in establishing networks of states and communities that want to learn from each other as they improve math and science education, including over the Internet.

TIMSS: NATIONAL STANDARDS, INTERNATIONAL BENCHMARKS OF EXCELLENCE, AND A ROADMAP FOR IMPROVEMENT. TIMSS is the most thorough international study of mathematics and science education ever conducted. The study, conducted in 1995-96, compared the performance of 500,000 students in 41 countries worldwide, including a random sample of 40,000 American students, in grades 4, 8, and 12.

National Standards and International Benchmarks of Excellence: TIMSS has established, for the first time, international benchmarks of world-class student achievement in math and science. The tests reflect an international consensus on what students should know and be able to do in mathematics and science at grades 4, 8 and 12. The TIMSS test also reflect the kind of high expectations called for in the United States by the National Council of Teachers of Mathematics (NCTM) standards, as well as the National Science Education Standards developed by the National Academy of Sciences and the Benchmarks for Science Literacy developed by the American Association for the Advancement of Science.

A Roadmap for Improvement: The TIMSS findings released last Fall provide a roadmap for boosting math and science achievement in the U.S. The study found that the relatively low performance of U.S. students in math was due to the fact that the U.S. students receive a less demanding and less focused curriculum, teachers have inadequate professional development opportunities, and classroom instruction focuses more on teaching mathematical procedures and less on helping students understand mathematical concepts. In contrast, discipline problems, diversity among students, the amount of school time spent on instruction, or the amount of time students spend doing homework or watching TV did not account for differences in performance between the U.S. and higher performing countries such as Japan and Germany.

AMERICA IS MAKING PROGRESS IN MATH AND SCIENCE, BUT MUCH IMPROVEMENT IS NEEDED. Since the early 1980's, students are taking much tougher courses and National Assessment of Educational Progress (NAEP) scores have improved in both math and science, with gains in mathematics equal to at least one grade level. On the SAT, average math scores are at their highest in 25 years, even as the number and diversity of test-takers have increased. However, the recently released 8th grade results on the 41-

nation Third International Math and Science Study (TIMSS) shows that the U.S. is just slightly above average in science and below average in math. That isn't good enough; in this information era, our students need to perform much better in order to succeed economically.

A RENEWED CALL TO RAISE EXPECTATIONS FOR ALL STUDENTS. The Chicago-area consortium and other states and districts -- urban, rural, and suburban -- that accept the First in the World challenge will provide leadership and reform models that other communities can benefit from. Noting that, in this information age, today's students will be judged against international standards in the workplace, the President called on schools nationwide to help all students master the basics and advanced skills in math and science to world-class levels.

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THE FIRST IN THE WORLD CONSORTIUM

The First in the World Consortium is a group of school districts from Chicago's North Shore that came together in 1995 -- the outgrowth of discussions among the local superintendents -- and made a serious commitment to work together to reach the National Education Goals codified in the Goals 2000 Act, and to provide a "world-class education" for their students.

OBJECTIVES OF THE FIRST IN THE WORLD CONSORTIUM

The Consortium's initial efforts are directed toward three objectives:

- o **Benchmarking Consortium school's performance** against international standards in math and science, using the Third International Mathematics and Science Study.
- o **Creating a forum** to clarify world-class standards for business leaders, policy makers, educators and community members.
- o **Establishing a network of learning communities** involving educators, parents, and community leaders within the Consortium school districts and beyond, as a means of achieving the Consortium goals.

BENCHMARKING CONSORTIUM PERFORMANCE: TIMSS RESULTS

TIMSS revealed that the Consortium is well within reach of its goal of becoming first in the world in both math and science.

- o **Among the first in the world in eighth-grade science.** Students in the First in the World Consortium performed as well as students in the top tier of countries, with an average score of 584. Only Singapore's students performed better, but not significantly better, with an average score of 607. The average score of U.S. eighth grade science students on TIMSS was 534, compared to an international average of 516.
- o **Among the second in the world in eighth-grade math.** Only Singapore's students, with an average score of 643, performed significantly better than Consortium students. Students in the First in the World Consortium scored 587 on average, ranking in the top tier of countries below Singapore, including Korea, Japan, Hong Kong, and Belgium. The average score of U.S. eighth grade math students on TIMSS was 500, compared to an international average of 513.
- o **Higher expectations are a key to the success of the First in the World Consortium.** A key difference between teaching and learning in the First in the World districts and the U.S. as a whole is that more is expected of Consortium students. Approximately 50 percent of students take algebra and geometry by the end of the eighth grade compared to 20 percent of eighth graders in the U.S. overall who take algebra.

The consortium met all the guidelines for student selection and test administration set

by the international guidelines.

CONTINUING WORK OF THE FIRST IN THE WORLD CONSORTIUM

- o In September 1996, the Consortium received a \$150,000 grant from the U.S. Department of Education to support their efforts to improve curriculum, professional development, teaching, assessment, and parent involvement in learning, based on their TIMSS. The grant also supports sharing this information with other districts across the country.

- o Illinois granted the Consortium \$300,000 in federal Goals 2000 funds to support their efforts and link student performance on statewide achievement tests to performance on TIMSS.

- o Teacher Learning Networks have been formed across the Consortium districts so that teachers can share best practices, teaching techniques, and look at their textbooks and other materials. The Learning Networks will be creating a comprehensive curriculum plan from kindergarten to grade 12 that will be available for other districts.

FIRST IN THE WORLD CONSORTIUM SCHOOL DISTRICTS

Illinois

Wheeling School District 21

Northbrook School District 27

Northbrook School District 28

Sunset Ridge School District 29

Northbrook/Glenview School District 30

Glenview School District 34

Glencoe School District 35

Avoca School District 37

Wilmette School District 39

Mt. Prospect School District 57

Golf School District 67

Niles Elementary School District 71

Lincolnwood School District 74

Frankfort CC School District 157-C

New Trier Township Community High School District 225

Niles Township Community High School District 219

Glenbrook High School District 225

Northern Suburban Special Education District

Illinois Mathematics and Science Academy

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THIRD INTERNATIONAL MATHEMATICS AND SCIENCE STUDY (TIMSS)

The Third International Mathematics and Science Study, or TIMSS report, is the most thorough international study of mathematics and science education ever conducted. During the 1995-1996 school year, TIMSS compared the performance of 500,000 students in 41 countries worldwide, including 40,000 Americans, at levels corresponding to U.S. grades 4, 8, and 12. In addition to tests and questionnaires, it included a curriculum analysis, videotaped observations of mathematics classes, and case studies of policy issues.

TIMSS was coordinated by the International Association for the Evaluation of Educational Achievement (IEA), a Netherlands-based organization of ministries of education and research institutions in its member countries. Each country participating in TIMSS paid for its own national data collection. TIMSS in the U.S. was supported by more than \$30 million from the National Center for Education Statistics (NCES) of the U.S. Department of Education and the National Science Foundation (NSF).

KEY FINDINGS FROM THE 8TH GRADE STUDY

Last Fall the 8th grade results of TIMSS were released. Results from the 4th and 12th grade portion of the study will be released later.

Achievement

- o Among the 41 countries participating in TIMSS, U.S. 8th graders scored below the international average in mathematics and above the international average in science.
- o In comparison to our key trading partners, the scores of U.S. students in math were similar to those in England and Germany, while behind scores in Japan, France and Canada. The scores of U.S. students in science were above those in France, similar to scores in England, Canada and Germany, and behind those in Japan.

Curriculum

- o The content taught in U.S. 8th grade math classrooms is at a 7th grade level in comparison to other countries.
- o The 8th grade math curriculum is less focused in the U.S. compared to other countries such as Japan and Germany. However, the 8th grade science curriculum is similar to that of other countries.
- o U.S. 8th grade students actually spend more hours per year in math and science classes than German and Japanese students.

Teaching and Teachers

- o U.S. mathematics classes require students to engage in less high-level mathematical thought than in Germany and Japan.
- o U.S. mathematics teachers' typical goal is to teach students mathematical procedures, while Japanese teachers' goal is to help them understand mathematical concepts.

- o Japanese teachers widely practice what U.S. mathematics reformers (e.g., National Council of Teachers of Mathematics) recommend, while U.S. teachers do so infrequently.
- o Unlike new U.S. teachers, new Japanese and German teachers undergo long-term structured apprenticeships.
- o U.S. teachers have more college education than their colleagues in all but a few of the 41 countries participating in TIMSS
- o Japanese teachers have more opportunities to discuss teaching-related issues with colleagues than do U.S. teachers.

Students

- o In Japan and Germany, all 8th grade students are expected to learn the same material in mathematics, while in the U.S. students in different ability groups study very different material.
- o Heavy TV watching is as common among U.S. eighth graders as it is among their Japanese counterparts.

TIMSS IS AN IMPORTANT TOOL FOR IMPROVING TEACHING AND LEARNING

- o **TIMSS has established international benchmarks of world-class student achievement in math and science.** Because of TIMSS, we now have for the first time clear information about what other countries expect their student to learn in math and science, and how well they actually achieve. We know now what world-class standards of excellence are. And, as a result of President Clinton's First in the World Challenge, states and communities around the country can now compare their academic standards and performance with the highest performing nations in the world, and develop concrete plans for meeting international benchmarks of performance.
- o **TIMSS shows the importance of high expectations.** TIMSS shows a link between having higher expectations for students and getting better results. High performing countries introduced more challenging material, in earlier grade levels, than the U.S. The topics taught to eighth graders in the U.S. math curriculum are comparable to those taught in the 7th grade in other countries.
- o **TIMSS provides a roadmap for improvement.** The TIMSS findings pinpoints specific areas where American education can improve: the need for higher standards, including giving more students algebra in the 8th grade; better teacher preparation and increased opportunities for professional development for teachers; a more focused curriculum and more focused textbooks, to enable students to study subject matter in greater depth; and, instructional practices that help students more deeply understand mathematical and scientific concepts as well as master procedures.

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FIRST IN THE WORLD CHALLENGE FOR MATH AND SCIENCE EDUCATION

HOW THE CHALLENGE WILL WORK. The TIMSS test will be administered in the Spring of 1997 and again in the Spring of 1998. Interested states and school districts should apply to the U.S. Department of Education by January 31, 1997 for the Spring 1997 testing, and by July 31, 1997 for the Spring 1998 administration. The application materials will describe the commitment that they are willing to make in terms of:

- Examining math and science standards for academic rigor.
- Carefully reviewing their curriculum and student achievement testing.
- Providing intensive professional development.
- Paying the cost of administering and scoring TIMSS (\$50,000 per grade participating, with the option of taking 4th, 8th, and/or 12th grade exams).

The U. S. Department of Education will make its selections to achieve a mix of states and districts, urban and suburban areas from around the country. Additional criteria will include:

- The level of reform activity focused on raising standards already underway.
- The commitment of the applicant, as well as parents and the business community, to significant and sustained education improvement.
- Innovation in bringing together a mix of federal, state, and local resources in support of needed reforms to improve performance based on TIMSS.

Depending on the number and quality of submissions received by the end of January, the U.S. Department of Education will identify between 5 and 15 school districts, consortia of districts, or states for participation in the Spring, 1997 administration of TIMSS. The Education Department will select 45-55 participants for the Spring, 1998 test, to be announced in the Fall of 1997.

The Education Department will fund the ongoing structure and activities necessary for TIMSS to be made available and the results analyzed for all First in the World States and Communities.

Assistance to districts and states that accept the challenge will come from the Education Department working in conjunction with the National Science Foundation. Both agencies will make available a range of resources, as appropriate. These may include, for example, the technical resources of the Regional Education Labs, the Eisenhower Regional Math and Science Consortia, the Eisenhower National Clearinghouse, and the programs of the Office of Elementary and Secondary Education. It will also include the financial resources provided by programs such as Goals 2000, Eisenhower Professional Development Funds, and Title I funds (which pay for extra help in basic and advanced skills in core subjects). The NSF will continue to provide support to state-level and urban-district math and science reform efforts, as well as supporting high quality training for teachers.

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8th Grade Science Results

Top Tier Nations	
<u>Nation</u>	<u>Average</u>
Singapore ¹	607
Consortium	584
Czech Republic	574
Japan	571
Korea	565
Bulgaria	565
Netherlands	560
Slovenia	560
Austria	558
United States	534
International Average	516

8th Grade Math Results

Top Tier Nations	
<u>Nation</u>	<u>Average</u>
Singapore ²	643
Korea	607
Japan	605
Hong Kong	588
Consortium	587
Belgium-Flemish	565
Czech Republic	564
Slovak Republic	547
United States	500
International Average	513

1. Differences in scores among countries in this category are not significantly different from one another.

2. Singapore's scores are significantly higher than those of the other nations on this list. Scores of the other nations are not significantly different from each other.

FIRST IN THE WORLD CONSORTIUM

PROOF THAT THE U.S. CAN COMPETE WITH THE WORLD'S BEST

Today, President Clinton announced the results for 8th grade mathematics and science of the Chicago-area First in the World Consortium school districts that participated in the Third International Math and Science Study (TIMSS). Students in these districts scored in the top tier of nations in science, and in the top tier of nations below Singapore in math.

8th Grade Science Results

Top Tier Nations	
<u>Nation</u>	<u>Average</u>
Singapore ¹	607
Consortium	584
Czech Republic	574
Japan	571
Korea	565
Bulgaria	565
Netherlands	560
Slovenia	560
Austria	558
United States	534
International Average	516

8th Grade Math Results

Top Tier Nations	
<u>Nation</u>	<u>Average</u>
Singapore ²	643
Korea	607
Japan	605
Hong Kong	588
Consortium	587
Belgium-Flemish	565
Czech Republic	564
Slovak Republic	547
United States	500
International Average	513

1. Differences in scores among countries in this category are not significantly different from one another.

2. Singapore's scores are significantly higher than those of the other nations on this list. Scores of the other nations are not significantly different from each other.

EXECUTIVE OFFICE OF THE PRESIDENT

26-Jan-1997 04:02pm

TO: cohen_m

FROM: Jennifer_Davis

SUBJECT: McCurry Press Briefing Today -- Education Standards

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THE WHITE HOUSE

Office of the Press Secretary
(Northbrook, Illinois)

For Immediate
Release

January 22, 1997

PRESS BRIEFING
BY
MIKE MCCURRY

Glenbrook North High School
Northbrook, Illinois

12:40 P.M. CST

MR. MCCURRY: Here we go. All right, just in case the news from that speech might have been somewhat opaque to you -- (laughter) -- let me just fill in a little bit to go with the President's full-throated cry for standards. How often over the last four years have you heard President Clinton talk about the need for world-class standards in education?

We now have those world-class standards with respect to math and science through the TIMS testing, and the success here in the consortium schools that we celebrate today is the success the President wanted to lift up to show how the application of these standards can be used to reform education nationally, how the application of standards can really make a difference as teachers, as parents, as communities, as administrators come together to really build better schools for the future. Education is a key element of that foundation for the bridge to the 21st century. The President, in his very first trip of the second term was determined to put the spotlight on an issue which arguably will dominate his domestic agenda during a second term.

He also today is doing something that increasingly he will do in exercising the power of the presidency in a second term, which is to not just talk about the conversation up and down Pennsylvania Avenue with

Congress, but to go out where the real work is being done in communities to build the 21st century that we want for our children, and demonstrate what works and encourage Americans to replicate that success.

If we could see all throughout the 16,000 local school districts in this country, the kind of commitment to standards of excellence that we've seen in these school districts here, we could make significant progress toward the education goal reforms that we have.

Now, how does the federal government help these school districts come together? In this case here, with the consortium, the Education Department provided a lot of technical assistance to this consortium during the course of 1995 and '96 as they worked through the restructuring of their curriculum and applied new techniques and new discipline to the teaching of math and science, and they also provided a \$150,000 grant last year, last fall, to help I guess with some of these guys -- with the costs of administering the test and applying the lessons learned from the test, which is an evaluative process to the teaching of their curriculum here.

So what we can do is, in a sense, provide the cookie cutter that allows local school districts to go out and emulate the success that we see elsewhere by providing a tool that people can use for the administration of this test. Now, this is clearly a school district in which they have the kinds of

resources, the kind of community involvement, the kind of commitment from parents and teachers and administrators to really do the discipline of applying standards of excellence, but what the President will suggest is that we need to do that everywhere.

And as you know, later today he goes down to Chicago, a school district that has had considerable trouble dealing with schools in distress and which is actively in the process of reforming and actively applying, in a way, their own set of standards by putting schools that are not cutting it on probation and demanding a strategy for improvement. And the President wants to compliment the effort that they're making down there. So you see two much different types of school districts doing different types of things.

Now, the President -- the Education Department's involvement here comes in really two different fashions on how they help, or two different programs that are critical. One is Goals 2000, which is the commitment to help states develop their own standards, and then apply them using local resources, and the President in his FY '98 budget when it goes up to the Hill on February 6th will propose a 26 percent increase in funding for Goals 2000. He will propose a FY '98 expenditure of \$620 million, which is an increase from the 1997 enacted level of \$491 million for Goals 2000. That represents a significant increase; it's a commitment to the kind of standard-setting that we are demonstrating the success of here north of Chicago today.

In the charter schools area, charter schools will be also a subject of the President's discussions down in Chicago later in the day. We are proposing nearly a doubling of the amount for charter schools. The President's FY '98 budget, when it goes to the Hill on February 6th, will propose \$100 million for charter schools, an increase from the enacted 1997 level of

\$51 million.

So more resources where appropriate within the context of the balanced budget plan to those things that can improve education for the future, education being a central element of the President's second term agenda.

Q To get these increases in these two programs, do you just shuffle money within the Education Department, or does the education spending --

MR. MCCURRY: Well, the Department, like other departments, has had to live within the contours of a balanced budget discipline, but I'm not going to comment on other aspects of the Education Department's budget. We're just providing the figures on these two programs because they are centrally connected to the standards that the President is talking about today.

Q Mike, she's not asking about other parts of the budget, she's asking about --

MR. MCCURRY: I know, she was asking about a budget process that I'm not going to be amplifying on right now.

Q Can you just say whether the overall Education Department budget has gone down?

MR. MCCURRY: I'm not going to give you that answer, because we'll be doing more on that at future times. I've given you two specific program elements today that are related to what the President is talking about today.

Q Will these elements take money away from other existing programs?

MR. MCCURRY: I'm not going to write budget stuff

for you. I've given you two pieces of information to help you understand the commitment to providing more resources for these efforts, connected to standards.

Q Who is it who is selling the schoolchildren down the drain? Is it the local school boards who are blocking this, or is it the Republicans in Congress who wanted to eliminate Goals 2000?

MR. MCCURRY: No. Look, in the era of goodwill and partisanship I'm not going to walk through the history of what almost happened to Goals 2000 and some of our priority investment in education for the future. But I would say that in some sense, that -- we had a debate last year about that type of commitment, and I think the American people by and large rally to the view that we need to invest more in education because it's a building block for the future. Better learning means better earning. It's centrally connected to our economic strategy for the long term. So it's connected to what we measure as success as we look ahead to the year 2000, and in any community there are different elements that lead to success and, to answer your question, sometimes different elements that account for failures.

The key thing is to have -- I mean, it's interesting, one of the lessons learned from some of the testing that's done here that it's not necessarily more time in front of a television or a lack of commitment on the part of teachers or students; it sometimes is the way in which things are taught, or how you teach the subject matter itself, which is what you learn from the discipline of having a testing process itself.

Q Mike, this school --

MR. MCCURRY: A couple of minutes, and then some of the guys from the Education Department and Domestic Policy Council can help out.

Q This school district aside, can you talk about why you think that setting higher standards makes people able to achieve them just by, like, writing them down?

MR. MCCURRY: Well, because learning how to measure progress and learning what is internationally recognized as standard is the only way you can tell where you are. It's like having the North Star in the sky that you can navigate against. You need to have a fixed point of reference so you know whether you're behind or ahead, which is what was established through the TIMS process. And then once you know what the standard is or what the benchmark is you can begin to evaluate your teaching methods, your curriculum, make sure that you've got yourself organized in order to accomplish those objectives.

I've got plenty of people here who can tell you more on that, and you'll also see in the pool report, I think -- Allison, didn't Secretary Riley talk a little bit about that, too?

Q Mike, in the Morris book, he suggests that the President backed away from requiring national standards because you took polls; is this true?

MR. MCCURRY: I've said all I have to say on the Morris book.

Q Mike, the President drew a distinction between the federal government setting standards and establishing national standards. Who does he envision setting these standards?

MR. MCCURRY: Well, standard setting, as envisioned by Goals 2000, is a state and local process, but in this case

we're providing a little bit of help at the federal level in seeing how we apply now internationally recognized standards.

There have been some common -- a lot of hard work going into establishing the criteria evaluated in the TIMS test, and that is something that the President today is challenging local school districts and states, as they do their own standard setting, to look at, to emulate and perhaps to administer in their districts because it's a way in which we measure whether we in fact become world class.

If the goal is world-class performance, measured by

a world-class standard, then that ought to be something that those who are responsible for setting the standards at the local level embrace.

Q Who is responsible for the TIMS standards, do you know that?

MR. MCCURRY: TIMS was developed internationally. I think there is some good background in the little handout that we've got on how they actually developed that.

John, one last thing for me before I go.

Q If national standards is the goal, why would you not have a national curriculum and a national test by which you could do it?

MR. MCCURRY: Well, in a sense, that's what the TIMS test now is. It is a test that -- what the President is saying today is, this is, in effect, something that you can look at and know where you are as measured against 41 other countries that have been folded into this testing standard. So it is, in effect, almost a way that you measure your ranking internationally, and of course obviously you can make cross-comparisons nationally as well.

Q What about a national standard test for teachers, Mike?

MR. MCCURRY: Look, why don't I turn it over to some experts on the subject. Anything else you want to get me on before I go?

Q Could you just briefly give a run --

MR. MCCURRY: We'll do that. Anything else? Any other subjects you need me for? Because I've got to go. Okay, thanks.

MR. COHEN: My name is Mike Cohen. I'm a special assistant to the President for education, the domestic policy council. Let me say a couple things about questions that came up already about national standards and who develops them and where this TIMS testing fits in. I'll be happy to take any other questions you've got, and I've got colleagues from the Education Department here who can help out, as well.

There are national standards in math and science. They've been developed by the National Council of Teachers of Mathematics, a private group. They've been developed by the National Science Teachers Association and the National Academy of Sciences and other scientific groups that have basically looked within the discipline, within the profession and said, what's important for kids to learn.

The international testing built on those things and also basically asked the question, what is it that kids in other countries are expected to learn. That's how you get an international standard; you ask the question, working with

educators from other countries, what is it that students in those

other countries learn, and what would be a test that reflects the common expectations and high expectations in all the countries.

That's what the TIMS test does. It's been done by an international group of educators. They are not part of the federal government, though the federal government provided the bulk of funding for that effort, both for the participation of the United States and for most of the international support for it in each country, though each paid their own way for that.

In other subjects, there have been other efforts to develop national standards by private groups, some with federal funding and some without federal funding. And states are working at developing their own standards. We're at a point in a lot of subject areas where you can begin to see the common expectations from state to state, and how they fit with those expectations that national groups have set, which when you put it all together is what begins to give you a foundation for national standards.

With regard to the question on national testing, the President has been very clear that he wants to see a national testing program in place. This TIMS test is a good first start at it. While it was given to a sample of students nationally in its original administration, every school district in the country was also invited to participate in that. This is a test given to a sample of kids, kind of like a poll. So you had a national poll and each school district was given the opportunity to administer its own poll to a sample of kids in its district.

The 20 districts that we're visiting today were the only ones in the country that came forward about a year ago and agreed to administer the test. So this is the only places -- just one second -- these are the only places in the country that have administered the test as a sample in their own districts so they can tell how well they are doing -- not how well the whole country is doing, but how well they are doing.

What the President has done today is challenge other districts to come forward and do the same thing. And the U.S. Department of Education will make that test available so other districts can replicate it.

Yes, you look confused.

Q I am confused on this test. If they said a sampling of students, but not the entire district, that's how we know that 8th graders are performing --

MR. COHEN: That's right. This is from a sampling.

Q -- below average because they've already taken this test?

MR. COHEN: Here in this district, these -- they have already taken the test and the results are back.

Q -- the whole district wide, but nationwide, where do you get this figure where you say 8th graders are performing below average? And that's because they took the test already, right?

MR. COHEN: The test was taken a year ago. The

national results -- the international results were released last November. Okay, Pat can brief you in more detail on that. But the short version of it -- last November, when these were released -- and I bet every one of your papers had stories on this, okay -- the U.S. ranked slightly above average in science among the 41 countries and slightly below average in math among the 41.

Q The question is, did every American student take this test?

MR. COHEN: No.

Q I think the answer is no.

MR. COHEN: No, a sample of students nationally took the test and in addition to that, a special sample of students from these 20 districts also took the test. So you have --

Q -- school district plucked out a few kids at random or some --

MR. COHEN: It's a scientific sample representative of the country in the first instance, and representative of these districts in the second instance.

Q --

MR. COHEN: No, this is -- these -- samples were selected under international guidelines to make sure you had a fair sample of kids. This is not picking out the best kids. This is really designed, again like you would do a poll to get a representative sample.

Q Just a question here. These school districts are wealthy school districts. The class sizes, the one we saw had only 18 kids in it. Why did you choose this kind of district to come to to make your first point on education? I mean, they obviously have a luxury in a way to do this kind of testing that another school might not think is their priority.

MR. COHEN: The President came to these districts to make this point again because they are the only districts in the country that stepped up and administered this test so they could find out how well they're doing on the standards. If other districts around the country had done the same thing, we would have had a choice of districts to go to.

But the fact that these districts are suburban and wealthier than others doesn't mean that these international standards should only apply to them. Because the kids in inner cities, whether they know it or not, are competing against the same international standards. And if they don't have an opportunity to find out what those standards are, to know how well they're doing compared to them, and have their schools put in place curriculum and teaching practices that will teach them the standards, they will never meet them. That's the President's point. These are the first ones to do it. But in fact, this is something that every district in the country ought to be doing.

Q So what kind of resources are available to inner city schools to do this, to follow up on Allison's point? What kind of resources, federal, are available for this?

MR. COHEN: Let me answer that in a couple of ways. First of all, the Education Department has -- working with the National Science Foundation -- has resources to help about 50 to 60 school districts or consortium school districts or states around the country administer the test in the next -- in this spring or the following spring. So there's a challenge for a small number to come forward and do that, though. If 60 came forward, that would be a 60-fold increase in the number that we have right now. So it's a big step up, if you will.

Secondly, the federal government provides a significant amount of resources targeted to districts with large concentrations of poor students, in particular, to focus on basic skills and on math and science. The Title I program concentrates its funding on inner city districts and districts with large

concentrations of poverty. The Eisenhower Professional Development Program provides training for teachers particularly in math and science. The National Science Foundation has a program designed to improve math and science teaching and learning in about 20 urban school districts around the country, something like that.

So there are federal resources available to help. But it is also the case that the bulk of the resources still come from the state and local level, as they do with everything else in education. But it is not the funding level that is depressing the curriculum in schools. It's not the funding level that's keeping outmoded teaching practices in place. It's not the funding level that's holding the expectations down for students. That's a pretty big part of what the President's been saying.

Q When you double the amount for charter schools, do you have numbers on how many additional charter schools can receive -- is there a number on --

MR. COHEN: I'm not sure I can give you the number -- do you have the number of charter schools for next year? We're aiming for 3,000 charter schools by the year 2000. We have about 400 in place now. And the money that we're proposing for next year would fund start-up costs for about 1,000 to 1,200 charter schools.

Thank you.

Q So -- 1,000 to 1,200 new charter schools?

Q Twelve hundred new charter schools?

MR. COHEN: Yes, that's right.

Q For next year?

MR. COHEN: For next year.

Q Explain how the Goals 2000 money helps set standards in precise terms as possible? I don't really

understand what the money pays for.

MR. COHEN: Sure. Yes. The Goals 2000 money does several things, right -- the money first of all is distributed by the federal government to states according to a formula and the number of kids in the state and how much poverty they have. The state then distributes the money to local school districts on a competitive basis. Now, there are several ways in which the Goals 2000 money helps set standards.

Some states have used the money to form committees of teachers to go look and see what other states expect of kids, what other countries expect of kids, to try to come to agreement on what standards ought to be set in their state. Pat Forgione, before he came to the U.S. Department of Education, was Commissioner of Education in Delaware, and if I'm not putting words in your mouth, I think that's essentially what you did with Goals 2000 money. So it literally supported the process of coming to agreement on what the standards ought to be and getting the information necessary to do that.

Secondly, I think I'm going to take another Delaware example if I can, Pat. Pat used the money that he had that was given out to local school districts to help local schools develop model curriculum that were tied to the standards so that teachers all over the state could not only look at the state standards, but also begin to look at curriculum to see how to translate that into classroom practice.

In Colorado, they used the money to develop model

standards at the state level, and then each district or districts could apply for money and use that to set their own local standards, because it's more of a local control tradition in Colorado.

One last point on that -- an awful lot of states around the country are using the money once they've set the standards to train teachers in new teaching practices and in the subject matter that they will need so they can teach kids to those standards. Does that help?

Q You said that there are now 400 charter schools. How long have they been around? Has it been just been a year or two?

MR. COHEN: When President Clinton took office in '92 I think there was maybe one or two charter schools in existence. Now there are approximately 400. When we took office, I think Minnesota was the only state in the country that had a charter school law. Now, 26 states and the District of Columbia have -- it's been a tremendous explosion in the last four years, and I think our start-up funds probably pay for roughly 300 out of the roughly 400 charter schools in some way or another; we're stimulating and supporting those efforts.

Q Mr. Cohen, I wonder if I could ask you two quick questions. Is there a dollar figure attached to this push towards standards? The things the President talked today, wanting to do in a second term, is there a rough dollar figure that can be attached to the combination of tuition credits and

all of the things you listed, and can you break out standards separately and say that there's a figure attached to them?

MR. COHEN: I don't think so. The Hope Scholarship that he talked about, for instance, I believe we've got that at about \$42 billion over six years. I'll double-check those figures for you if you need it, because that's off the top of my head -- it is much more difficult to come up with a set figure for standards, but what I can tell you is that over the last four years between Goals 2000, which is now \$490 million, we're asking for \$620 million, the Title I program, which provides the lion's share of federal support for elementary and secondary education and is aimed at helping low-income kids in particular meet the same high standards that states set is about \$10 billion -- roughly \$10 billion an year. And the School-To-Work program, which is also focused on high standards, is about \$400 million a year between the Education Department and the Department of Labor. So we're looking at almost \$11 billion by rough calculation. I can again check figures for you if you need me to.

Q That's all money that needs to be appropriated by Congress this session?

MR. COHEN: Every year, the Congress needs to appropriate money. The figures that I gave you are pretty consistent with what we've got in place right now, though.

Q I guess what I'm saying, then, is how much more is he asking them to spend this year to do the things he thinks will be new and necessary?

MR. COHEN: As Mike indicated, the only two parts of the budget we're prepared to talk about right now are the charter schools figure and the Goals 2000 figure, but not the rest of it.

Q Is there an ideal number of charter schools you want in the country? Do you want to kind of control it so that you don't have too many sort of -- since this is a relatively new phenomenon, can you talk on that a little bit?

MR. COHEN: Well, the President's goal is to get 3,000 charter schools in place by the year 2000 or 2002. Again, I'll have to check what we said about that -- 3,000 charter schools by the year 2000. That would be a sustained, significant growth each year. But we are also investing some money in monitoring them, in -- we've got some evaluation reports that the Education Department will release in the near future that are trying to learn how do you help manage these charter schools so that they're focussed on quality, so that they remain accountable for results, so that they -- as states and local school systems begin to put them in place, they in fact get implemented in a sensible fashion. So part of our responsibility is to help people learn how to do that.

Q How can you explain the fact that only one group of school districts came forward to take this test? Is that because other school districts are afraid of losing local control?

MR. COHEN: There were -- there may be a number of reasons in that. There were only a handful of others that had come forward and said, gee, we'd like to take the test but we either can't quite get the money together or we don't -- you know, we can't get our act together in time to meet the deadline.

But I think it takes a real push to convince local school districts that in fact the right thing to do is to aim for the highest standards in the world. That is not something that comes naturally to local school districts. It really takes some leadership and some push to get them to recognize the value in doing that and to be willing to take the risk in discovering that they are falling short of the mark for their students. That takes some courage to compare yourself to the best in the world -- as opposed to how we did last year, where we can always show a little bit of improvement and tell the community we're doing well. This takes a real risk to commit yourself to finding out the truth.

Q The President seemed to be saying, too, that there is some concern out there about losing local control.

MR. COHEN: Well, you know, a lot of the debate about Goals 2000 in the last -- well, since it started, has been this debate that somehow the federal government is going to take over the curriculum in school systems, which I should point out has not happened in any state or any school district that's receiving Goals 2000 money, but there has been this myth generated that there is sort of a federal effort to undermine local control.

And as the President pointed out, local school boards don't determine algebra and don't determine the laws of physics. There are some things that kids ought to learn pretty much in common all over the country. We need to figure out what that is, people need to commit to those goals and standards and figure out the way to reach that. And that's not going to take away local control from everybody.

Q Just a question on the nitty-gritty of the costs of giving these tests. What does it cost to give the test in a school district, and is that for overtime for teachers to administer it or is it for the testing service? Where does that money come and go?

MR. COHEN: Pat Forgione is the commissioner of the National Center on Education Statistics at the U.S. Department of Education that administers the TIMS testing program.

MR. FORGIONE: Thank you, Mike. The main cost in doing this is to ensure the quality control. Historically, these kinds of studies have not been trusted because you don't know

what the sample is, the follow-through, were selected kids tested. So the main cost here will be \$50,000 at a grade level to do math and science. If a district wanted to do grade 8 math and science, \$50,000 would be the cost.

The main costs are to bring out the team to select the sample. This school district had 3,000 kids at grade 8; 750 were selected. They did not select them. They were selected

independently. There was monitoring to make sure the right kids took the test. If you're absent, you have to follow up. You have to have a lot of quality control so when you release the results we can really say, here's the way the United States is versus other countries -- in this case, how school districts are.

Q So those 750 were chosen at random, or how does that happen?

MR. FORGIONE: Were chosen randomly by the contractor, using a sampling model to assure that we would get a random sample of children in the district, across all the regular classroom. So this is including all the kids in this district -- from the very best to the weakest academically, were all on a list, and we selected them. We went in, got those kids, tested them, collected the data, followed up if they were absent, and put together a database in which today we're able to report to you that this district would rank first in the world in science and second in the world in mathematics. And that's a far call from the United States' position, if you remember the results that we released last November, where the United States had a number of countries -- 20 countries in math were better than us, and in science, nine countries. So this district really has set an example of what's possible.

Q But is this really a fair comparison, because what you -- I would assume in the other 40 countries -- is that how many other countries?

MR. FORGIONE: Right.

Q That their sampling would have been taken across the board and across the country, as opposed to one affluent school district that got \$150,000 from the federal government and some sort of Department of Education -- I'm confused about that. Did you come in and coach the students on how to take the test? What was that about?

MR. FORGIONE: Well, let's take the fairness first. None of those grants happened until after the kids were tested. In the United States, we selected 13,000 kids at grade 8 to test. We picked the schools and the kids for the United States data. So we have a fair, accurate estimate of the United States grade 8 population from TIMS. We also have the same accuracy in Singapore, Germany, England -- our economic competitors that were in TIMS.

In this district, we took a sample of the children. Now the children may be of a certain type here, but this is a fair, accurate estimate of how this district does.

Q Yes, but I think the comparison could be made: It's like putting the Dream Team up against everybody else in the Olympics last summer. We blew them away. That's because we took -- we selected the cream of the crop and essentially put them on the floor. Isn't that what was done here?

MR. FORGIONE: Okay, Mike wants to --

MR. TOIV: Mike wants to answer that question. Now, we have folks here from the consortium who can answer your questions and concerns about how the test was administered and

how the students

Q No, that's not my question. My question is, is this an accurate comparison to the other 40 countries where, I would assume, these tests were administered across the country as opposed to in the one single school district.

MR. FORGIONE: Look --

Q You see the point I'm getting at?

MR. FORGIONE: I understand your point completely. These districts are not representative of America. These districts are better off than most districts in America -- the Dream Team, right? The important point, though, is that this isn't basketball. This is math and science and every kid has got to learn math and science. Sure, these districts -- no, wait a second, though. These districts did a lot better than other districts will do. There's no doubt about that. That may partly have to do with the nature of the community they come from. It also has to do with the kind of expectations that they've set. Fifty percent of the kids in this district take algebra compared to 20 percent in the rest of the country.

We know from the international studies that the curriculum throughout the country here in math and in science is far less focused, far less challenging, far less -- far less easy to learn. It's more chaotic, more unfocused, more fractured in this country, around the country, in math and in science compared to other countries.

Now, that may be less true here than it is in other districts around the country, but those are things that can be corrected regardless of the background of the kids and regardless of the level of funding in the district. In that sense, the message here is not that they did first and is it fair or not, but other districts need to step up to the plate and benchmark themselves against the same standards so they can change the things in education over which they have control. And we know from lots of research and lots of experience that that will lead to improvements in math and science performance of those kids.

Will every district do as well as these did? Not necessarily. Can a lot of them do a lot better than they are? Absolutely.

END

1:20 P.M. CST