

DOCUMENT RESUME

ED 448 523

EA 030 796

TITLE A Forum To Expand Advanced Placement Opportunities: Increasing Access and Improving Preparation in High Schools. Transcript of Proceedings (Washington, D.C., February 11, 2000).

INSTITUTION Department of Education, Washington, DC.

PUB DATE 2000-02-11

NOTE 231p.; Transcript was produced from a tape recording. For other transcripts of the proceedings, see EA 030 792-795.

PUB TYPE Collected Works - Proceedings (021)

EDRS PRICE MF01/PC10 Plus Postage.

DESCRIPTORS *Advanced Courses; *Advanced Placement; Change Strategies; College Preparation; Curriculum Development; Educational Improvement; Educational Opportunities; Excellence in Education; High Schools; *Secondary School Curriculum

ABSTRACT

This transcript reproduces a Department of Education/College Board-sponsored discussion on ways to expand advanced-placement (AP) opportunities in high schools. The deliberations opened with a presentation by Terry Peterson, Senior Advisor to Education Secretary Richard Riley, in which he focused on the importance of AP courses for minority and low-income students. He was followed by Gerry Tirozzi, head of the National Association of Secondary School Principals, who discussed the need to raise academic standards for everyone. Tirozzi also touched on ways to ensure teacher quality and mentioned the correlation between college success and the AP courses that students take. The next two speakers, Richard Riley and Gaston Caperton, the latter being President of the College Board, presented the two keynote speeches for the conference. Secretary Riley focused on the heightened expectations for all students and the desire that all students eventually take AP courses. Secretary Riley's speech was followed by Mr. Caperton, who reiterated the importance of AP courses in all students' lives. Other presenters included Bryan Barnett, Vice President of Apex Learning, who discussed the role of distance education in AP courses; Karen Deaver, a teacher who demonstrated how the Virtual High School works; and others. (Includes an index.) (RJM)

ER

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA

DEPARTMENT OF EDUCATION

* * *

A FORUM TO EXPAND ADVANCED
PLACEMENT OPPORTUNITIES:
INCREASING ACCESS AND IMPROVING
PREPARATION IN HIGH SCHOOLS

WASHINGTON, D.C.

FRIDAY, FEBRUARY 11, 2000

ACE - FEDERAL REPORTERS, INC.

Stenotype Reporters

1120 G Street, NW
Washington, D.C. 20005
(202) 347-3700

NATIONWIDE COVERAGE
800-336-6646

ED 448 523

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

0796
ERIC
Full Text Provided by ERIC

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA

DEPARTMENT OF EDUCATION

* * *

A FORUM TO EXPAND ADVANCED
PLACEMENT OPPORTUNITIES:
INCREASING ACCESS AND IMPROVING
PREPARATION IN HIGH SCHOOLS

WASHINGTON, D.C.

FRIDAY, FEBRUARY 11, 2000

ACE - FEDERAL REPORTERS, INC.

Stenotype Reporters

1120 G Street, NW
Washington, D.C. 20005
(202) 347-3700

NATIONWIDE COVERAGE

800-336-6646

3

UNITED STATES OF AMERICA
DEPARTMENT OF EDUCATION

* * *

A FORUM TO EXPAND ADVANCED
PLACEMENT OPPORTUNITIES:
INCREASING ACCESS AND IMPROVING
PREPARATION IN HIGH SCHOOLS

Washington Court Hotel
525 New Jersey Avenue, N.W.
Grand Ballroom
Washington, D. C.

Friday, February 11, 2000
8:34 a.m.

PRESENT:

IRENE K. SPERO
LEE JONES
JUDITH JOHNSON
LORRAINE MUNROE
JEFF LIVINGSTON
JORDANNA GRANT

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

4

410-684-2550

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

P R O C E E D I N G S

(8:34 a.m.)

LEE JONES: Good morning, everyone. We're going to get started in about 15 second here, so if everybody can just grab a coffee or whatever you need and then have a seat, we will get started.

It is very rewarding to me to hear all the positive feedback from everyone about our kickoff yesterday.

I was really also rewarded yesterday during the reception, because I went around and visited tables and I found groups of people from a whole lot of different states sitting together exchanging ideas.

So, already, I think we are off to a good start, and a lot of our goals are being accomplished.

The first thing I want to do this morning is reviewed our agenda for you. As you know, we are starting a half hour early.

What I would like to do is walk through the timing of the sessions for this morning.

This first session will be setting the

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

5

410-684-2550

1 stage. It will be from 8:30 to 9:30. We will then
2 break, and the first set of breakout sessions will
3 start at 9:45 and run to 10:45.

4 So, 9:45 to 10:45, Breakout Session 1.
5 Another break, and then from 11:00 to 12:00, we'll
6 have Breakout Session 2.

7 All the rooms will stay the same. It is
8 just the times that are changing -- from 11:00 to
9 12:00 the second Breakout Session.

10 Then, we would everyone to try and quickly
11 reassemble back here by 12:10, so that we can begin
12 our keynote addresses at 12:15.

13 It is my pleasure to start this morning
14 off by introducing to you Terry Peterson, who is
15 Senior Advisor to Secretary Richard Riley.

16 Terry has worked at all levels of the
17 education system. He has been a teacher--Wisconsin,
18 Brazil, South Carolina--a parent organizer, worked at
19 colleges in South Carolina, was the Chief Advisor to
20 Richard Riley when he was--on education--when he was
21 Governor of South Carolina, and now of course serves
22 in that capacity.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

6

410-684-2550

1 We need to thank Terry, in particular,
2 because it was really his vision that stimulated this
3 Forum.

4 I can remember sitting around the table,
5 when, sort of, the light bulb started to go off when
6 we tried to think about what would be the best way to
7 try and get people together to spend \$15 million in
8 support of expanding access for challenging academic
9 courses for low-income students.

10 So, I want to thank Terry for his vision
11 and assistance in organizing this Forum and welcome
12 him here today. Terry.

13 (Applause.)

14 TERRY PETERSON: Thank you and good
15 morning.

16 VOICES: Good morning.

17 TERRY PETERSON: I had a little quieter
18 audience than he did, so I wanted to get a little
19 extra "Good morning" in to everyone.

20 First, I wanted to extend another warm
21 welcome to you from the U.S. Department of Education
22 for your participation in this, really, first-ever

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

7

410-684-2550

1 summit on the critical importance of advanced courses
2 in high schools.

3 We have teams from 43 states and
4 territories. We have many leaders and
5 representatives of major education organizations
6 participating in this very important dialogue.

7 I think, really, the level of
8 participation shows a seriousness and potential of
9 offering advanced courses to our students and to our
10 country.

11 Second, let me express my deep
12 appreciation to the College Board, which was really a
13 major contributor of funds and of intellectual and
14 organizational support for this conference.

15 Might I ask you to give them a round of
16 applause, please?

17 (Applause.)

18 TERRY PETERSON: We have another set of
19 sponsors, and let me mention them quickly -- the
20 Southern Regional Education Board.

21 (Pause.)

22 TERRY PETERSON: Either it's too much wild

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

8

410-684-2550

1 living or thinking about AP. I'm not sure what's got
2 me losing my voice.

3 The Southern Regional Education Board
4 headed by Mark Musick, an old friend, the Witchie
5 Group out of the West with David Longenecker, the
6 Council of Chief State School Officers, the
7 International Baccalaureate Organization, the State
8 Higher Education Executive Officers, and the National
9 Association of Secondary School Principals, led by my
10 co-presenter here this morning, Gerald Tirozzi.

11 Could I ask you to give them a round of
12 applause, please?

13 (Applause.)

14 TERRY PETERSON: Also, we have had great
15 support right within our Department of Education, and
16 I hope everyone who you have dealt with has been
17 positive and helpful and they will continue to be so.

18 Really, during this meeting and
19 conference, if you have any questions about
20 anything--well, just about anything--please ask them,
21 and I am sure they will be helpful.

22 So, why is this issue of increasing

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

9

410-684-2550

1 participation in advanced courses so critical? Let
2 me get rid of my water for one minute in case I need
3 it again.

4 Why is this so important? Is this just
5 another kind of thing to look at in kind of a passing
6 fad.

7 You heard, I think, yesterday, the moral
8 imperative from a very impassioned Lorraine Munroe,
9 my fellow South Carolinian, and now turned
10 Californian, Jeff Livingston, and from Jordanna
11 Grant.

12 But, let me give you two other reasons, as
13 well.

14 The first reason is very, very
15 straightforward. Our nation is facing a talent
16 shortage.

17 Let me give you three stark examples.
18 Number one, we need over 200,000 highly qualified
19 teachers each year for the next ten years to deal
20 with growing student enrollments, increasing teacher
21 retirements, and normal replacements of the teaching
22 force.

1 These future teachers, as you well know,
2 are people who obviously must be well prepared,
3 starting early, to handle a concentrated area of
4 study in the Bachelor's program as well as learn how
5 to teach, probably go on to get a Master's degree,
6 and ultimately have the background to teach to high
7 standards.

8 The second example -- the information
9 technology industry needs, by some estimates, 400,000
10 more qualified employees right now.

11 There's actually vacancies of that many
12 positions, and they estimate that that need is going
13 to continue.

14 Obviously, these people need a solid
15 background. They need preparation, so they can
16 handle two-year degree work in college, four-year
17 degree, some Master's and some Ph.D.

18 The third example -- despite a smaller
19 military today, our Armed Services need over 100,000
20 new recruits a year.

21 While most of these recruits don't
22 typically have a college degree, they do want,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

11

410-684-2550

1 however, recruits who come from the top half of
2 achievement in verbal and math skills.

3 Now, stop and think for just a minute.
4 These are just three sectors -- the most critical
5 community institution, your local public school; the
6 fastest growing business sector, the information
7 technology industry; and our national defense--

8 These three together need at least 700,000
9 more qualified individuals per year.

10 Where is the on-tap pool that will fill
11 these positions?

12 How can we build the pipeline? Clearly,
13 when you analyze all this, a substantial part of the
14 answer can be found among low-income students and
15 among our minority students.

16 You see, low-income and minority students
17 are seriously under-represented in college--
18 participation in college completion rates.

19 They are under-represented in advanced
20 courses in middle and high schools, and, as Gerry
21 will soon discuss with you, these are all very
22 interconnected.

1 A second reason for the focus on
2 increasing participation in advanced courses is that
3 they are truly gate-openers.

4 They are particularly gate-openers for
5 low-income and minority students. They are powerful
6 gate-openers.

7 You heard the potential last night. Let
8 me show you one set of data that absolutely shocked
9 me when I first saw it.

10 (Pause.)

11 TERRY PETERSON: Well, it's gotten big.
12 I'm squeezing it in here barely. Let me describe
13 this for a minute.

14 PSE is folks going on to college, so these
15 are high-school kids going on to college.

16 (Slide.)

17 TERRY PETERSON: So, we've got two columns
18 here. This group, very low income, under 15,000.
19 Here we have 50,000 above.

20 It isn't high income, but it captures a
21 large part of America. All right, I think that is
22 good.

1 Just for a minute, let's take a little
2 reduction here. This is really high-tech. You take
3 a piece of paper, and you fold it four times.

4 (Laughter.)

5 TERRY PETERSON: Gerry said I've come a
6 long ways.

7 (Laughter.)

8 TERRY PETERSON: The Yes means that
9 students have taken Algebra I, Geometry, Chemistry,
10 and Trig--all four, okay.

11 We haven't even gotten to Advanced
12 Placement, yet. That is even more powerful. Gerry
13 is going to get to that.

14 Above \$50,000, if you took all four of
15 those courses, the odds of going to college is 98
16 percent.

17 That is about as high as you can get for
18 50,000-above family--kids from families who didn't
19 take all four.

20 They probably took-- About 82 percent go
21 to college, so you can show the power of these
22 courses.

1 But, now look what happens for low-income
2 students. If you take all four of those courses, 87
3 percent go to college.

4 Talk about leveling the playing field.
5 There are very few things you can find in education
6 that you find this stark a difference.

7 Now, some of it obviously is selection
8 factor, and so on, but, man, this is a huge
9 difference.

10 But, look what happens if you don't take
11 all four and you are low-income. Thirty-four (34)
12 percent -- look at this difference. Massive.

13 So, we really need to look at ways in
14 which we can truly increase the participation of our
15 young people in advanced courses.

16 That is what this meeting is really all
17 about.

18 Now, what are some opportunities to do
19 that? Really the opportunity that you have here is
20 that we have some new resources.

21 (Pause.)

22 (Slide.)

1 TERRY PETERSON: You may know that, for
2 some of you who have been involved in this, that, for
3 1999, we had about \$4 million of Federal money for
4 Advanced Placement programs.

5 Most of that money went to pay for the
6 fees of low-income students to take AP courses.

7 Right now, we have had a major increase--
8 about \$11 million, and it appears, from our work of
9 our Department and College Board, we don't need a
10 whole lot more than the \$4 million to pay for the
11 fees.

12 So, that leaves about \$10 million or \$11
13 million that you can apply for in your states to
14 expand advanced courses in our high schools.

15 Now, this really, really gives you a rare
16 opportunity to think about new strategies and new
17 approaches.

18 These new approaches should really
19 concentrate on two things -- expand advanced courses
20 in schools that have few or none of them,
21 particularly schools that have large percentages of
22 low-income and minority kids, and, second, to enlarge

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

16

410-684-2550

1 the pool of low-income students preparing for and
2 taking advanced courses.

3 As Gerry will talk about, you can't talk
4 about 11th and 12th graders here. You should be
5 talking about 6th, 7th, 8th, 9th, 10th, 11th, and
6 12th graders.

7 That may even be too late. But, think
8 about how do you build a pipeline to prepare
9 students, excite them, motivate them to take these
10 courses.

11 As we saw, they are truly gate-openers.
12 You will have a chance to hear and discuss success
13 stories later today, and this afternoon and tomorrow,
14 to have opportunities to brainstorm and plan on how
15 your application might contain new strategies to help
16 your state and schools move forward.

17 As you look at this second overhead, I
18 want you to keep in mind also that we are asking you
19 for additional money next year in two ways -- to keep
20 expanding this effort from \$15 million to \$20
21 million--it is a request to Congress; they haven't
22 bought into this yet--we hope they do--and a new

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

17

410-684-2550

1 initiative to create incentives and catalysts to put
2 terrific advanced courses online.

3 So, the \$10 million will be a new request
4 to incentivize and create new opportunities to put
5 courses online, to give you some more tools in your
6 quiver to help kids get access to advanced courses.

7 Now, another thing. Again, this is kind
8 of rare that you have new money. It's broad. It
9 gives you a chance to be creative.

10 I want you to also think about these
11 Federal monies, not as the only source of money,
12 eventually, but sort of as start-up monies or
13 leverage resources for you back home to work with
14 your state and your school districts to build new
15 partnerships and greatly expand Advanced Placement
16 opportunities, and create new initiatives.

17 So, don't just think of this as the only
18 money, but this might allow you to try out some
19 things that you could then take to your legislature,
20 take back to us, or take to school districts or
21 colleges, to really be bold.

22 So, that is kind of the background of why

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

18

410-684-2550

1 and what was the rationale for this conference and
2 meeting, and pulling you together.

3 I now want to do my second part of my job,
4 and that is to introduce Gerry Tirozzi, who will
5 share with you how we get there.

6 I tried to talk a little about why and
7 what. He will talk a little bit about how.

8 Gerry has held just about every job there
9 is in education, from a teacher to principal to a
10 college president.

11 He has been a state superintendent, an
12 Assistant Secretary in our U.S. Department of
13 Education.

14 He currently is the head of the National
15 Association of Secondary School Principals.

16 I have known Gerry a long time. He
17 changes jobs a lot, but, wherever Gerry goes, good
18 things happen.

19 He has a wealth of hands-on experience
20 just like you. He has had probably almost every job
21 you have had and I have had, and a few more.

22 He knows how to make things happen. He

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

19

410-684-2550

1 knows what good ideas we need to address.

2 So, let me introduce to you my good
3 friend, Gerry Tirozzi.

4 (Applause.)

5 GERRY TIROZZI: Thank you, Terry, for that
6 very nice introduction, and just to clear the air,
7 first, I do change jobs.

8 I have 40 years in the field, so it is not
9 as bad as you think, and I started very young, for
10 those of you counting on fingers.

11 (Laughter.)

12 GERRY TIROZZI: It is always a pleasure to
13 be on a platform with Terry Peterson, who I have the
14 greatest respect and admiration for, and, of course,
15 the gentleman who is the counselor to Dick Riley, who
16 really is one of the quintessential figures in this
17 country for American public education, and all
18 education.

19 I am going to follow up on Terry's
20 opening, and what I really want to do is talk about
21 reform, but in particular, related directly to
22 Advance Placement and some things like international

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

20

410-684-2550

1 baccalaureate--anything that raises the bar.

2 My sense is we have a significant number
3 of states represented here, not necessarily just to
4 talk about AP, but because you are all very
5 interested in terms of how we are going to improve
6 what we do in public education, and in all education.

7 You know, I always like to say we are at a
8 critical crossroads, and, you know, all education is
9 important.

10 Don't misunderstand what I am saying, but
11 in particular, I mean, the major enterprise in this
12 country is public education.

13 Unless we really get the job done, over
14 time I think public education is going to change in
15 ways that some of us do not want to see.

16 So, I think it is fair to say we are at a
17 crossroads.

18 So, when I talk about reform-- You know,
19 everyone talks about reform in this country. I like
20 to say to an audience do you feel reformed yet? You
21 know, is it over?

22 (Laughter.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

21

410-684-2550

1 GERRY TIROZZI: And it isn't. I guarantee
2 it isn't, and Johnny Lee, country singer--and some of
3 you may remember this song--I won't sing it, of
4 course.

5 But, he talked about looking for love in
6 all the wrong places. I think we have been looking
7 for reform in all the wrong places.

8 People tell me all the time, or I see the
9 reference "push the envelope." My sense is you
10 really don't need to push an envelope. You need to
11 open it.

12 The answer is right in front of us if we'd
13 only see it. Someone at Stanford University wrote a
14 book and entitled it "Tinkering Toward Utopia."

15 (Laughter.)

16 GERRY TIROZZI: I think we are, because I
17 think we operate on the fringe of this thing we call
18 reform.

19 I think Secretary Riley really states it
20 best when he talks about one of the critical issues
21 when we deal with reform and where we are, and where
22 we are going.

1 He refers to it as the tyranny of low
2 expectations, which I think is a wonderful phrase or
3 metaphor that captures the problem.

4 My sense, with 40 years' experience in
5 education, including having been an urban
6 superintendent, teacher, counselor, principal--and
7 the more I talk and speak with people about this
8 problem, and those of you who heard Lorraine Munroe
9 yesterday--I was not here, but I have heard
10 Lorraine--the secret really is raising the bar for
11 the kids in the poorest schools and in the lowest-
12 achieving schools.

13 The secret is not keeping them in remedial
14 courses or courses which really are-- I call them
15 terminal--terminal math, terminal reading, and so on.

16 You keep the bar here, and they never go
17 anywhere. The secret is to raise the bar.

18 That is why this conversation about
19 Advanced Placement, international baccalaureate, and
20 other advances courses, is so important.

21 Goyten once said, if you treat students as
22 they are, you make them worse. If you treat them as

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

23

410-684-2550

1 they potentially could be, you make them better.

2 So, when I talk about AP--and I have been
3 a big fan of AP for a very long time--by the way,
4 when we say AP--I think Terry would agree--I keep
5 referencing international baccalaureate, anything
6 that is advanced, anything that raises the bar for
7 our youngsters.

8 The standards movement which Secretary
9 Riley and the President, and others, Congress,
10 National Goals Panel, have been looking at for the
11 last five to ten years, really, the standards
12 movement, I think, does, in fact, drive equity.

13 Yes, when we talk about high standards in
14 states--and most of you are in states where this is
15 being promoted--we are talking about the same
16 standards for all children.

17 I understand that some people have some
18 problem with that, because--pardon my expression--the
19 cop-out often is, well, the poor kids can't reach the
20 standards.

21 Well, the bottom line is the poor kids
22 will never reach the standards if we don't expect

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

24

410-684-2550

1 them to reach the same standards.

2 Too, the critics often say what is the
3 alternative, minimum standards or lower standards?
4 Think about that for just a moment.

5 Yes, I respect that we need more resources
6 to ensure that all kids in this country have an
7 opportunity to achieve high standards.

8 I absolutely understand and respect that
9 argument. However, do we put aside high standards
10 until the resources arrive?

11 That's what you really have to think
12 about, and my sense is--and I have always felt this
13 way--if you have a quality teacher in a classroom,
14 well prepared, continually involved in professional
15 development, knows his or her subject, can deliver
16 the subject, and that teacher has high expectations
17 for all students and is offering high-level courses,
18 that is the major resource you need to change the
19 school.

20 It isn't bright-colored textbooks or new
21 innovations in technology, all of which support
22 teaching-learning.

1 But, ultimately, it is the quality of that
2 teacher and what he or she expects from those
3 students.

4 So, very quickly, let me transition
5 directly to a reference to AP, and what Terry was
6 talking about, advanced courses.

7 Very interesting study was issued by the
8 U.S. Department of Education. I guess it was five,
9 six, or seven months ago.

10 It is called Answers in the Toolbox, by
11 Clifford Edelman. It is always amazing to me how
12 some research reports receive national publication.
13 They're USA Today, New York Times.

14 A majority of those research studies, to
15 be very candid, were written for other researchers
16 and have very little application often for what we do
17 in schools.

18 What surprises me is a report like
19 Edelman's "Answers in the Toolbox" I would probably
20 think a number of you have never heard of.

21 That's the tragedy, because it is a great
22 report that has huge implications for anyone who is

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

26

410-684-2550

1 debating discussing or involved in the discourse of
2 school reform.

3 What he found in his study "Answers in the
4 Toolbox"--and this is my reference to open the
5 envelope--the answer is right in front of us.

6 Here is what he said. He made four key
7 points:

8 The completion of a solid academic core
9 was more strongly correlated with the Bachelor's
10 degree than high-school test scores, grade point
11 average, or class rank.

12 By the way, they followed a cohort of
13 students over a long period of time--I guess from the
14 early '80's through the '90's to see how successful
15 they were in college. This is how they did the
16 study.

17 So, the completion of a solid academic
18 core is critical. Terry's slides clearly pointed
19 that out.

20 Two, an intensive curriculum in high
21 school had the strongest possible effect for African-
22 American and Latino students. Key.

1 Three, finishing a math course beyond the
2 level of Algebra II more than doubles the odds that a
3 student will receive a Bachelor's degree.

4 One math course beyond level II more than
5 doubles the odds.

6 I wonder if school superintendents, school
7 board members, policymakers in the audience,
8 Governors' offices--in particular, you know, those
9 who really are involved in policy and making
10 decisions in schools--high-school principals, also,
11 when was the last time people really stepped back and
12 evaluated the course offerings in their respective
13 schools?

14 In particular, who was taking which
15 courses -- because, when I say the answer is in the
16 envelope, the answer resides with a rigorous
17 curriculum for all kids.

18 Terry's slides clearly pointed that out.
19 At the top of the scale in Edelman's report were
20 high-school students who took more than one AP
21 course, more than three years of both English and
22 math, including math beyond Algebra II--Terry's

1 slides--a minimum of two years of laboratory science,
2 foreign language, and history--and this is extremely
3 important--they took no remedial math or English
4 courses, better known as terminal math and terminal
5 English.

6 So, again, step back for a moment, and you
7 get a sense of the power of the curriculum and the
8 power of rigor.

9 Let me share with you just a few slides,
10 and If I can use Terry's technical assistance.

11 (Slide.)

12 TERRY PETERSON: This is a slide that
13 shows--and, by the way, I believe Terry is going to
14 make all of this information available to you, so you
15 don't need to take copious notes.

16 High language in high school and 8th-
17 grade foreign language classes increase the
18 likelihood of college.

19 This is a slide that notes that, if, in
20 fact, you have taken notice of the lighter bar,
21 there's no 8th-grade language, and the solid bar is--

22

1 I'm sorry, the light bar is 8th-grade
2 language, and the darker bar is no 8th-grade
3 language.

4 Those youngsters, who took a foreign
5 language in the 8th grade, the potential for the
6 success increases dramatically the likelihood of
7 going to college.

8 Yet, it is always amazing to me, in this
9 country in reform, we cut out foreign language, just
10 like we cut out the arts. So, think about that.

11 (Slide.)

12 TERRY PETERSON: This to me is very
13 impressive. High math in high school in 8th grade--
14 and you can just follow the bars if you can't read
15 the print--again, the light bar is 8th-grade algebra.

16 The dark bar is no 8th-grade algebra, and
17 you can see the youngsters who took high math, middle
18 math, and low math--

19 It is amazing the difference in terms of
20 the likelihood of going to college where you are
21 involved in high math courses.

22 (Slide.)

1 GERRY TIROZZI: This to me is a very
2 telling chart. Students who took no AP, Bachelor
3 degree completion is 33 percent -- students who took
4 no AP.

5 Students who took one AP class, the odds
6 increased to 59 percent, and students who took two-
7 plus AP, the odds increased to 76 percent.

8 Again, it goes back to the rigor of the
9 curriculum and the high standards and the
10 expectations that all students can do this.

11 What is interesting in his report, if you
12 look at any population group--white, black, hispanic,
13 et cetera--you find the same type of very high
14 correlation.

15 Yet, in this country, when we debate and
16 discuss reform, we continue to make the statements
17 that we can't expect poor kids to do these things
18 until all the resources arrive.

19 I would argue, I would debate, I would
20 posit, that Advanced Placement, international
21 baccalaureate, and high standards courses really can
22 immediately make a difference.

1 My best example--and you are overnight in
2 D.C., and I am not giving a homework assignment,
3 because all of you have probably seen it already--but
4 anytime you are in doubt, you need to watch Stand and
5 Delivery and Hemi S. Gallanti, and what he did with a
6 group of youngsters in Los Angeles, California, who
7 were taking terminal math.

8 By the end of that year, he had everyone
9 of them passing the AP, to the extent College Board
10 insisted they retake it, and they all passed it
11 again.

12 So, the point is it can be done, and the
13 greatest resource will be teacher.

14 In a moment, I want to reference the
15 Federal grant and how that can help.

16 (Pause.)

17 GERRY TIROZZI: Another key point I want
18 to make, and again building on Terry's presentation,
19 the commitment to high-level Advanced Placement
20 courses and international baccalaureate programs, and
21 others, does not begin in high school.

22 We could make an argument all the way back

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

32 410-684-2550

1 to the first grade, but I don't want to go back that
2 far.

3 I want to just suggest that one of the
4 most powerful things we can do--and the research
5 tells us this--is to ensure that every youngster in
6 this country in the 8th grade has an opportunity to
7 take Algebra I in the 8th grade.

8 If you look at the third international
9 assessment of educational progress in math and
10 science, every country we were compared with--and, by
11 the way, in the 12th grade, our 12th-graders scored
12 only above Cypress in South Africa of 41 countries--
13 but all the countries at the top--the Singapores, the
14 Koreas, and others--about 98 percent of their
15 students take algebra in the 8th grade.

16 In American schools--public schools--it is
17 around 20 to 25 percent.

18 That is an improvement over what it was
19 five years, so, again, we need to step back and ask
20 what is the expectation.

21 There's a huge challenge here for high-
22 school principals, and I am very much involved with

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

33

410-684-2550

1 high-school principals and middle-level principals--
2 and, again, that is where I work--to really look at
3 that whole curriculum.

4 Those you, who are in your respective
5 communities and from various states, you need to
6 start demanding that people look at this and really
7 understand the importance of it.

8 In talking briefly about the Federal
9 grant, I am delighted to see the Federal Government--
10 and, again, with the Secretary's strong push--putting
11 forward \$15 million this year to help Advanced--AP
12 courses.

13 This started, I believe, as a \$2 million
14 grant a couple years back, and I was the Assistant
15 Secretary at the time.

16 One of my great surprises--and, of course,
17 \$2 million is not a lot of money, nationally. But,
18 when I went out, it had basically one purpose. It
19 was really to underwrite the cost of poor youngsters
20 having the dollars to take the course.

21 It paid for them to take the course. We
22 had several states return their appropriation,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

34

410-684-2550

1 because they did not have enough students who--

2 Poorer students who were eligible to take
3 the test weren't prepared to take the test. Schools
4 said: We can't do this.

5 Several states returned the money. As a
6 matter of fact, there is a footnote, and I haven't
7 looked recent.

8 But, the last statistic I saw, only about
9 12 percent of our students in America take AP
10 courses--only 12 percent.

11 About 49 percent of all American high
12 schools do not even offer AP courses--do not even
13 offer.

14 If I could disaggregate that to urban, it
15 is probably-- It is a much higher percentage.

16 The difference with the grant now, and I
17 think with Edelman's report and other initiatives
18 really driving this question of higher-level
19 courses--AP courses--the new grant not only pays for
20 the student to take the course but will allow for the
21 development of teachers to teach AP courses, because,
22 in fairness, you do need a very specific training

1 program to teach an AP course.

2 Interestingly enough, the teachers I speak
3 to who tell me about AP tell me it is probably the
4 best professional experience they ever had, even
5 being trained to teach a course like this.

6 Then, the money can also be used to tutor
7 youngsters who need help in preparing for AP courses,
8 and there are other things the grant can be used for.

9 But, those three, in particular, I do want
10 to cite -- the tutorial assistance, helping the
11 teachers develop the skills to teach these courses,
12 and helping the youngsters to pay for the courses.

13 I might, also as a footnote--a lot of
14 people don't even know this--but Title I schools--
15 high schools--always could use the money to pay for
16 AP courses.

17 But, people-- Because we are so wed to
18 remedial education, we never think about that.

19 So, this grant, to me, really sends a very
20 strong message, and I appreciate what Terry said
21 about, next year, the grant going to \$20 million.

22 I sincerely hope you caught the

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

36

410-684-2550

1 significant of the second part asking for an
2 additional \$10 million for online courses.

3 Online, I think, is going to be one of the
4 ways we address this issue of equity where, if you
5 have got a lot of these poor rural schools who just
6 don't have the teachers to teach some of these
7 courses, you can start to do a lot of this online--
8 distance learning formats.

9 So, there's great potential here, and I
10 think the U.S. Department of Education is showing a
11 real commitment to moving this agenda.

12 I would also like to note that the
13 commitment we all have in our follow-up--in our
14 discussions with U.S. Department of Education--our
15 office, the NASSP--National Association of Secondary
16 School Principals--we have been very interested for a
17 long period of time--

18 I can tell you this morning that the U.S.
19 Department is going to fund the proposal that will
20 allow us to bring together, as a follow-up to this
21 conference, somewhere in the neighborhood of 30 to 40
22 high-school principals who will be from traditionally

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

37

410-684-2550

1 what have been low-performing schools.

2 Those schools--several of those, in
3 particular--urban schools--they have 80 to 85 percent
4 of their kids taking AP courses.

5 What we want to do is tell a story. We
6 want to talk to those 30 - 40 principals over a
7 couple of days and really have a seminar in terms of
8 what they did, how they did it, how they brought the
9 faculty along, how they overcame the bureaucracy in
10 the school district to do this, if you will -- how
11 did you do it?

12 Then, we want to put together a major
13 paper which really might be just a series of case
14 studies or some helpful hints, that we will
15 disseminate widely.

16 So, this grant, I mean, really gives you
17 the major oversight, and we are trying to take it a
18 step further and tell the story specifically in terms
19 of how it happens.

20 If all goes well, that would be out by the
21 end of the year or no later than the summer, so it
22 could be used in the Fall.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

38

410-684-2550

1 So, again, there's a huge commitment to
2 move this agenda forward.

3 I do want to note very quickly, before I
4 wind down, when we talk about the importance of this
5 and we understand the essence of raising the
6 standards, some of the bad news that I do want to
7 bring to your attention--

8 (Pause.)

9 GERRY TIROZZI: I will explain this,
10 because you probably can't see it. Bud Hodgkinson,
11 the great demographer, is doing a report for us and
12 gave us this information.

13 This represents the percentage of high-
14 school students who reported being in various high-
15 school programs between '82 and '92.

16 This is the NELS data--the longitudinal
17 data. We'll get the next report soon. This is the
18 most recent we have.

19 But, what is shocking when you look at
20 this, the greatest growth we have seen over this ten-
21 year period was in the General course, a slight
22 increase in the Prep course, and a fairly dramatic

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

39

410-684-2550

1 decrease in Voc Ed courses.

2 Ladies and gentlemen, I really sometimes
3 defy an audience to tell me what is the "General
4 Course"?

5 Think about that. Now, if you have a
6 great, quote, unquote, General Course in your high
7 school, amen.

8 But, in general, I don't know what a
9 General Course is and Bud Hodgkinson, in the report
10 he is doing for NASSP, one of his major
11 recommendations to high-school principals--

12 He says two key things--many key things--
13 two in particular -- eliminate the General Course--
14 just eliminate it, and either everyone should be in
15 college-prep or we should have highly viable
16 vocational education courses that are directly linked
17 with the marketplace.

18 I mean-- So, that is a major
19 recommendation. But, go back and start asking
20 questions about this thing called the "General
21 Course."

22 (Slide.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 GERRY TIROZZI: The other point he makes
2 is we probably need to do away with this thing we
3 call the Carnegie unit, because all that represents
4 is sea-time. You have served the sentence of a
5 course.

6 (Laughter.)

7 GERRY TIROZZI: It is no attestation of
8 excellence. So, again, there's a lot of data out
9 there.

10 But, the good news. That's the bad news.
11 There's good news.

12 (Slide.)

13 GERRY TIROZZI: Between 1984 and 1997--
14 it's hard to read that. It's still wrong. We'll get
15 it right.

16 Again, I'll explain the bars to you. What
17 it is simply telling you is that we are seeing this
18 significant increase in the percentage of students
19 taking AP courses.

20 Going from left to right, it's Total on
21 the left. Just pay attention to the lightest bar,
22 because that shows you growth.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

41

410-684-2550

1 The second bar from the left is the white
2 population of high-school students. You see growth.

3 The third block is black students, and
4 that, by the way, I should note, over the ten years--
5 three years--that went from eight to 26 to 37
6 percent, which is great.

7 The fourth bar is hispanic students, and
8 this is really interesting -- 24 to 55 to 85 percent,
9 the growth.

10 So, the bad news is this thing called the
11 General Course is out there, and we are worried about
12 that.

13 On the other hand, over the last 13--the
14 period of 13 years, '84 to '97--we have seen an
15 increase in AP.

16 I am told, by people who I have these
17 discussions with at College Board, that increase
18 continues, so there is a lot of good news in this.

19 Let me wind down by--and Terry and I both
20 would like to take some questions--go back to where I
21 began.

22 I think public education is at a critical

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

42

410-684-2550

1 crossroad. I think we are going to have to make a
2 clearer statement about what we expect of our
3 students.

4 We really need to have high standards, and
5 I have always felt that is really a right of the
6 states and local school boards.

7 You really need to figure out in your own
8 states what those standards are.

9 But, I will tell you what, if you go to
10 one state and another and you start comparing what
11 people call high standards, it is amazing to me how
12 the definition varies.

13 All I can suggest is, if you really want
14 some benchmarking, courses like AP, international
15 baccalaureate, I mean, they are there.

16 We know the quality of those courses, and
17 we need to go back at all of our states and take a
18 look at who is taking which courses and, in fact, if
19 our high schools are even offering these Advanced
20 Placement courses.

21 We have two roads we can go down on this
22 issue, and the paths we, as educators, choose will

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

43

410-684-2550

1 ultimately determine the future of this thing we call
2 education, and in particular, public education.

3 I have always liked to remind audiences
4 either we accept the status quo and continue business
5 as usual or we begin to feel a sense of urgency.

6 Urgency is-- When you feel a sense of
7 urgency, it's the only way change can take place.

8 There are too many schools in this country
9 where the status quo has set in, everybody is happy,
10 staff morale is great.

11 It's called complacency. We need a sense
12 of urgency, and I think this whole study, "Answers
13 from the Toolbox," really brings that to fruition.

14 So, when I say we have this choice to
15 make--the status quo or to aggressively move forward
16 with courses like AP--I'll close on a note.

17 There's a story I heard about a
18 taxidermist. There is a gentleman driving down a
19 road in a Maine community, and he sees this sign.

20 The signs says: John Smith,
21 Veterinarian/Taxidermist.

22 (Laughter.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

44

410-684-2550

1 GERRY TIROZZI: Either way, you get your
2 dog back.

3 (Laughter.)

4 GERRY TIROZZI: I like that metaphor,
5 because it makes the point that we have choices, and
6 I think satisfaction, complacency, status quo, in the
7 school really plays out the role of the educational
8 taxidermist, you know, weak pulse, little hope.

9 We do the same thing over and over again,
10 whereas the quote, unquote, educational veterinarian,
11 if you will, is a visionary who provides courageous
12 leadership, and that promotes healing.

13 Such leadership leads to full recovery.
14 The veterinarian of school reform will open the
15 envelope and find the prescription.

16 I guess I challenge you, and Terry would
17 challenge you, as well. The prescription is there.
18 Please use it.

19 Part of the prescription is really
20 dramatically promoting advanced courses like Advanced
21 Placement. Thank you.

22 (Applause.)

1 GERRY TIROZZI: We have time for questions
2 if anyone has a question. Yes, ma'am.

3 VOICE: I would like to know if you could
4 talk a little bit about the alignment of courses that
5 we are talking about for students--the alignment to
6 standards.

7 There's been a lot of talk in the past few
8 years about having all students take Algebra I by the
9 8th grade.

10 But, I don't know that Algebra I is really
11 aligned to the national math standards. Advanced
12 states are trying to have a better alignment and
13 teach a little different kind of mathematics.

14 So, schools, on one hand are hearing let's
15 have everybody take Algebra I, but yet also they're
16 supposed to teach the standards.

17 I am just wondering if you could comment
18 on that alignment, at this juncture, that seems to be
19 here.

20 GERRY TIROZZI: Well, I am not going to
21 stand before you and tell you I am an expert in the
22 math curriculum, or what the math teachers of America

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 are discussing.

2 The only thing I can tell you, in any and
3 all conversations I have had with people in
4 leadership roles with the National Association of
5 Teachers of mathematics, I mean they support this
6 concept that all students in the 8th grade should
7 really get a good foundation--or basis, if you will--
8 in algebra.

9 Again, it goes back to an earlier point.
10 I think every state has to step back and really
11 assess its standards.

12 I mean, if, in fact, your state is
13 promoting algebra in the 8th grade, that should be
14 linked to your state's standards.

15 I have always felt that--and this is the
16 problem that schools have--the standards are over
17 here, and what we teach in schools may be over here.

18 That's where you have a disconnect or a
19 bifurcation.

20 So, I would sincerely hope that we have
21 this coherence between whatever the standards are and
22 what the courses are.

1 Based on all the literature I have seen,
2 all the research I have seen, including the Edelman
3 report, I would be hard-pressed to accept an argument
4 that we could do anything less to accept the fact
5 that we need to promote high-level math in middle
6 schools, and really push the idea of Algebra I in the
7 8th grade.

8 I think, if we don't, it is just a step
9 backward. I don't know if Terry has any-- Okay.
10 Any other questions?

11 Well, hearing none, I know I speak on
12 behalf of Terry, or Terry will come forward. I thank
13 you very much.

14 (Applause.)

15 TERRY PETERSON: Gerry, that was terrific,
16 and I think his wealth of experience really helps us
17 get a feel for the potential of all this.

18 One thing he did mention and I just want
19 to reiterate is the talking about advanced courses
20 doesn't necessarily mean narrowing the curriculum.

21 I think the O'Donnell Foundation in one of
22 its presentations, perhaps others here might talk

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

48

410-684-2550

1 about in their workshop, how AP math, science, and
2 English courses really can really improve the
3 curriculum from high school down to middle school,
4 but also the inclusion of art and music AP courses.

5 So, it is the notion of really challenging
6 material that's critical here.

7 Let me wind up--and then I don't know if
8 you're going to give some final directions--with one
9 other slide and then a kind of a close.

10 We hear a lot about choice today -- choice
11 of schools, private-school choice, public-school
12 choice.

13 Just like Gerry said, the choice we don't
14 pay much attention to that has the answer in the
15 toolbox is course-taking.

16 I would hope you would take back with
17 you-- This is, again, an interesting-- We use math,
18 because math is the easiest one to analyze rigor of
19 courses.

20 What you find here for all students--this
21 tier--these are students who took Algebra II. Here
22 are students who took Trig or higher.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

49

410-684-2550

1 Their score in the NELS assessment--
2 There's dramatic difference in performance by the
3 courses you take.

4 The same happens with low-income students.
5 The blue--if that's blue, I'm color-blind--I think
6 it's blue.

7 I can tell the other one is yellow. Blue
8 are public schools. The yellow is private.

9 When you look at the courses kids take and
10 their performance, there's basically no difference,
11 so we're having all this huge debate about vouchers
12 and everything.

13 I think that is a huge distraction in
14 America that keeps us away from working on what
15 really matters, and that is the guts of a school --
16 the teachers, the courses, the motivation, and how
17 the school is organized.

18 So, with that, let me close with a couple
19 of quotes, reminding you, I think, of what you heard
20 yesterday a little bit.

21 For those who might say that advanced
22 courses are for a few--a few select few--let me

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

50

410-684-2550

1 remind you of something that another South
2 Carolinian, Dr. Benjamin Mays, a mentor to Dr. Martin
3 Luther King, said.

4 Dr. Mays put it eloquently and bluntly:
5 The biggest tragedy in life is not failing to reach
6 your goals. The biggest tragedy lies in having no
7 goals to reach.

8 My colleague and Gerry's colleague and
9 hopefully all of your colleagues, my boss, Secretary
10 Riley, put it another way: About the surest and
11 fastest way to create an angry 19-year-old illiterate
12 dropout is to give that young person a watered-down
13 curriculum which says to that youngster: You don't
14 have it. You aren't good enough to learn anymore.

15 That is a mistake. So, you are here today
16 and tomorrow in a great position to do something
17 about replacing a watered-down curriculum with one
18 that stretches our students and gives them goals to
19 reach.

20 Be a gate-opener. Use our new resources
21 and this enthusiasm here to be a leader of gate-
22 openers when you return home. Thank you very much.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

51

410-684-2550

1 (Applause.)

2 TERRY PETERSON: We have many of these
3 slides on hard copy, not in color, unfortunately,
4 but, if you want that in color, let us know. We will
5 probably get you that, too.

6 Or, if you want the overheads, we can get
7 some of those, also. Just contact one of our staff.

8 So, while Lee is winding up and kind of
9 giving your next directions, we will hand out the
10 data that we used here.

11 Let us know if we can be helpful in any
12 other way. Thank you.

13 LEE JONES: Thanks, Terry and Gerry.

14 (Applause.)

15 LEE JONES: Hand-outs of the slides as
16 well as copies of Terry's remarks, the staff from
17 College Board and Department of Education will have
18 at the doors or will have sitting out there.

19 I am going to suggest that, since it is
20 about 20 after 9:00, that we try and start that first
21 Breakout Session at 9:35.

22 There's a lot going on in those Breakout

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

52

410-684-2550

1 Sessions, and we might as well take advantage of an
2 extra ten minutes.

3 So, let's go from 9:35 until 10:45 for the
4 first Breakout Session, and we will see you back here
5 again, remember, at 12:15.

6
7 (Whereupon, at 9:23 a.m., Friday, November
8 11, 2000, the meeting was recessed, to reconvene at
9 12:15 p.m. this same day.)

10
11 LEE JONES: Good afternoon, everyone. I
12 am going to ask everyone to try and find their seats
13 for lunch.

14 We are going to begin our keynote
15 addresses in just a couple of minutes, so thank you.

16 (Pause.)

17 VOICES: (Simultaneous conversation.)

18 LEE JONES: Good afternoon. Thank you.
19 Today continues to be a good day. I was pleased to
20 see that we had full houses in almost every one of
21 the Breakout Sessions both times around.

22 So, I am hoping that you have learned a

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

53

410-684-2550

1 lot and it has been a great success for you so far.

2 It is truly an honor for me to be here to
3 introduce our distinguished keynote speakers for this
4 National Forum to Expand Advanced Placement
5 Opportunities, U.S. Secretary of Education Richard
6 Riley and the President of the College Board,
7 Governor Gaston Caperton.

8 These two men are champions for the
9 improvement of education in America, champions for
10 promoting high standards through challenging
11 coursework, and champions for equity and excellence,
12 opening doors of economic opportunity for all
13 students.

14 President Clinton chose Richard Riley to
15 serve as his Secretary of Education in 1992 after he
16 had won national recognition for his highly
17 successful efforts to improve education in South
18 Carolina during his two terms as Governor.

19 His initiatives included a tremendous
20 expansion of Advanced Placement opportunities for
21 South Carolina students.

22 As Secretary of Education through both of

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

54

410-684-2550



1 President Clinton's terms, he has helped launch
2 historic efforts to raise academic standards, improve
3 instruction for poor and disadvantaged students, help
4 all students master the basics of reading and math,
5 make schools safer, reduce class size and improve
6 teacher preparation, and, as he noted in his Back-To-
7 School Address last September, ensure that students
8 in every school have access to Advanced Placement
9 courses.

10 Of course, in the future, he may also be
11 known as the Governor who opened the door of
12 opportunity for the next King of Silicon Valley.

13 (Laughter.)

14 LEE JONES: Without his vision and
15 support, we would not be here today.

16 It is a distinct honor for me to welcome
17 and introduce to you the Secretary of Education, the
18 Honorable Richard W. Riley.

19 (Applause and standing ovation.)

20 SECRETARY RILEY: Thank you. Thank you.
21 Thank you so much. Thank you all.

22 Thank you so much, Lee, and I thank all of

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

55

410-684-2550

1 you for being here. I was so interested in hearing
2 the noise level when I came in here.

3 I know you haven't had a chance to start
4 eating yet, but, boy, were you all talking.

5 (Laughter.)

6 SECRETARY RILEY: I think that is a very
7 good sign. I was so pleased that this whole Forum
8 was put together.

9 I want to thank the College Board for its
10 co-sponsorship of the Forum.

11 My long-time friend, Gaston Caperton-- We
12 were Governors together, and we had a common interest
13 in education all through those years.

14 He is just a wonderful friend and a great
15 person to work with, and I thank all the other
16 partners--and I see some of the people representing
17 them here--that made the Forum possible.

18 I want to thank my staff people. I always
19 am so lucky to have such a great staff. Dr. Terry
20 Peterson was a leader in setting this Forum together.

21 Terry was one of the driving forces in
22 South Carolina, when we were involved in Advanced

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

56

410-684-2550

1 Placement there, as my top education person there,
2 and came here with me.

3 He has been a tremendous help in things
4 like this that make such a difference--Terry--and I
5 thank you for that.

6 I want to thank all of you, though, for
7 coming here. I am going to have to-- I know it is
8 inconveniencing everybody for me to speak a little
9 early, but I guess I am going to have to leave and
10 not hear your speech.

11 I hate that. Maybe you can call me up and
12 tell me what you said.

13 (Laughter.)

14 SECRETARY RILEY: I've got a meeting at
15 the White House on the census, and you say: Well,
16 what's that got to do with education?

17 Well, it has a lot to do with education.
18 Somebody was mentioning a city in the south that had
19 like a 5000-vote count less for children--one city.

20 Yet, Title I and Eisenhower and safe and
21 drug-free schools, all of these programs that are
22 built on the census number.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

57

410-684-2550

1 So, you can imagine how that was harming
2 those children in that city simply because they
3 weren't counted.

4 So, I think all of us need to be sensitive
5 to that, and certainly we in education especially
6 should be.

7 But, you all couldn't have come here at a
8 better time. We announce the new Federal education
9 budget on Monday, and I am proud to say that the
10 Clinton-Gore Administration has asked for the highest
11 level of Federal funding for Advanced Placement ever.

12 We propose \$20 million in state grants
13 over the next year, and I am sure you have talked
14 about that here.

15 It's an increase of 33 percent over this
16 year's current funding and a 500 percent increase
17 over funding two years ago.

18 Congress, of course, must approve the new
19 recommendation, but, in the meantime, with \$20
20 million potentially available, I really expect to see
21 kind of a stampede at 3:45 when the session on
22 reviewing the Federal grant application process takes

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 place, and I want all of you to be tuned into that.

2 But, I will tell you I am excited about
3 expanding the Advanced Placement opportunities,
4 because I have really always believed that young
5 people are a lot smarter than sometimes we give them
6 credit for.

7 I have been Secretary of Education for
8 seven years and been privileged to meet with a lot of
9 wonderful people, including world leaders and
10 outstanding educators from every state.

11 One of the smartest people I met was a
12 young guy--and you and I were talking about elevating
13 young people to reach higher.

14 They always surprise me how high they can
15 reach. Some of you might have heard me tell the
16 story.

17 A couple of years ago, I was announcing
18 the new program up here, a summer reading program,
19 "Read Write Now."

20 We were announcing it over in an
21 elementary school in Virginia, and so I was over
22 there, going to make a talk and read a book with a

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

59

410-684-2550

1 young child that was designated to be with me--a
2 kindergarten kid five years old.

3 So, I got over there, and it was a mob of
4 people--giant crowd--three or four televisions, and
5 all the press.

6 I was given a stool to sit on, and they
7 had a shelf of books, and this little fellow was
8 standing there.

9 I told him to pick the book out he wanted
10 me to read. Somebody told me that was a good idea.

11 (Laughter.)

12 SECRETARY RILEY: Get him into something
13 he would be interested in. So, he looked over the
14 books.

15 He pulled a book out, and it was about
16 animals eating ice cream, and I said: Well, that's
17 fine.

18 So, I got up on the stool, and all the
19 T.V. was running, and I started reading this book.

20 Well, I got through about a dozen animals,
21 and it was getting a little boring.

22 (Laughter.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

60

1 SECRETARY RILEY: He was sitting there
2 big-eyed, and I kept reading and turning. It was an
3 elephant.

4 Then, I went on to the kangaroo, and
5 whatever. So, finally, I said I've got to do
6 something to liven this deal up.

7 I turned the page, and I said: This is my
8 opportunity. It was a spider.

9 I said: Spider! I looked down at this
10 kid. I said: Whoever heard of a spider eating ice
11 cream?

12 All the cameras came in. He looked up at
13 me, and he said: Mr. Riley, this book is fiction.

14 (Laughter.)

15 (Applause.)

16 SECRETARY RILEY: Five years old. I don't
17 know what he told his mother that night, if he said:
18 That Secretary of Education is supposed to be right
19 smart, but he--

20 (Laughter.)

21 SECRETARY RILEY: --wasn't into this
22 spider eating ice cream. Anyhow, America has always

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

61

410-684-2550

1 been filled with children who are bright and who are
2 eager, just like this young guy.

3 But, we adults have not always encouraged
4 all of our children to reach their potential. For
5 too long in this country, we have made negative
6 assumptions about students' abilities based on the
7 color of their skin, the education of their parents,
8 their economic status, the country they came from,
9 whether they came to a school in a wheelchair, or
10 whatever.

11 That is a real mistake. We even made
12 assumptions about ability based on gender.

13 As a result of this, what I call a tyranny
14 of low expectations, many students were never
15 encouraged to take challenging or Advanced Placement
16 courses.

17 Writing in Newsweek magazine in March of
18 '98, journalist Jay Matthews--and Jay is here, I
19 think. Somebody told me he was here.

20 Anyhow, he might be here later.

21 (Laughter.)

22 SECRETARY RILEY: Journalists stay

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

62

410-684-2550

1 incognito. They don't like to be seen around, but,
2 anyhow, Jay, an education writer, he said this.

3 He wrote that AP courses have been treated
4 like the best family china brought out only for
5 special guests.

6 Matthews said that the practice of
7 offering watered-down courses to many students--and
8 this is a quote--occurs in most high schools and is
9 usually justified like bunny slopes for uncertain
10 skiers, as a way to save ill-prepared students from
11 crashing into mountainous reading lists, and, yet,
12 this can be blamed for much of the low motivation and
13 low achievement in our high schools.

14 What an interesting way to say that. I
15 know that bringing about change is truly difficult.

16 Some teachers, principals, parents, oppose
17 expanding AP opportunities, because they think it is
18 too hard on the students or themselves.

19 Some schools fear that allowing too many
20 students into AP courses may ultimately lower the
21 school's pass rate on exams.

22 But, as I travel around the country--and I

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

63

410-684-2550

1 do that a lot--I am proud to say I have been into all
2 the 50 states--I talk to a lot of students and
3 teachers, principals, parents.

4 I can see a real sea change in attitudes
5 about student ability. It is very interesting for me
6 to see.

7 I know you are having that experience, but
8 today the idea that all students can learn to
9 challenging standards is gaining wide acceptance.

10 Higher standards are in place in all 50
11 states for all students, not just some of them.

12 Now, this change gives us an historic
13 opportunity to open the doors, for advanced courses
14 to many students who otherwise in years past maybe
15 had not had that opportunity, to expand the number of
16 school offering AP and international baccalaureate
17 courses and exams, to offer many more dual enrollment
18 college courses in high school, to improve the
19 quality of AP courses and of teaching.

20 This Forum is really about exploring these
21 opportunities, and I believe that we can truly take a
22 very big step here towards revolutionizing course-

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

64

410-684-2550



1 taking in our middle schools and in our high schools.

2 I think that is very important--these
3 young people who are motivated to take higher-level
4 courses.

5 Now, I would like to briefly describe, in
6 my own experiences, with expanding AP opportunities
7 when I was Governor of South Carolina.

8 We took several steps to improve our
9 record in Advanced Placement. The state agreed to
10 pay for the exams and to make them free for all
11 students.

12 That, obviously, was a big key. The state
13 also paid for start-up costs for training teachers,
14 including the creation of teacher centers.

15 This took a big financial burden off the
16 school district and made those decisions easier for
17 them.

18 The state required that our public
19 colleges and universities give college credit for
20 students who scored a '3' on the exam, a real
21 incentive, then, for students to take rigorous
22 courses.

1 Yesterday evening--I just saw him
2 outside--you met one of the beneficiaries of that
3 expansion, Jeffrey Livingston. and I heard him
4 referred to in my introduction.

5 Jeffrey, as you know, earned enough
6 college credits in South Carolina to enter Harvard as
7 a sophomore.

8 He is a walking example of how important
9 and valuable these courses can be, and I am very
10 proud of Jeffrey.

11 I am sure you all were impressed with him
12 and also the other student guest, Jordanna Grant.

13 Let's give both of them a hand. I wasn't
14 here, but I do appreciate that.

15 (Applause.)

16 SECRETARY RILEY: Now, it all boils down
17 to this. When you innovate, create partnerships,
18 improve teaching, and have high expectations for all
19 students, you can get many more students off the
20 bunny slopes and onto the Advanced Placement slopes.

21 That is what we are talking about.

22 President Clinton and Vice President Gore and I are

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

66

410-684-2550

1 eager to support your efforts, as I mentioned a few
2 minutes ago.

3 The \$20 million in grants that we have
4 requested for the next year will expand AP
5 opportunities by giving states, school districts, and
6 schools an incentive to put more AP courses in place
7 if they currently don't have them.

8 It will also give students an incentive to
9 take the courses and to help pay for approximately
10 75,000 AP tests.

11 In addition, states and participating
12 schools can use the funds to develop curriculum for
13 AP courses to train teachers to teach those courses
14 or to offer more courses like AP Art and AP Music,
15 which can be just as important in the effort to help
16 students reach high standards, as AP Calculus or
17 Biology.

18 The President has also proposed a new \$10
19 million initiative called Next Generation Technology
20 that would provide grants to help develop high-
21 quality AP courses on the Internet.

22 This will bring Advanced Placement into

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

67

410-684-2550

1 the 21st century world of distance learning with its
2 potential for reaching large numbers of students.

3 Now, with this kind of support, I can
4 announce to you today that the goal of our
5 Administration is to help every American high school
6 to offer AP courses within the next two years.

7 I will tell you we are serious about
8 Advanced Placement, and you are serious about
9 Advanced Placement, and together I think we can
10 really make things happen and reach this goal, plus a
11 lot of other goals.

12 For example, I believe that we can help
13 every high school in America to add at least one
14 advanced course each year for the next ten years.

15 That is a goal we can meet, particularly
16 in light of the growing interest in challenging
17 courses.

18 New research shows that between 1984 and
19 '97 the number of AP exams taken by high-school
20 students nearly tripled, going from 50 exams per 1000
21 12th-graders to 131 exams.

22 Now, to keep this kind of momentum

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

68

410-684-2550

1 rolling, we must keep the AP pipeline humming. The
2 road to AP doesn't really begin in high school, as
3 you and I know.

4 That is why the President's education
5 budget calls for more support to education at every
6 level. That is what really counts.

7 We are asking for a dramatic expansion of
8 our support for after-school programs to give
9 students expanded learning opportunities in the
10 afternoons and weekends and summers.

11 We want to increase our investment in the
12 mentoring programs to help middle-school students
13 select the right courses, including algebra in the
14 8th grade and geometry no later than ninth grade, to
15 put them on the road to Advanced Placement and to
16 college.

17 We want to launch a new \$1 billion
18 initiative to recruit and prepare and support good
19 new teachers.

20 We want to accelerate our efforts to
21 reduce class size and hire 100,000 new teachers for
22 those early grades--teachers who are very well

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

69

410-684-2550

1 qualified to teach reading.

2 We are asking Congress to continue to help
3 us open the door of college to all, and, in the
4 Clinton-Gore years, the amount of available student
5 financial aid has risen more than at any time since
6 the GI Bill.

7 We want to make sure that all students who
8 earn college credits through Advanced Placement can
9 afford to go to college and to use those credits.

10 I want to end by talking to you about a
11 story that I am sure--a book that many of you have
12 read, Frank McCort's unforgettable biography,
13 "Angela's Ashes."

14 I had the pleasure of visiting Frank in
15 Ireland and here in America, and I am sure many of
16 you have read "Angela's Ashes" several years ago when
17 it came out.

18 Of course, a current movie is now out
19 based on it, and it is a memoir of Frank's childhood,
20 which was really filled with great poverty.

21 He had a wonderful Irish wit and could
22 handle poverty in a way that made it interesting but

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

70

410-684-2550

1 very sad.

2 But, the book includes uplifting passages
3 along with the very tragic things that were happening
4 to this very poor child there in Limerick.

5 It deals with education a lot. He is a
6 teacher now. He became a teacher, and he loves
7 education.

8 But, in one of the passages, Frank's
9 teacher was talking to this class, and imagine, if
10 you would, in the very poorest time in Ireland, here
11 this little 5th-grade class, children very poor, all
12 of them on the dole, as they said--welfare--hungry,
13 all of them, half hungry, sick, infectious diseases
14 that they carried for months, depressed, trying to
15 then deal with education.

16 This teacher looks out upon this group of
17 5th-graders, and he says this: You have to study and
18 learn so that you can make up your own mind about
19 history and everything else, but you can't make up an
20 empty mind. Stock your mind, he says. Stock your
21 mind. It's your house of treasure, and no one in the
22 world can interfere with it. You might be poor.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

71

410-684-2550

1 Your shoes might be broken, but your mind is a
2 palace.

3 I say to you, on behalf of the American
4 people, of where education is going to determine the
5 future of this great country and future of all the
6 people in this great country, I want to thank you for
7 helping our nation's students fill their palaces with
8 knowledge and with joy and with wonder.

9 I thank you all for helping all students
10 through a challenging and engaging coursework to
11 discover their own house of treasure.

12 I thank you very much, and I thank you for
13 what you are about. Thank you.

14 (Applause and standing ovation.)

15 LEE JONES: It is great to hear words like
16 that from one of our country's great education
17 leaders, inspiration, motivation, and support for the
18 work that all of us do together.

19 I now have the pleasure of introducing our
20 second keynote speaker and my boss, the President of
21 the College Board, Governor Gaston Caperton.

22 Governor Caperton assumed the presidency

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

72

410-684-2550

1 of the College Board in July of last year, and he has
2 brought a vision and energy to the position, along
3 with a passionate concern for students that is at the
4 core of everything that he does as the College
5 Board's President.

6 Prior to joining the College Board, he
7 served two terms as Governor of West Virginia.

8 His impact on education in West Virginia
9 was nothing short of revolutionary. He implemented a
10 comprehensive expansion of the use of computers and
11 technology in West Virginia schools, and implemented
12 an aggressive school building program -- 58 new and
13 780 renovations of school buildings benefiting two-
14 thirds of West Virginia students during his tenure.

15 In addition, teacher salaries rose from
16 49th out of 50 states in the nation to 31st during
17 his years as Governor.

18 Following his term as Governor, he founded
19 the Institute on Education and Government at Columbia
20 University, and then assume his current role with the
21 College Board.

22 Support for increasing access to AP,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

73

410-684-2550

1 expanding teacher professional development, building
2 the pipeline for students to get to AP and to
3 college, have all been at the centerpiece of his
4 agenda at the College Board.

5 It is a pleasure for me to welcome and
6 introduce to you the President of the College Board,
7 Governor Gaston Caperton.

8 (Applause.)

9 MR. CAPERTON: Lee, thank you very much.
10 It is always a pleasure for me to be anywhere where
11 Secretary Riley is.

12 He is a man that anybody who has ever
13 worked with him or served with him appreciates. His
14 intelligence, his commitment to young people, his
15 commitment to public service, and his record as
16 Secretary of Education, I think, will go down in
17 history to show him to be one of the great
18 Secretaries, if not the greatest Secretary, this
19 country has ever had.

20 I am honored to be here with him today,
21 and Linda Roberts, who is the Assistant Secretary of
22 Education, my good friend, it is great to see you.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 I know the people at the College Board are
2 deeply appreciative of our opportunity to work with
3 the Department of Education to put this program on
4 and feels honored to be able to do that, and to each
5 of you who are part of the AP family, that most of
6 you are the people who have brought the AP where it
7 is today and have given us such a platform to move it
8 forward.

9 I would like to introduce you to a student
10 named Camille. Camille is a student--African-
11 American--who grew up in the Bronx.

12 Her brother had gone off to college and
13 had had a very successful career.

14 But, Camille had been in an alternative
15 school, had done very poorly, had been a disciplinary
16 problem.

17 But, to please her parents, she had gone--
18 decided to enroll in the community college. When she
19 got there and she began to sign up, the only course
20 that she decided might be interesting to her was a
21 nursing course.

22 So, she went into a science program. She

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

75

410-684-2550

1 had been in the course about two months when she
2 found out that this was not a course for people who
3 wanted to be a nurse, but a course for people who
4 wanted to be physicians or research scientists.

5 She had an A in the course at that time,
6 and she continued in the course.

7 Following that success, Camille went on to
8 be a physician.

9 Jenny Crudeman, one of our trustees and a
10 person who runs the AP program in Dade County,
11 Florida, told our trustees three weeks ago at a
12 retreat that she had a student in her--that had been
13 sent to her for disciplinary problems, and she hadn't
14 really known what to do with this student during her
15 third period.

16 So, she had taken her to her AP course in
17 English. She said, after about three weeks, this
18 young woman came up to her and says: Mrs. Crudeman,
19 I have never before had a good teacher. I didn't
20 know who Shakespeare was. She says: I get it.

21 She finished that course and passed her AP
22 examination.

1 I have been spending this week around at
2 regional meetings of the College Board, in which I
3 give a short talk and then answer questions.

4 I was saddened by one of the questions
5 that was asked me. It was asked by an experienced
6 teacher who asked me and told me that I was really
7 making a mistake at the College Board talking about
8 the expansion of AP in underperforming schools and to
9 even think that AP could be in every school in the
10 country.

11 She said to me that AP was only for
12 special students.

13 You see, I have been taught that every
14 student is special, that every student has the
15 capacity to learn.

16 To me, the strength of AP is not about who
17 gets 4's and 5's on examinations, but how much it
18 enriches the total experience in a school.

19 It's whether you really build vertical
20 teams and have that pipeline grow and grow and grow.

21 I think and deeply believe that this
22 movement, as well described by the Secretary, that we

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

77

410-684-2550

1 can put AP in every school in America and add one
2 course per year, is very doable.

3 We at the College Board--and I have talked
4 to Lee, and his people have said that we have to have
5 a real martial plan to make this happen.

6 We've got to do like we did in Texas with
7 the O'Donnell Foundation where we got the private
8 sector to come in and help us do that.

9 They went in 1995 in the Houston--nine
10 Houston schools from 312 people taking examinations
11 to 2143 in only a four-year period.

12 We have got to ask the private sector to
13 help us. We're making a major investment at the
14 College Board in expanding our Internet capacity,
15 because we want to be a channel for those people who
16 prepare courses for students and courses for teachers
17 in AP.

18 That's part of our martial plan. We
19 believe that we have got to search for teachers
20 everywhere, not just the way it is being done today.

21 We've got many AP teachers that are
22 retiring. I think we've got to ask them to come back

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

78

410-684-2550

1 and help us continue to teach some of those AP
2 courses.

3 I think we've got to reach down and ask
4 graduate students in our colleges and universities to
5 help us teach AP courses.

6 I think we've got to reach out into
7 industry where we have people who are well educated
8 and well prepared, who could help us teach AP
9 courses.

10 I think we've got to walk out of the box,
11 that we have to think about every way we can to give
12 the Camilles, to give the Jeffreys--as you heard
13 today--the Jordannas, the chance to take AP, to have
14 the chance to learn, to grow, to expand.

15 There's something that I have always had a
16 part of me and I believe, and it is a saying I heard
17 a long time.

18 It says: What the mind can conceive and
19 the heart can believe, man can achieve.

20 We can put AP in every school in America.
21 We can have vertical teams and have an effect on
22 every school in the country, and we can make this

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

79

410-684-2550

1 available one course per year every year for ten
2 years.

3 To do less is not to do what is right and
4 will make a huge difference in America.

5 Thank you very much for what you are doing
6 and thank you very much for what you will do.

7 (Applause.)

8 LEE JONES: As you can see, I think I will
9 be busy, and I think you all will be busy if we are
10 going to launch off on all these good efforts.

11 It's time for lunch. I am sure that
12 you're all ready for that, so just sit and I think
13 food will arrive.

14 (Lunch recess - 12:55 - 2:05 p.m.)

15

16

17

18

19

20

21

22

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

AFTERNOON SESSION

(2:05 p.m.)

LEE JONES: Hello, everyone. This is the two-minute warning to get our 2:00 o'clock session started.

So, if everyone can take a seat and we will try and get everyone in from the hall, we will get started almost on time. Thank you.

(Pause.)

LEE JONES: Good afternoon, everyone. We are going to start our afternoon sessions now, if I can just have everyone's attention, and take your seats so we can get started.

For this session, I am going to turn the podium over to our moderator, Linda Roberts, who heads the Office of Educational Technology in the Department of Education, and is a Senior Advisor to Secretary Riley on matters of educational technology.

I asked her what I should say, and she was relatively modest but pointed out an accomplishment that I think isn't rather so--isn't that modest,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

81

410-684-2550

1 which is that, when she joined the Department in
2 1994, there was a \$10 million allocation across all
3 Department programs to support work in educational
4 technology.

5 For 2001, that appears that it is going to
6 be \$900 million, so I don't know too many people who
7 can claim to be associated with productivity gains of
8 that magnitude.

9 But, I think that is pretty impressive. I
10 am going to turn the podium over to Linda. Thank
11 you.

12 (Applause.)

13 LINDA ROBERTS: Well, thank you, and I
14 just want to say what a pleasure it is to be able to
15 be part of this really important conference.

16 As both Secretary Riley and Governor
17 Caperton said, we really are about to embark upon
18 just an incredibly important venture.

19 Particularly from my perspective, when we
20 think about technology, there is so much to learn
21 about what we can do, what works, ways in which we
22 can expand opportunity and be sure that we are not

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

82

410-684-2550

1 closing off opportunities inadvertently because we
2 are using technology.

3 I should tell you that, before I came to
4 the Department of Education, I directed three of the
5 major Congressional studies on technology and
6 learning.

7 In November of 1989, the Office of
8 Technology Assessment released a report that was
9 prophetically called Linking For Learning, a new
10 course for education.

11 At the time, I will tell you that there
12 was some interest in this phenomenon of distance
13 learning.

14 But, there was nothing in anybody's
15 vocabulary about Web-based learning or online
16 learning, because nobody had any inkling of where the
17 technology was going to be headed.

18 But, even in 1989, what was particularly
19 striking to me was the pioneering efforts that were
20 starting to spring up across the country, both in
21 higher education--and, in fact, it happened in higher
22 education first--and then, believe it or not, in K-12

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

83

410-684-2550

1 education, as well.

2 When I think back-- It's ten years ago.

3 When I think back to what we thought the
4 possibilities were then, which was mostly satellite-
5 based delivery and, maybe, some cable systems that
6 would link some classrooms and teachers together, the
7 possibilities just simply astound me today.

8 So, the purpose of this session this
9 afternoon is to not only help you, but I will tell
10 you, quite frankly, it is also to help us, because,
11 as the Secretary mentioned, in our 2001 budget, we
12 have added a new dimension to our, what we call Next-
13 Generation Technology Innovation Initiatives, where
14 we are confident that there is much more to do to
15 push the envelope on both tools for learning, tools
16 for teaching, tools for students, tools for parents,
17 tools for communities, all focused on really
18 challenging both in terms of content, but also
19 challenging in terms of the way that we think people
20 could be learning.

21 So, the panel and the presentation that
22 you are going to see this afternoon, I think, are

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

84

410-684-2550

1 going to give us a sense of how the various ways we
2 can do this can grow even further in the future,
3 because doing this right is going to involve insight
4 from our schools, from our teachers, from our
5 students, going to require, I think, incredible
6 partnerships with higher education and with the
7 private sector.

8 So, in putting together the group that you
9 have--we have before us this afternoon, we have tried
10 to model the kind of conversation and examples that
11 we think are going to be examples, not only now, but
12 models to guide us in the future.

13 What we are going to do first is begin
14 with a kind of virtual--I guess we'll call it that--
15 example--a demonstration of what one online learning
16 strategy looks like.

17 We wish we could have taken you all online
18 directly, but I think this will really give you a
19 sense of what we are--what this is about.

20 Then, we are going to move to a panel
21 discussion with both Bryan Barnett, who is going to
22 be doing the demonstration, and our other panel

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

85

410-684-2550

1 members, as well.

2 I am going to introduce them in a little
3 bit, but first I would like to turn this session over
4 to Bryan Barnett, who is the Vice President and
5 Academic Officer for Apex Learning.

6 He is a founding member of this
7 organization, and I don't know him, but I know his
8 CEO really well.

9 I can tell you that they are working
10 really hard to make what they are doing make a
11 difference.

12 So, I would like to let Bryan show us the
13 virtual learning first, and then we will move on to
14 the panel discussion.

15 When we move into the panel discussion--
16 because I know this is not a shy group--we are-- You
17 notice there are microphones.

18 We are going to find a way to have you
19 interact with us as well, so no sleeping--no
20 sleeping.

21 Really powerful ideas are going to be
22 coming across, and I can only tell you that I think

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

86

410-684-2550

1 we are just at the beginning of an incredibly
2 exciting time, because we have so much power in
3 technology.

4 We could know so much more about learning
5 and teaching, and, most importantly, as both the
6 Governor and Gaston Caperton said--the Governor and
7 Secretary Riley said--we really, really can challenge
8 so many more students all across America in every
9 school in every part of the country.

10 We can be world leaders in this effort, as
11 well. So, Bryan, take it away.

12 BRYAN BARNETT: Thank you, Linda. It is
13 delightful to be here. It is, I think, a hallmark of
14 progress for me personally that I think the first
15 Advanced Placement meeting I attended was perhaps two
16 years ago, three years ago right now.

17 I count so many faces in the audience as
18 familiar and as friends. That means a lot to me.

19 I am the only one who has to rely on
20 technology today. Everybody else has an easy time of
21 it.

22 (Pause.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

87

410-684-2550

1 BRYAN BARNETT: Aren't you glad I'm not
2 flying your airplane home?

3 (Laughter.)

4 BRYAN BARNETT: Before I begin, I've got
5 to tell you a little story.

6 A little under three years ago when I was
7 working at the University of Washington, I was
8 recruited out of there by Paul Allen, who founded
9 Microsoft with Bill Gates, and given the task of
10 charting for Paul an agenda of business investments
11 and funded projects that would push forward the
12 technology on online learning and help to convince
13 the rest of the world that there was a lot of power
14 there that Paul could see and he felt other people
15 weren't yet paying attention to.

16 I was in the process of doing a lot of
17 research, and I was looking at-- I had been actively
18 involved in distance learning for some time, so I
19 knew quite a bit about the state of distance
20 learning.

21 But, I was looking around for a suitable
22 place to launch a project, a place where there were

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646 88

410-684-2550

1 sought-after learning experiences and eager learners,
2 where a new and different approach to teaching and
3 learning might take root and give us an opportunity
4 to, not only build something, but to have it used by
5 people who were eager to have it.

6 I was sort of casting about, and I
7 happened to be on the telephone with an administrator
8 for the Seattle schools talking about--not AP,
9 unfortunately--I was talking about one of my sons.

10 But, in the course of that conversation,
11 this administrator asked me what I was doing with
12 Paul Allen these days.

13 I told him what I was shopping around for,
14 and he launched into a very impassioned plea for
15 Advanced Placement as a place to look as a target, as
16 a place to start.

17 I am gratified to say, looking back on
18 that conversation, that it took both of us to a place
19 neither one of us expected to go.

20 I am also gratified to say that that
21 administrator was a truly devoted and impassioned
22 advocate, not only for AP, but for high-quality,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

89

410-684-2550

1 challenging learning experiences throughout--across
2 the entire curriculum at all levels.

3 It got me started thinking about AP was
4 the original inspiration for what I am about to show
5 you in a minute.

6 He is here today. His name is Bob Vaughn.
7 He's sitting right there, and this is the first
8 chance I have had to acknowledge publicly the
9 contribution that he has had to everything that has
10 gone on since.

11 (Applause.)

12 BRYAN BARNETT: I think the moral of that
13 story is that, if you really believe in something and
14 you are passionate about it, preach your gospel to
15 anyone who will listen, because you never know when--
16 or, if you were my wife, you would say be careful
17 what the next adventure you talk to Vaughn about it.

18 (Laughter.)

19 BRYAN BARNETT: I'm going to just cover a
20 couple of familiar things here just to set some
21 context.

22 (Slide.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

90

410-684-2550

1 BRYAN BARNETT: As you saw in the video
2 yesterday, 60 percent of schools in America offer AP.
3 That's a very credible accomplishment, but it means
4 that 40 percent of the schools don't. That is a
5 crime.

6 The average school that offers any AP
7 offers five subjects, roughly. That means that, in
8 all but the tiniest handful of schools in America, AP
9 is a very small part of the curriculum.

10 There are at least 25 subject
11 opportunities, that a lot of students would be
12 interested in, that are not available to them in that
13 school.

14 This is economics, simple as it gets. The
15 problem is not demand. The problem is supply.

16 (Slide.)

17 BRYAN BARNETT: Forgetting entirely about
18 the coming boom--the baby boom echo, the bulge in the
19 population of students going through middle school
20 now and soon to enter high school--independent of
21 that entirely, for all practical intents and
22 purposes, the demand for Advanced Placement and

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

91

410-684-2550

1 learning experiences of its kind is unlimited.

2 The problem is that for a school to offer
3 an Advanced Placement course requires not only a
4 specially trained teacher--and teaching Advanced
5 Placement is really challenging--but it also requires
6 a minimum cohort of students.

7 A school operated under traditional
8 principles cannot dedicate a classroom and a teacher
9 unless there are a minimum number of students.

10 So, if there are three kids in a school
11 who are passionately interested in government, that's
12 not enough if there are three students who like
13 psychology or, God knows I studied classics as an
14 undergraduate, Latin.

15 That's just not enough students. That
16 interest, however passionate, however deep, and
17 however long-lasting, will not be satisfied under the
18 current regime of things.

19 What we want to talk a little bit about
20 today is technology and the Internet as a part of the
21 solution to that problem.

22 Let me be the first to say in this room

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

92

410-684-2550

1 that technology and the Internet are not a silver
2 bullet.

3 It is not the answer to every problem, and
4 anybody who thinks that it will make, somehow, the
5 crisis in qualified teachers go away, please let me
6 disabuse you of that notion now.

7 But, technology will help us solve a lot
8 of problems, and I hope to persuade you a vision of
9 how that might actually happen.

10 Our little project began in 1987, and it
11 was funded initially by Paul Allen. We're now
12 actually a venture back to a small little company
13 focused just on Advanced Placement, initially.

14 We set out to design online learning
15 experiences that would maximize the value of the
16 technology.

17 Our goal was not simply to create
18 correspondence courses on the Internet. There were
19 already a lot of those.

20 It wasn't simply to graph technology onto
21 a traditional approach to teaching, which is
22 validated by thousands of years of practice but

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

93

410-684-2550

1 doesn't translate to this new venue very well.

2 We started developing AP courses in 1998--
3 early in 1998. We had a full development team.

4 I am pleased to say that Diane Darese, who
5 is sitting right over here--hold up your hand,
6 please--and Will Ketchem from Apex are both here.

7 Diane headed the development team, who
8 produced everything I am about to show you and
9 deserves a lot of the credit.

10 We decided that we would go through an
11 initial year of piloting the courses that we had
12 developed, since what we were doing was pretty
13 unusual and different.

14 So, we began a year ago--Fall of '98--with
15 a very small group of students in AP Calculus, from
16 around the country, followed in the Spring with a
17 somewhat larger group of students in U.S. Government.

18 We experienced significant attrition for a
19 variety of reasons.

20 Top among them was simply that the schools
21 that were eager to participate didn't have the
22 technology to support the program on their end.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

94

410-684-2550

1 But, there were other reasons as well. We
2 were, in that sense, concerned, and we have made much
3 improvement on the retention.

4 But, to answer the question that's on
5 everybody's mind right up front, we had a small group
6 of students from the Government class, and actually a
7 couple of students from Calculus take the AP exams.

8 It was a small group. It is not
9 statistically significant or representative of what
10 we even think our current year's crop will be, but 87
11 percent of the kids who finished enough of the
12 Government course to take the exam--

13 Excuse me, 84 percent of the students--
14 about 30-some-odd--who were eligible to take the AP
15 exam did so, and 87 percent of those scored a 3 or
16 better.

17 What does that prove? Well, it proves
18 that we have a long way to go. I think we all agree
19 that those numbers will decline over time.

20 But, it was a somewhat selective group,
21 but it should lay to rest, I think for everybody,
22 concern about the question of can students learn in

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

95

410-684-2550

1 this environment. Can they learn effectively a
2 material that is as challenging as AP and prepare for
3 the exams?

4 There may be dissent on this opinion, but
5 my mind is made up. The answer to that question is
6 yes.

7 Now, the question is how do we get more
8 students in those courses and completing them?

9 We have enrolled 500 students so far this
10 year, and we will expand from five subjects to ten
11 next year.

12 Basically, our approach here--and I am
13 going to walk you through here in just a second--is
14 we really want to focus on student success, not
15 lesson planning.

16 We set up, not to create a virtual
17 classroom, recruit some teachers, introduce them to
18 the classroom, and say, as a school typically does:
19 Here's your room. Plan your class. Go to it.

20 We decided that we would actually convene
21 a team of designers and design a curriculum that was
22 specifically calculated to prepare students for this

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

96 410-684-2550

1 exam that was interesting for teachers to teach and
2 interesting for students to learn, and then asked the
3 teachers who taught with these materials to
4 concentrate on making their students successful, and
5 not worrying about what they were going to do in
6 class next week.

7 I have to pause here to acknowledge a deep
8 debt to the staff of the College Board.

9 They don't endorse anything we do. They
10 help everybody else, too, but we have had a huge
11 amount of assistance from them guiding us along the
12 path to making these courses map accurately to good
13 pedagogical practices and to the course descriptions
14 published by the Board.

15 They have put us in touch with the exam
16 readers, the AP consultants--that vast community of
17 very knowledgeable people that we tapped into on our
18 development teams to make sure that these courses do
19 what they're supposed to do.

20 The technology attempts to personalize
21 learning for the student-- I think this is one of
22 the truly powerful aspects of technology in the

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646...

97

410-684-2550

1 future.

2 The Internet is a source of information as
3 an electronic library is a wonderful thing, but,
4 frankly, is that is all it ever does for education,
5 we will be here five years from now, and the needle
6 on the meter will not have moved.

7 It is wonderful that students have access
8 to more information, but education, as most of you
9 know, is not just about access to information.

10 It is about much more than that, and the
11 Internet can do a lot more than that.

12 Accordingly, we develop with a view to
13 embedding throughout, not only a rich curriculum, but
14 rich progress and performance reporting that benefits
15 both the teachers, students, and parents.

16 You know, if nothing else happens over the
17 next year, I hope, in the talks at this time that I
18 give around the country now, to expand the
19 understanding that all people, but especially
20 educators, have of the Internet.

21 The computer sitting in front of me here
22 on the podium is an absolutely wonderful device for

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

98

410-684-2550

1 delivering very rich content and information to me.

2 But, it is an even more interesting device
3 to monitor the learning activity that I am trying to
4 accomplish, and collect and store that data centrally
5 over the Internet in order to track the progress of
6 my learning and enable a teacher or a school to adapt
7 their instruction to my needs.

8 So, let's go down here. I want you to
9 imagine now that we are--you are a student in an Apex
10 course.

11 We are going to log right in here. This
12 is a demo. It is running from my laptop only because
13 it is faster.

14 But, everything I am going to show you
15 streams over the Internet, so, if you want to go home
16 and look at it, I would be happy to give you a
17 password.

18 So, when I log in, I am not logging into a
19 Web site. I am actually logging into a management
20 system.

21 Here is-- If you are familiar with my
22 Excite or my Yahoo, that kind of personalization--

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

99

410-684-2550

1 So, I can choose, if I am enrolled in more than one
2 class, I can choose the class I'm in.

3 There's my instructor. I have multiple
4 instructors. I can click-- There will be multiple
5 names there. I can click on different ones and send
6 mail to them.

7 There is a student lounge where I can chat
8 with other students, not just in my own section of
9 Calculus, but in all the sections of Calculus across
10 the country.

11 There are standard reference resources.
12 Down here, there is a dynamic and changing roster of
13 office hours.

14 We have a team of instructors who teach a
15 bunch of sections, and they collectively staff office
16 hours that are scheduled at different times to serve
17 the needs of students across the country.

18 Down here, you will see active
19 discussions. One of the things you will hear me
20 emphasize in a minute is that teachers are, without a
21 doubt, the most precious and expensive resource in
22 the whole educational enterprise.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

100

410-684-2550

1 When I think about how teachers' time is--
2 if you will forgive me for saying so--wasted in so
3 many instances, it makes me want to cry.

4 We try very hard to economize and to make
5 efficient use of the very valuable time of both our
6 online teachers as well as our students.

7 We heard from students after our first
8 year of running courses, that their biggest complaint
9 about our courses is it wasn't fast enough.

10 They were in band. They had drama. They
11 had four other classes. We needed to make it easier
12 and quicker for them to get to things and get things
13 done.

14 So, here are active discussions down here.
15 This is not all the discussions in the course. These
16 are the ones that have new postings that I haven't
17 read yet.

18 So, I can go directly to those, just take
19 care of the business that needs to be done.

20 Here is a progress summary, just a quick
21 digested synopsis on how I am doing in the course.
22 This is not done by hand by a teacher on Friday

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 night.

2 This is all monitored by the server, and
3 this dishes up automatically, and it continually
4 updates.

5 Every time I make progress in the course
6 and get a new grade, this material updates.

7 Here are all the activities in the course,
8 where I can drill down on a particular week. I am in
9 Week 5 here.

10 It keeps track of my progress through the
11 course. Weeks here are an abstract description. In
12 other words, we organize it by weeks.

13 But, this doesn't mean a student
14 necessarily has been-- On the fifth week of a given
15 semester, they may be ahead or behind that, depending
16 on their school schedule.

17 Here are the actual learning activities.
18 We build courses, not as-- We don't think of
19 ourselves as building content. We think of ourselves
20 as building learning activities.

21 Some of them do embody a lot of content,
22 but many of them are actual things the students do.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

102

410-684-2550

1 We think about a course the way a student
2 does. It is a set of learning tasks. It's things I
3 have to do to complete the course.

4 We support a wide but standardized variety
5 of types of learning tasks that become familiar to
6 students, so it is easy for them to be able to
7 complete.

8 The system tracks. You can see there is:
9 Not Started, In Progress. If I actually want to
10 drill down on my report card here at any time, I can
11 do that.

12 There's the same summary. Here's a
13 listing of every activity in the course. This is the
14 first semester of Calculus only. Any volunteers?

15 You know, those are all the-- Now, some
16 of those take 10 minutes, you know. I mean, they're
17 not all long, but they're all discreet.

18 The student knows what they have to do to
19 complete them. The course takes about an average of
20 10 hours, we hope.

21 We design it so that it takes an average
22 of 10 hours a week to complete--roughly five hours of

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

103

410-684-2550

1 class time, five hours of homework.

2 But, when I show this particular screen
3 out of the demo, it puts to rest questions about
4 whether these courses are serious.

5 There are 250-some--I don't know--Diane
6 can correct me if I'm wrong here--but I think 250-
7 some-odd learning activities in the course of a year
8 of Calculus--a very, very significant amount of work
9 for a student to do.

10 Okay, I am going to click on one of these
11 here, and we are going to make the tutorial just to
12 make it interesting.

13 Some of you have seen this Calculus
14 tutorial before. I apologize. I've got some
15 incredibly interesting, new Chem tutorials on my
16 laptop here, but I am not daring enough to try to
17 navigate to them in the middle of a presentation.

18 But, I will be happy to show them to you
19 later. But, anyway, here is where learning starts.

20 VOICE: I don't know anything about
21 Calculus. Okay, let's look at an example here.

22 Let's look at the volume of a right circular cone,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

104

410-684-2550

1 the height of four, and a base radius of two.

2 Now, you may even remember the formula for
3 the volume of a cone, but let's not think about that
4 now.

5 Let's think about this in terms of
6 Calculus. Let's look at what Calculus can do to give
7 us this volume.

8 It turns out to be easiest if we stick
9 this guy, put the axis of symmetry of this cone along
10 the X-axis.

11 BRYAN BARNETT: Well, I have seen that
12 before. I can whiz through it if I want. I am going
13 to jump over here to volumes of revolution.

14 I am just reviewing, let's suppose. I
15 have looked at this before, but now I have got one
16 concept that I would need to refresh, or perhaps my
17 teacher, these materials are available for classroom
18 teachers.

19 VOICE: These are very particular kinds of
20 solids that are easy to find the volumes of because
21 they're easy to find cross-sectional areas of. So
22 let me first show you what the solids of revolution

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 looks like.

2 Here I have got a region in the plane. It
3 is between the curve Y equals 1 minus --

4 BRYAN BARNETT: Can you take the audio
5 down for me, please?

6 VOICE: --.25 X squared. And the line--

7 BRYAN BARNETT: Thank you. This is a real
8 Calculus teacher. One of the things we did starting
9 out was to abandon many of the established
10 conventions about multimedia--you click a button and
11 you get a sentence read by an actor, or something
12 like that.

13 We found the best teachers we could. We
14 took them into the studio. We paired them up with
15 instructional designers and animators, and we just
16 let them do what they do best, which is teach.

17 Mrs. Shawna Callaway, who teaches Calculus
18 at the University of Washington, now is an online
19 teacher for us, as well.

20 There you will see the tutorials are
21 filled with worked examples, and there are actual
22 ones where the tutorial pauses.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

106 410-684-2550

1 I am not going to take long enough to do
2 that, but it will pose a question much as a teacher
3 would in the classroom, and then ask students to
4 pause and work out a solution before continuing with
5 the tutorial.

6 So, this kind of basic presentation of new
7 facts and information is done in the richest and most
8 engaging possible way.

9 These tutorials last only about 15
10 minutes. The sections that we are watching here,
11 their volumes of revolution last only five minutes
12 apiece, because the research shows that that is about
13 how long you can watch something like this before
14 your attention begins to trail off.

15 After every one of these tutorials, there
16 is a self-check. We call it Scored But Not Graded,
17 not part of your grade in the class.

18 It is just a comprehension check, so I am
19 going to show you that-- I do really have a Ph.D. in
20 Political Science.

21 (Laughter.)

22 BRYAN BARNETT: You see the interface

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

107 410-684-2550



1 tells me immediately that I got the right answer. It
2 gives me immediate feedback.

3 If I got a wrong answer, it gives me a
4 hint about the right answer. Now, it shows me over
5 here that I have scored one out of one.

6 That score has been captured-- If I am
7 online, it has been captured to a server on the
8 Internet.

9 So, imagine now that you are a classroom
10 teacher or an online teacher. It doesn't matter.
11 One of the beauties of all this is that the
12 distinction between online teaching and classroom
13 teaching is going to begin to blur, because the
14 Internet will be a big part of both.

15 But, now you assign that tutorial, let us
16 say, as homework. You don't have to assign a
17 homework assignment and collect it, take it home on
18 the weekend, grade it, and give kids back feedback
19 next Tuesday on what they learned this week.

20 You can log in here the next morning
21 before you go to class and know who did it and how
22 well they scored, so you know exactly how to address

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

108

410-684-2550

1 your class the next day.

2 So, these self-checks just provide
3 continuous feedback to the student and the teacher
4 about whether they need to review the tutorial or
5 otherwise go further to cement their mastery.

6 Sometimes this means getting in touch with
7 the teacher online and exchanging E-mail or having a
8 phone call to solidify understanding.

9 Once that is done, students move into
10 practice activities where they apply what they have
11 known.

12 This particular one is from Economics.
13 This is a-- We call this a brain-builder. It is a
14 step to problem-solving activity.

15 I am not going to go through it with you,
16 because it is timely, but the students actually step
17 through it.

18 They are given opportunities to solve the
19 problem at each step. As they move through, it gets
20 more complicated.

21 They are asked here to put things on the
22 sine and they submit. It tells me-- See, the aplet

1 can read where I put those X's on the graph and it
2 knows that I didn't put them in the right place.

3 Now it has given me the correct, and
4 finally it gets very nice. So, students are working
5 through, and, as they complete this activity, it gets
6 pretty fancy here.

7 Now, they have to adjust the levers so
8 that the graph fits in the right place. If they are
9 in Calculus, they might-- Any math folks here? I'll
10 raise my hand.

11 Okay. Just to show you how powerful this
12 kind of technology can be, whether it serves the
13 needs of a classroom or a distance learning course--
14 and I've got to say here that I owe a lot of the
15 original ideas for much of this to Ray Ravaglia, who
16 is sitting off here to my left, whose brain I picked
17 shamelessly a couple of years ago about a lot of this
18 stuff.

19 But, students need to learn to draw
20 functions and to free-hand them. I am going to show
21 you here the first derivative for that curve.

22 Most people-- Students struggle to

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

110 410-684-2550

1 understand what a derivative is, but, if we give them
2 this tool and we say the black line is the curve you
3 want, the red line is drawing the derivative in real
4 time.

5 Draw the black line so that the red line
6 is flat at zero, and pretty soon the kids figure out
7 that, if they draw the black line perfectly
8 horizontally, the red line stays flat at zero.

9 Now you all understand that the first
10 derivative is the graph that shows the rate of change
11 in the function as it moves across the horizontal
12 axis.

13 It would be a lot easier for most of us to
14 have learned Calculus originally if we had had a tool
15 like this to start with and then could go back to the
16 symbolic math, which is what we do.

17 So, these are the kinds of activities that
18 a student completes, and, of course, it wouldn't
19 really be a class and it sure wouldn't be any fun if
20 there weren't other students to talk to.

21 This is a typical threaded discussion page
22 from our Government course. We have both informal

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

111

410-684-2550

1 discussions, kind of go somewhere and chat with
2 whoever is there of the kind you are familiar with,
3 AOL.

4 But, we also have structured discussions
5 that are part of the course as you would have in a
6 class. Only, these are what we call asynchronous.

7 We don't want them all to be sitting at
8 our computer at once. Students come. They post a
9 comment.

10 They'll come back later, and other
11 students in the interim will have posted responses to
12 their original postings.

13 Those postings, then responses, are
14 indented here, and they form a dialogue.

15 So, when I showed you, in the beginning,
16 the student center with the little thing there about
17 the active discussions, a student navigates to one of
18 these and can see when another student has made a
19 fresh posting for them and responded.

20 These discussions go on throughout the
21 course, and students who are in very small schools
22 get very excited about suddenly I can be the only

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

112

410-684-2550

1 person who is interested in Government in a very
2 small school.

3 That is a very isolating experience, but,
4 through this medium, I am immediately connected up
5 with a bunch of students from schools all over the
6 place.

7 I didn't have time to show you, but we
8 post biographies for the students, and we encourage
9 them to introduce themselves, which is critical to
10 their engagement in the course.

11 Finally, and last thing, I am-- I am
12 almost finished here, but I wanted to show you this.

13 This is the part that I think is really
14 the-- This is the killer ap for education on the
15 Internet.

16 I think multimedia is great. I think our
17 animators are tops, but this is the application that
18 I think is the killer ap for education.

19 This is the great book. Now, this is what
20 I, as a teacher, see when I log in as a-- If I am
21 using Apex course materials, either in the classroom
22 or on a distance learning program, when I log in, I

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

113

410-684-2550

1 see color-coded across here the names of all the
2 students, the date they started the course.

3 The C stands for a Complete Activity. IP
4 stands for In Progress. NS, Not Started.

5 I get a very simple, quick graphic gestalt
6 of how my class is doing, and I don't have to
7 manually keep track of all that; 90 percent of this
8 is kept track of for me by the automated--the
9 computer technology that powers the whole system.

10 I can click on a week and drill down, and
11 I can see here the scores for individual activities.

12 ASN -- this stands for Assignment. This
13 is like homework, and in our technology, when a
14 student submits an assignment, they upload the
15 assignment directly to the system.

16 They don't send it to the teacher as an
17 attachment to E-mail, who then has to detach it and
18 open it in Microsoft Word, and transcribe the grade.

19 No, they send it directly to the system.
20 The system knows the file is coming in. They know--
21 It knows which student it is coming from.

22 It automatically tracks the receipt and

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

114

410-684-2550

1 management of all those homework assignments. The
2 instructors do grade them.

3 They open them up. So, here are scores
4 for homework assignments that have been submitted in
5 this class.

6 Many of these others, like online
7 assignments, this is an automatically scored
8 activity.

9 A student downloads the task, goes away,
10 works the problems, comes back, and simply submits
11 their answers online, which are scored automatically.

12 This is a discussion, and the blue
13 indicates that there are active postings, that I, as
14 a teacher, need to go look at.

15 Here is a unit quiz. There are quizzes at
16 the end of every unit. There's a proctored final
17 exam that we mail out to schools at the end of the
18 course.

19 I can also drill down on a single student
20 quickly, and there is the same window onto the
21 student's progress that the student themselves have.

22 I can see very, very quickly what a

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

115

410-684-2550

1 student's status is. So can their parent if they
2 share the password.

3 So can a staff member at their school. We
4 provide access to this system. As a matter of fact,
5 we require that the schools participating with us
6 appoint a responsible staff member who is supervising
7 and mentoring the students in the course.

8 We provide them, not only with access to
9 this system, but we have the system generate some
10 reports on E-mail that are mailed out weekly, so that
11 schools can keep track of progress that their
12 students have in the course.

13 This is what enables us to monitor the
14 progress of individual students and to target those
15 very valuable teacher resources and staff resources
16 to the students who need it most.

17 I will close by telling you one sort of
18 very illustrative and funny story of many great
19 stories from our experience doing this so far -- one
20 rather delightful one.

21 At the end of a course, since we just
22 provide these courses as an educational service under

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

116

410-684-2550

1 contract to schools that offer them, we don't--

2 We're not--

3 We are, in fact, an accredited provided
4 accredited by the Northwest Association of Schools
5 and Colleges.

6 But, we don't offer diplomas. We don't
7 transcript grades. We simply send out a report to
8 students--to schools summarizing the performance of
9 students in our online courses.

10 Last year, we had a number of students
11 who, shortly before the AP exams, stopped submitting
12 homework assignments and started watching a lot of
13 those tutorials, kind of just racing ahead.

14 We saw the pattern in this--we call it the
15 great book here--and grew very anxious about it, and
16 we were ultimately forced, as our policies and our
17 commitments to the schools, required to send out
18 reports on many of these students saying the students
19 only completed 60 percent, 70 percent of the work in
20 the course.

21 Then, later, we found out that a number of
22 those students, whom the schools had probably given

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

117

410-684-2550

1 C's to because of the limited work performed,
2 actually got 4's and 5's on the AP exam, and we heard
3 from those kids.

4 (Laughter.)

5 BRYAN BARNETT: I don't want to give you
6 the impression that we only hear from kids when they
7 are unhappy.

8 We get just wonderful, wonderful E-mail
9 from kids all over the place who talk about how this
10 is just an opportunity--

11 We have kids who say to us, literally: I
12 don't care if this isn't as good as the best
13 classroom teacher that was ever born on the earth in
14 a room with me and five other students. This is the
15 only opportunity I have to take AP Calculus, and
16 thank you.

17 But, anyway, we heard from these kids:
18 What are you telling my school I got a C? I got an--
19 I got a 4 or 5 on the AP exam.

20 We followed up with some of these kids,
21 and basically they all told us pretty much some
22 variation of the same thing.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

118

410-684-2550

1 They said: Listen, who knows more about
2 what I know? You or me? With three weeks to go on
3 the AP exam, I know my writing skills are pretty
4 good. I know what grades I have gotten on those
5 assignments. What I need to do is get the rest of
6 the content under my belt and get ready for that
7 exam. Who are you to do to my school and tell them I
8 wasn't prepared?

9 So, indeed, we had to go back to the
10 schools and say: I don't know how we are going to
11 handle this in the future, but please don't rush to
12 judgment about the performance of your kid based on
13 the amount of work they did in our course.

14 Because, indeed, students are very smart
15 about what they know and what they don't know.

16 When we paint a clear picture for them
17 about what the standard of expectation is on the AP
18 exam, many of them turn out to be very smart about
19 how best to prepare.

20 Ideally, that is what they like most about
21 this system. Absent from class? Not in my notes?
22 Don't care.

1 I can go back to this anytime and get that
2 curriculum. So, you can see it changes dramatically
3 the way a student thinks about their education.

4 It's not anymore about being present in
5 class and punching a ticket. It's about learning
6 material and getting to the end of the course.

7 We will have a lot to say here, I think,
8 about it in the next few minutes. I am sure you have
9 many, many questions about getting to the end of the
10 course.

11 Thank you very much for your wonderful
12 attention. I am certainly here and very much
13 available to answer questions afterwards.

14 But, I would like to sit down and allow
15 the remainder of the panelists to give you a window
16 on their experiences and how different they might be
17 from my own. Thank you.

18 (Applause.)

19 LINDA ROBERTS: Well, thank you very, very
20 much. That was really helpful to give us a
21 perspective of how things can operate.

22 But, what we would like to do now is give

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

120

410-684-2550

1 you some other perspectives as well, and I would like
2 to begin with Karen Deaver, who is a teacher--a
3 mathematics teacher--at Hudson High School.

4 But, she is also an AP Statistics teacher
5 in the Virtual High School project, which is a
6 technology innovation challenge grant.

7 It is a five-year project that has been
8 funded by the Department of Education as a research
9 and development project to explore what it is that we
10 can do with these technologies when multiple schools
11 and teachers work together.

12 So, Karen, what is the essence of what you
13 are doing right now at the Virtual High School?

14 KAREN DEAVER: What I do is very similar--
15 or the Virtual High School is very similar to how
16 Bryan's is set up.

17 However, the way Virtual High School works
18 is a school actually has to join up with the Virtual
19 High School.

20 They have to offer a teacher, or they have
21 to have somebody who will teach a class, and then,
22 for having a teacher to teach the class, 20 of their

1 students can take a broad range of other classes.

2 The first year we started, which was--
3 we're in our third year of teaching now--we had 30
4 classes.

5 This year, we have 85, and next year we
6 will have 210. All those aren't AP classes. This
7 year, I am the only AP teacher.

8 This is my third year doing it. Next
9 year, there will be five AP classes that will be
10 offered.

11 The technology is very similar to what
12 Bryan was showing you. It works very similar, except
13 for the teacher actually has to devise their class.

14 You know, two teachers teaching the exact
15 same class can have completely different lesson plans
16 in their Web Site, or where the student goes can look
17 completely different.

18 So, the teacher actually has to do all of
19 that. That's not set out previously, but so far
20 right now we have 215 schools participating.

21 That's across the country, about half of
22 the states, and most of them are public schools.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

122

410-684-2550

1 They have about 15 private schools that are also
2 working with Virtual High School.

3 LINDA ROBERTS: Great. Let's see, Ray.
4 Ray Ravaglia is Deputy Director of the Education
5 Program for Gifted Youth at Stanford University.

6 I should tell you that Stanford has a 30-
7 year history of developing computer-assisted
8 instruction.

9 I remember talking to Pat Soupes, who is
10 the kind of father of computer-assisted instruction,
11 who I understand was your mentor, right--

12 RAY RAVAGLIA: Yes.

13 LINDA ROBERTS: --20 years ago. What are
14 you doing with technology and gifted youth, and what
15 is your focus at the program?

16 I know you have obviously influenced what
17 Apex folks are doing, but what do you think are the
18 important opportunities and resources that you're
19 putting together?

20 RAY RAVAGLIA: Yes, I just want to make a
21 couple comments. First of all, there is a brochure
22 outside on the table, that was placed there right

1 before lunch, and I know Karen put one as well for
2 the Virtual High School.

3 I just want to-- As Linda said, we have
4 been-- What is now called the Education Program for
5 Gifted Youth grows out of the 30-year history at
6 Stanford University in developing computer-based
7 courses.

8 The most recent history of EPGY, in 1985,
9 we received a grant from the National Science
10 Foundation to put a first-year Calculus course on
11 computer.

12 That's what lead us into Advanced
13 Placement instruction. When we tested this course in
14 1990, we wound up testing it with younger students,
15 7th graders to 10th graders, all of whom did quite
16 well.

17 That sort of led us to refocus ourselves
18 on the need of younger, very advanced students. We
19 are presently offering about 50 courses with
20 sequences in mathematics from kindergarten-level
21 mathematics up through--

22 As of September, we will have up through a

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

124

410-684-2550

1 Bachelor's degree at Stanford University worth of
2 courses in math, physics from an Algebra-based
3 physics course up through Quantum Mechanics, and
4 courses in English, Computer Science, and Music
5 Theory, as well.

6 All of the students who take courses from
7 EPGY are enrolled in the Continuing Studies Program
8 at Stanford and do get a Stanford transcript for the
9 work they do.

10 Obviously, taking Algebra from us, say,
11 isn't going to get anyone out of college anytime
12 sooner.

13 At the Advanced Placement level, students
14 take the Advanced Placement courses. For other
15 university-level courses, the credit that they get
16 through us will apply directly to an undergraduate
17 degree if they come to Stanford.

18 The course model is very similar to what
19 Bryan showed you, but I do want to make a couple
20 points.

21 One is just an extreme example of the sort
22 of thing we are interested in. There's been much

1 talk today about the need to identify students when
2 they're young.

3 I think that's a very important point,
4 because, unless students are in Algebra by 8th grade,
5 it's going to be very difficult for them to do an
6 Advanced Placement mathematics course when they are
7 in high school.

8 Similarly, our goal is to really make it
9 possible for students to take courses at the age that
10 they are ready to take them.

11 So, it would not be unheard of, say-- We
12 had a 6th grader a few years ago take our Advanced
13 Placement Calculus course 10th grade, when she--

14 She wound up skipping 7th and 8th grade.
15 She graduated high school last year and was also the
16 winner in the Intel Science Talent Search.

17 She had taken a number of courses with us.
18 Our goal really is to make it possible for these
19 students to get access to courses they would not
20 otherwise have access to.

21 What is important for expanding Advanced
22 Placement opportunities really is to realize that the

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

126

410-684-2550

1 Advanced Placement program, while it has served a
2 lot--

3 While it serves a lot of students, it
4 makes it possible to document that, while you are in
5 high school, you are doing college-level work.

6 What you need is this sort of
7 documentation both below and beyond -- below in the
8 sense students who are doing Algebra when they are
9 still in elementary school need to be able to go to
10 middle school knowing that they are going to get
11 recognition for that.

12 Students who are doing high-school-level
13 coursework while they are in middle school need to be
14 able to get credit for that in high school.

15 There's no reason why a student who starts
16 out, say, in 5th grade shouldn't be taking Advanced
17 Placement Calculus in 7th or 8th grade, and moving on
18 to university-level coursework--other university-
19 level coursework while they are in high school.

20 For this, the Advanced Placement program
21 has been possible for a large number of students to
22 do one year's worth of university coursework.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

127

410-684-2550

1 Before there will be a program for
2 students to do more coursework at the university
3 level before they go to university, it will be a
4 while before their exams just in terms of number of
5 trained teachers--other availability.

6 It really is time for other universities
7 to step up and assume the role of making these
8 courses available to students, so that kids can take
9 courses suited to their level of ability and have
10 this kind of achievement and get full credit for it.

11 LINDA ROBERTS: Great. So, there's
12 another perspective. Obviously, the role
13 universities can be such key players in, not just
14 AP--that's what you're saying, it seems to be, but in
15 identifying students early on who can be challenged
16 and building the kind of curricula and opportunities
17 for learning that are critical.

18 Marie Barber is Assistant Director of
19 Distance Education at the University of Nebraska-
20 Lincoln.

21 That's another place where we have been
22 providing funding for experimentation with distance

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

128

410-684-2550

1 learning through our Star Schools Program.

2 We have been very excited by the kinds of
3 things that have been developing. You know, this is
4 the case where--

5 I know, Bryan, you are getting a lot of
6 money from venture capitalists, but I've got to tell
7 you all that the Federal Government, in the case of
8 both the Virtual High School project and the class
9 project in Nebraska were the venture capitalists
10 there.

11 We have given you quite a bit of time and
12 quite a bit of money to develop your strategy, so why
13 don't you tell us a little bit about it.

14 MARIE BARBER: I am with the University of
15 Nebraska, Lincoln, Nebraska, and we have an
16 independent study high school that has been in
17 existence for over 70 years.

18 This independent study high school serves
19 over 16,000 enrollments for about 5,000 - 6,000
20 students in all 50 states in the United States and
21 over 135 countries.

22 We have a full staff of certificated

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

129

1 teachers. They are all endorsed in their subject
2 matter areas.

3 We have academic advisers, and we have
4 principals. We're a school. We're fully accredited
5 by North Central Association of the Commission of
6 Schools and by the Nebraska Department of Education.

7 So, we do offer a diploma sequence. We
8 work with individual students, and we work with
9 schools.

10 The Class Project is one of the, I think,
11 most exciting initiatives we have ever been involved
12 with.

13 The Class Project, as funded by the Star
14 Schools grant, is to put a diploma sequence online,
15 on the World Wide Web.

16 The numbers of courses in the five-year
17 grant is to be up to 55 courses or more. There
18 currently are approximately 30 courses right now that
19 are available.

20 There will soon be almost 40 courses
21 available. The project is directed at providing--
22 The project is directed at--similar to the projects

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

130

1 the Apex is talking about, to really use the
2 interactive multimedia dynamic environment of the
3 World Wide Web, but to do it time- and place-free.

4 The courses are student-centered. They
5 place the responsibility for learning on the
6 students.

7 They are self-paced. Students can go
8 through their courses at their own pace, but there is
9 a building of a community within the courses.

10 There is student-to-student interaction.
11 There is student-to-teacher interaction. There's
12 peer review -- all of this within a self-paced
13 environment that is allowed by the World Wide Web.

14 The Class Project also provides a seamless
15 navigation system for the students. It provides all
16 the materials the students need online.

17 It creates an environment that the
18 instructors and the development teams can see the
19 progress of the students.

20 They can see where the barriers are for
21 the students. They can intervene and help students
22 immediately.

1 They can communicate with the students in
2 a wide variety of environments, so it is an exciting
3 project, I think, that takes advantage of the entire
4 World Wide Web and will allow students to be able to
5 get a distance-delivered diploma--independent-study
6 diploma--but also is a real advantage for schools.

7 In working with schools, schools can use
8 the courses and with their own individual students.

9 They can use it to enhance curriculum--it
10 is something I have heard a great deal about here--in
11 terms of being able to provide access, flexibility,
12 options for the students.

13 It is a way to do that within your own
14 schools, either using our own teachers or using the
15 curriculum with your teachers.

16 LINDA ROBERTS: So, we've got a sense of
17 what you're about, and, in some ways, you have all
18 talked about this.

19 But, I would like you to think about the
20 question about what do you see as kind of the
21 necessary components if you are going to do a
22 distance learning online environment, that, most

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

132

410-684-2550

1 importantly, I think all of you are thinking about,
2 that will promote student success.

3 I mean, what are the elements that you're
4 trying to do that these people, if they are going to
5 be looking at this as an alternative, what are the
6 things they should be looking for as essential
7 components? Does anybody want to start?

8 RAY RAVAGLIA: I'll be happy to start.
9 One thing that is important to emphasize is that, in
10 looking at the technological components, it needs to
11 be understood that students will always be able to
12 exhaust any finite resources that you have online.

13 It is always going to be important to make
14 sure students have adequate access or recourse to
15 talk to instructors, to talk to other students in the
16 course, to have someone that they can ask the
17 difficult or interesting questions of, and get an
18 intelligent response from.

19 Another point to make is if the
20 environment where courses like this are being
21 utilized--

22 If you are doing something in the school,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

133

410-684-2550

1 it is essential-- You can't just tell the student,
2 okay, you're taking complex analysis from Stanford;
3 see you later.

4 These students will be seeing all their
5 other teachers in all of their other courses every
6 day.

7 Those are the courses that they are going
8 to be guaranteed to be doing their work for.

9 These distance learning courses are easy
10 courses to wind up slacking off on and putting off to
11 the last minute, because you don't have to face
12 someone every day looking at you, wondering why you
13 haven't been doing the work.

14 The irony there is that these are most
15 often the most difficult courses they are taking and
16 the ones that they can least succeed with at adopting
17 the strategy putting things off.

18 So, it is important to make sure that
19 there is someone at the school, even if that person
20 isn't providing instruction to the student, but just
21 making sure that the student is doing the work, and
22 also that the student seeks recourse when they have

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

134

410-684-2550

1 questions.

2 A lot of times these sorts of students who
3 are doing advance coursework never had to ask
4 questions before.

5 They have never taken a difficult
6 mathematics course. They take their first one, so
7 they don't have to ask questions. They think
8 something has gone fundamentally wrong with the
9 fabric of the universe.

10 They need to be told: No, this is--
11 questions, difficult material. When you need help,
12 you have to ask for it.

13 They need for sorts of support mechanisms
14 not just coming from the project but also locally as
15 well.

16 LINDA ROBERTS: Any other comments?

17 BRYAN BARNETT: I just want to underscore
18 what Ray said. I mean, I think it is pretty clear
19 that shopping for any kind of an AP course anywhere
20 that demonstrated rigor in the curriculum is sort of
21 the first requirement.

22 It is an outcomes-based education regime.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

135

410-684-2550

1 The goal is pretty clear. Anybody can teach a course
2 and call it an AP course. That doesn't--

3 I mean, there is no certification process,
4 so ensuring that the curriculum--just the basic core
5 curriculum--is at the standard required to prepare a
6 student, is the first issue.

7 But, we have experienced a lot of what Ray
8 points to, which is that a student in a high school
9 taking a distance learning course with us feels
10 primarily accountable to the staff of the school
11 where they go to school, not to us or to an online
12 instructor.

13 Our ability to provide the right kind of
14 training and support to--we call it the student
15 mentors in the school and the school's dedication to
16 assigning that responsibility, recognizing who has
17 it, rewarding and recognizing that person's
18 contribution--it's not a time-intensive
19 responsibility.

20 We have very effective mentors who spend a
21 few minutes at most a week with the students in our
22 courses.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

136

410-684-2550

1 But, they are just kind of there. They
2 read the E-Mail we send them. They stop a student in
3 the hall, tap them on the shoulders, remind them that
4 they are falling behind in their Apex work.

5 Commonly, we ask a school, for example--
6 When I go out and speak to schools about this, I say:
7 Well, you know, there's one thing you can do that's
8 very simple that will do more than anything else to
9 affect the success of the students you have in our
10 courses, assuming that you have adequate access to
11 technology. Just ask the student to tell you the day
12 on which they are going to be ready to take the final
13 exam.

14 If you treat it like a field trip, so will
15 they.

16 But, if you treat it like a course, it is
17 part of their curriculum, and you say, okay, you
18 know, you're going to be ready to take the final exam
19 on May 3rd--whatever it is--you tell the student:
20 Fine, that's the day I'm going to ask Apex to send us
21 the exam, and that's the day you're going to sit down
22 and take it.

1 It does a lot to clarify the mind and
2 focus people's attention.

3 LINDA ROBERTS: Karen, how do you approach
4 this, because you are a teacher online?

5 KAREN DEAVER: Our response is a little
6 bit different than what Ray and Bryan were saying.

7 First of all, we have due dates
8 throughout-- I have, actually, my courses set up by
9 units.

10 So, every probably about three days the
11 student has some either quiz that is due, test that
12 is due, or a homework assignment, a project,
13 something like that, so it is scheduled throughout
14 the course.

15 The other thing is we have a site
16 coordinator, what Ray was talking about and Bryan
17 mentions a mentor.

18 We have, actually, a site coordinator at
19 the school who actually is a teacher.

20 The first year Virgil High School was
21 running, they--we actually--North Carolina people,
22 sorry about this--but it was actually a few schools

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

138

410-684-2550

1 in North Carolina who decided not to have a site
2 coordinator at the school.

3 They were actually community members that
4 were designated as being the site coordinator.

5 Those kids fell through the holes. We
6 didn't see them, or, you know, we didn't hear from
7 them.

8 They weren't doing any of their work, and
9 those students really weren't doing well, and so now
10 it has to be a site coordinator at the school where
11 you are, who looks over them, who knows exactly what
12 is going on with all of the students at that time.

13 Actually, our site coordinator actually is
14 the technology person, also--or is a technology
15 person, also, making sure all of the computers work.

16 LINDA ROBERTS: Marie, your students are
17 all over the world, if I understand this correctly.

18 MARIE BARBER: Um-hmmm.

19 LINDA ROBERTS: I mean, how do you stay in
20 touch with them? How do you keep them connected?

21 How do you keep them going?

22 How do you use the technology to do this?

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

139

410-684-2550

1 I mean, you can't call them everyday, can you, so
2 what do you do?

3 MARIE BARBER: I was very interested in
4 hearing the comments, because our experience is quite
5 different.

6 We are working within a self-paced
7 environment. It is not term-specific. It's the
8 instructors that are on our staff that are watching
9 sort of the progress that students--

10 One of the advantages within a self-paced
11 environment is that the student can choose the time
12 and the amount of effort they are going to put in a
13 particular time.

14 We have students that really get into a
15 course. They just drive their way through it. They
16 focus on it.

17 The instructor can watch that happening.
18 If they hit a barrier and the instructor sees that,
19 the kind of a student that's been doing this, the
20 instructor can E-Mail them, can call them, can fax
21 them, and say: I noticed you are not moving. Is
22 there a problem?

1 Sometimes you get back from students:
2 Well, I just decided to try something else, and this
3 was a conscious decision on my part.

4 At other times, well, students say: Well,
5 you know, I just don't understand this.

6 The instructor can look at the path--the
7 map through the course--and they can see: Oh, well,
8 you know, I think you missed this part. You might
9 want to go back and try this particular activity.
10 You'll probably be more successful this way.

11 We also provide progress reports to
12 students, progress reports to supervisors, because
13 students have adult supervisors all over the world
14 that are part of their experience, so that they also
15 know where they are and what's happening.

16 LINDA ROBERTS: Well, you know, it sounds
17 like a lot of these students right now are extremely
18 self-motivated.

19 They are, in fact, gifted and talented.
20 Is there a way that you could describe the kinds of
21 kids that are either best suited for this
22 environment, or who are the kids with potential for

1 this, or how do you think about potentially reaching
2 a broader population of students and ensuring that
3 they are successful?

4 I would like to urge any of you, that have
5 a question, start to think about getting up to the
6 microphones, because we really don't want to have the
7 questions just coming from me.

8 I know a number of you have questions on
9 your minds as well, so start to think of your
10 questions.

11 When you are ready, just get up there, and
12 I will mediate that.

13 But, what about the kids? I mean, what
14 are the characteristics here, and are there kids you
15 tell: Don't do this.

16 Do you discourage some students from not
17 participating in your programs, and how do you do
18 that in a way that doesn't somehow have a negative
19 impact?

20 I mean, this is something, it seems to me,
21 that is very much got to be considered in these
22 virtual kinds of environments.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

142

410-684-2550

1 Marie, do you want to-- You look eager
2 to--

3 MARIE BARBER: Okay. I think they are
4 self-motivated students, but the motivation
5 necessarily isn't always internal in the sense of
6 what we might think of what a self-motivated,
7 organized student might be.

8 There's often students that are doing this
9 kind of virtual online distance learning activity,
10 because they don't have access within the areas they
11 are in, because they find being able to move at their
12 own pace really appealing.

13 They may be students that haven't been
14 very successful within a traditional classroom
15 situation.

16 But, they work very well in this World
17 Wide Web online situation.

18 They like the community feeling that they
19 get when they deal with students all over the world
20 or all over the country.

21 They like the project-based atmosphere.
22 They like working within their own communities, and

1 so the motivation is not--

2 Self-motivated students aren't what we
3 generally think of as self-motivation, and so, within
4 this environment, I would never discourage a student
5 from taking a particular course or working within
6 this environment.

7 But, I would caution them that it does
8 take--put the responsibility for the learning on
9 them, and there isn't somebody there virtually
10 holding their hand.

11 There's encouragement and support, but
12 there's nobody saying: Today you have to do this.

13 LINDA ROBERTS: Okay. We have two
14 questioners in the audience, but does someone have a
15 different point of view they want to share?

16 BRYAN BARNETT: I just wanted to say that
17 I am not sure that there is a single profile of the
18 student.

19 I mean, some students don't enjoy learning
20 in this environment. Some students don't enjoy
21 learning in the classroom.

22 Nancy Robinson, University of Washington,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 once said to me that there are students for whom the
2 classroom is like being stuck in a slow-motion movie.

3 (Laughter.)

4 BRYAN BARNETT: But it is true that almost
5 all the students we deal with are very busy. They
6 are not students who would necessarily be classified
7 under traditional terms as gifted or talented, or
8 anything like that.

9 But, they are ambitious, and they are
10 working very hard, and they are committed to a lot of
11 activities.

12 Time management is a big issue. Helping
13 them learn to manage their time so that this activity
14 is prioritized when it needs to be and the work gets
15 done is something--

16 Our instructors work pretty intensively
17 online with students providing that kind of support
18 and guidance.

19 I didn't mean to suggest, by my comments a
20 moment ago, that our instructors don't do that.

21 But, I think it is fair to say that there
22 needs to be a complement to that effort by the online

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

145

410-684-2550

1 instructor on the part of staff in a school, you
2 know, on the ground where the students are.

3 Before I forget, let me mention, also--Ray
4 just mentioned to me--I put a stack of brochures and
5 some CDs that have some of that same material on it,
6 that you are welcome to take home with you, outside
7 on the table.

8 Of course, I am going to be here for the
9 balance of the conference. I would be happy to
10 answer questions.

11 LINDA ROBERTS: All of the projects have
12 put out brochures. Yes, Ray?

13 RAY RAVAGLIA: I just want to say one more
14 remark on students. Students who are frustrated
15 easily probably should think--test these courses out
16 before committing to a year, especially in the next
17 couple of years.

18 The technology is in a rapid state of
19 improvement, but it definitely is the case that a
20 student who is easily put off by things not behaving
21 as advertised, you may not have the idea experience
22 in these courses.

1 (Laughter.)

2 LINDA ROBERTS: A question from here, and
3 can you identify yourself first?

4 BILL VASEY: I am Bill Vasey with the
5 state of California. My question has to do with
6 cost.

7 We've got some significant investment by
8 the Federal Government. We've got some venture
9 capital.

10 The state of California is making a
11 significant investment in this effort, and I know we
12 will probably have some more serious conversations
13 about, sort of, the pricing kinds of things.

14 I am interested, sort of for all of us to
15 consider and for the panelists to talk a little bit
16 about, if we sort of wrap this up to a larger-scale
17 adventure, what are the cost implications from your
18 various kinds of program?

19 LINDA ROBERTS: Can I just clarify your
20 question? Are you talking about the costs of
21 development?

22 Are you talking about the costs of

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

147 410-684-2550

1 delivery and maintenance? Are you talking about the
2 costs to the schools or for students?

3 BILL VASEY: Well, clearly, we have a
4 policy consideration in terms of how much public
5 money should be going into development versus venture
6 capital, and how that is recovered in either
7 situation.

8 I mean, the whole question is up there.
9 That is, is there some sort of ongoing costs, and it
10 may depend on who owns it or it may not? I don't
11 know.

12 LINDA ROBERTS: Okay, who wants to take a
13 shot? Karen?

14 KAREN DEAVER: Virtual High School right
15 now, for five years we are being funded by the
16 Department of Education.

17 We have actually a consortium that does
18 all of our technology, and what not, and they get a
19 portion.

20 But, the way that it works--the Virtual
21 High School works--is that the school has to actually
22 give up a teacher.

1 They have to have the technology there.
2 You have to have the computers, the access to the
3 Internet, and what not.

4 But, the school actually has to have a
5 teacher teaching the class. Then, you can have 20
6 students there.

7 There isn't any other cost involved right
8 now. Well, the other addition to that is that the
9 teacher, before they start teaching, has to actually
10 take a course.

11 You can actually get graduate credit for
12 taking that course, to prepare you to teach over the
13 Internet.

14 But, in addition to that, there are not
15 any other costs, and actually the teacher does get a
16 few thousand dollars to either buy a laptop or
17 somehow support what they are going to do.

18 LINDA ROBERTS: But it is a barter system,
19 if I understand you correctly. School A joins the
20 consortium, says: We have a teacher who is going to
21 teach X to-- How many students?

22 KAREN DEAVER: Twenty students.

1 LINDA ROBERTS: Twenty students. So, in
2 return, they get 20 places across the system? Is
3 that how it works?

4 KAREN DEAVER: Exactly.

5 LINDA ROBERTS: So you see what's
6 happened? The courses are really being borne mostly
7 by each of the local districts in this project.

8 What the Federal investment was about was,
9 as far as my opinion is, the initial development--the
10 piloting--the what I would describe as building the
11 capacity in these schools to do the work, and doing
12 some research and evaluation about the impacts.

13 You want to talk about costs?

14 BRYAN BARNETT: Sure. Well, obviously, we
15 are now a private company. I didn't realize--

16 LINDA ROBERTS: You don't reveal what you
17 can't reveal.

18 BRYAN BARNETT: Well, that's all right. I
19 didn't realize until I got here this afternoon that
20 the U.S. Department of Education was a venture
21 capital investor--

22 (Laughter.)

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

150

410-684-2550

1 LINDA ROBERTS: I'm the only one who says
2 that.

3 BRYAN BARNETT: I would like to talk to
4 you, Linda, before I go home tonight.

5 LINDA ROBERTS: You should. You should.

6 BRYAN BARNETT: I think you might be more
7 patient than some of my existing investors.

8 LINDA ROBERTS: That's the difference.

9 (Laughter.)

10 BRYAN BARNETT: No, I mean, what we do is
11 produce a course that we sell to school districts,
12 and we spend a lot of money to develop it.

13 I mean, we spend in excess of half a
14 million dollars on every course that we develop.

15 If you are going to produce 60 of those
16 tutorials to teach a year's worth of Calculus, it
17 takes a lot of money and a lot of time.

18 Schools license that stuff from us.
19 Because we are a young company, the pricing
20 structures are all in flux.

21 So, we began originally offering just
22 online courses, and we did so at a simple tuition

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

151

410-684-2550

1 basis of, now, \$395 a semester.

2 That includes a fully trained online
3 teacher, access to all that curriculum, the
4 reporting, everything.

5 We are now-- By Fall, we will release all
6 of these products in classroom versions, and we have
7 been approached by a number of states.

8 We are talking now to the state of New
9 Mexico--we've been talking to the state of Michigan--
10 who would like to simply license this stuff
11 statewide.

12 I mean, you want AP at every high school.
13 I mean, we just do-- We can turn on the switch.

14 Getting it actually used, to getting
15 teachers trained up, and all of that, of course, is
16 another thing.

17 So, if forced to guess, I would say that
18 we will be moving away from the kind of per-student
19 pricing that we now have into, you know, licenses
20 that are geographical or system-wide, because the
21 states that we're talking to are very, very anxious
22 to make this immediately available.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

152

410-684-2550

1 I mean, that is obviously-- The
2 legislation that produced the \$15 million we are all
3 here to talk about specifically mentions online
4 learning initiatives.

5 There are many, many states anxious to get
6 this, so I would expect, in those kind of volumes,
7 the pricing will come down.

8 LINDA ROBERTS: Let me just skip to class,
9 because I know you have a pricing structure, too.
10 Can you explain it?

11 MARIE BARBER: Well, it is very similar in
12 some ways to the Government being the venture
13 capitalist providing the seed money to do the
14 research and development of the course materials.

15 Then, the pricing structure really results
16 in letting the University of Nebraska sustain that
17 program so it doesn't die at the end of the grant
18 funding, which is often what happens.

19 So, the idea is to build and sustain a
20 program that can be based on fees.

21 The pricing structure really differs,
22 depending on whether it is one student enrolled with

1 independent study high school, getting credit from
2 the independent study high school, and using our
3 teaching services, to licensing agreements with
4 states, which is something that we have done with
5 Kentucky and Kansas, and are talking with others,
6 where they are using the curriculum in their high
7 schools and with their own teachers.

8 In those cases, the costs come down
9 significantly.

10 LINDA ROBERTS: Ray?

11 RAY RAVAGLIA: Just a quick comment. I
12 think, long term, the cost of materials, you're going
13 to see the sort of return to scale that you see with
14 textbook publishers and textbooks.

15 The real costs are going to boil down to
16 how much-- As Bryan said in his demo, it's the
17 instructor time that is the most expensive thing.

18 It's going to come down to how much
19 instructor time are you purchasing from somebody who
20 is providing it versus how much instructor time are
21 you providing yourself when you are making courses
22 available to students.

1 LINDA ROBERTS: Great. Back there, can
2 you introduce yourself?

3 CINDY BROWN: Yes, I am Cindy Brown from
4 the state of Oklahoma. We have heard a lot of good
5 stuff here in online.

6 But, one of the distance learning things
7 we mustn't forget is two-way video, two-way audio.

8 We have that going in a pretty big way in
9 Oklahoma and growing all the time. A lot of our
10 schools have gotten grants, a \$50,000 classroom--a
11 teleconference classroom.

12 We have many schools more and more moving
13 into that is how they are providing their AP.

14 Now, it is important to understand that we
15 have a class-size law in Oklahoma. A high-school
16 teacher-- A middle school or high-school teacher
17 cannot see more than 144 students in a day.

18 So, you have to be real careful that--when
19 you could technically go into the whole world, you
20 know, with two-way video, two-way audio.

21 But, we have chosen to count all the kids
22 a teacher sees, even over the video, as part of their

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

155

410-684-2550

1 class size.

2 So, that really is important to teachers,
3 so that they don't get burdened down with doing this
4 all day long and having thousands and thousands of
5 things to grade.

6 But, it really is working, and I think
7 two-way video, two-way audio is very important to
8 rural states like Oklahoma.

9 LINDA ROBERTS: So, I don't think you have
10 a question. You just made a statement.

11 CINDY BROWN: No, I just wanted to make
12 sure we don't forget that piece.

13 LINDA ROBERTS: Absolutely, and I think
14 the point here is that there are going to be many
15 strategies that are, I hope--I hope this will be the
16 case--many different strategies deployed.

17 I will tell you that, from my perspective,
18 one of the most important things we ought to be able
19 to do is to shed light on the kind of tools and
20 teaching strategies that really make a difference and
21 work.

22 I think that we have heard some very

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

156

410-684-2550

1 interesting things this morning, and--this afternoon,
2 rather.

3 I was just thinking to myself, geez, I'd
4 really love to have somebody, for example, being with
5 the students, who are part of these groups, and
6 understanding the dynamic that takes place both in
7 the class and out of class.

8 I'd also-- You know, one of the things I
9 was fascinated with, Bryan, that you talked about, is
10 this notion of a very rich reporting environment for
11 performance and progress.

12 What does that really mean in the dynamic
13 of teaching and learning?

14 So, it seems to me there's just an
15 incredible opportunity for us here as we move forward
16 to keep in mind that we don't--

17 We are just at the early curve of
18 capturing the knowledge here about what works and how
19 it works, and why it works.

20 That's something that we are going to be
21 doing more of as well. David Longenecker.

22 DAVID LONGENECKER: Yes. Bryan, you

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

157

410-684-2550

1 mentioned that one of the challenges or issues that
2 you raised that came up in the first year was the
3 persistence of students, or the loss of students.

4 You said you were addressing that. Could
5 you share some of how you are addressing that?

6 Is that a universal problem with
7 technologically delivered education?

8 Then, sort of as a quick aside, do you
9 offer summer school?

10 BRYAN BARNETT: Short answer to the last
11 question, yes, we will offer summer school sessions
12 this year.

13 To amplify on that point just briefly, we
14 started out doing distance learning courses, and we
15 go out to the school districts.

16 We've just gotten a ton of feedback from
17 schools who want this to work and a lot of
18 suggestions.

19 One of the things that schools told us
20 was: Summer school. Summer school soon.

21 The next thing they told us was: We'd
22 like to have these things available for our classroom

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

158

1 teachers to use, because this kind of curriculum is
2 very powerful, will put a good scaffold underneath
3 our classroom teachers, especially the teachers who
4 are new to teaching AP.

5 The third thing they told us is: Put up
6 an AP review six weeks before the exam, because we
7 can't offer AP in the Fall because students won't
8 take it because of the lapse between then and the
9 exams.

10 So, March 1 this year, we will--we're
11 going to open the AP exam review and we are signing
12 up school districts across the country with site
13 licenses for all their AP students, so they can check
14 in there and look at those tutorials.

15 So, we are trying to be as responsive as
16 we can in that way.

17 Regards the retention and attrition rate,
18 estimates differ depending on who you talk to, but a
19 common figure suggests--

20 A figure commonly heard suggests that
21 attrition rates in distance learning courses can
22 average as high as 50 percent.

1 Generally speaking, I am not sure that
2 that is a scientific number, but it has been accepted
3 for a long time that, in the distance learning
4 environment, depending on how you count--you know,
5 who counts as a starter--that there are a large
6 number of people who do not successfully complete
7 whatever the distance learning experience is that
8 they have started.

9 Last year, we saw attrition rates around
10 that, a little bit higher, actually, in some cases,
11 that were attributed to a number of different
12 factors.

13 Obviously, there were some students who
14 simply got into this, had no prior experience with
15 the Internet or with distance learning, found the
16 technology intimidating, didn't like the lack of
17 face-to-face instruction, and abandoned the course.

18 We had a very large number of students who
19 were unable to complete the course because of
20 technology problems.

21 Most typically, they simply didn't have
22 access to enough computer time. School signs up --

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

160

410-684-2550

1 well, we've got Internet computers. No problem.
2 There's three machines in the corner of the library
3 shared by the 1200 kids that we have in our high
4 school.

5 We failed to impress upon schools that
6 students completing an online course need access to a
7 machine for five to ten hours a week.

8 Consequently, we saw much better results
9 among students who had access to computers at home as
10 well as at school, and much better success rates in
11 schools that dedicated a class period to the work
12 that the students were doing and treating it like a
13 regular independent study, for example.

14 This year, we have done a number of
15 things.

16 One, we have worked very hard with our
17 online instructors. We worked to provide more
18 consistent, quality feedback to students to keep them
19 moving.

20 We have a set of kind of early alerts, if
21 you will, that the system automatically flags for
22 students who are falling behind.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

161

410-684-2550

1 We, too, have regular due dates for
2 assignments, and, when students fall behind, we react
3 more quickly than we did last year, cleaned up the
4 technology problems a little bit, and worked much
5 better with schools to discourage schools from
6 signing students up for the courses unless they are
7 really sure that they are prepared to provide
8 adequate technology support on their end.

9 This year, I looked, because I knew I was
10 going to be asked this, shortly before coming out
11 here.

12 Our current attrition rates are--retention
13 rates, if you want to look at it the other way--for
14 the Fall courses--the semester just passed--are
15 running around 65 percent, 70 percent, up from 40, 35
16 last year.

17 So, we think that we have made pretty
18 significant inroads.

19 But, let me remind everybody here. If you
20 go to any high school in the country that offers AP
21 in the classroom in the first two weeks of the
22 course, there's an exodus.

1 I mean, it has just been the nature of it.
2 Kids need to try it. I think what we need to worry
3 about is not putting penalties on that kind of trial,
4 so that as many students--

5 We also-- Ray, I have to remind him,
6 because he didn't say it. Ray's program is very
7 selective.

8 You have to test at a very elite level in
9 order to quality to participate in the Stanford
10 program.

11 We and the Virtual High School and the
12 Class Project do not-- We're not-- None of us are
13 gatekeepers.

14 We delegate to the schools the decision of
15 what students are going to try out our courses, or
16 not.

17 We accept the fact that schools will make
18 decisions we might not have made if we made them
19 ourselves.

20 LINDA ROBERTS: Ray, do you have a
21 comment?

22 RAY RAVAGLIA: Yes, just some attrition

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

163

1 stuff. We have had about 15,000 student enrollments
2 since 1992.

3 In the math courses, attrition has been
4 running around-- Successful completion of student in
5 first course has been running between 70, 75 percent,
6 somewhere in there.

7 So, even if you are selecting students in
8 the top five to ten percent of the population, you
9 are still going to see this sort of--some amount of
10 attrition.

11 A lot of that is in the first three weeks.
12 The point that I want to make, though--and this ties
13 together the earlier comment about audio and video
14 two-way--is, our writing courses, we have had maybe
15 300 to 400 student enrollments in the writing courses
16 that are relatively new.

17 The successful completion rate of those
18 courses the first time a student takes the course is
19 running about 97 percent.

20 The reason for this extreme difference is
21 those courses have required weekly, live, virtual
22 classroom sessions using two-way multipoint audio and

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

164

410-684-2550

1 shared graphics. We're not using video.

2 Not using video allows us to put stuff out
3 over 28A baud modem type connections.

4 We're looking at reasons why, but much of
5 it is both, pointing to what I said earlier, about
6 having to see someone every week who is going to call
7 you on whether or not you have been doing the work
8 prevents students from drifting away.

9 The other is that, when you are in these
10 classes, they tend to be 48 students.

11 When you are in a small class like that
12 with the teacher each week, there is a real sense of
13 commitment to other students.

14 There really is that sense of not wanting
15 to let the site down, and I think that has really
16 played into building the kind of community sense that
17 works against attrition.

18 LINDA ROBERTS: Marie?

19 MARIE BARBER: I think what we find is we
20 run a completion rate--I prefer a completion rate,
21 too--about 86 percent on an average of between 85 and
22 87 percent, and partly because there are open-

1 enrollment courses.

2 Students can enroll at any time, and they
3 can move at their own pace, and they have up to a
4 year to complete a one-semester content course.

5 What we find is that students, because
6 they don't start falling behind and they can choose
7 how they want to work through the course, then really
8 do finish the course.

9 It isn't a case of: Well, I got behind
10 because I didn't do this homework.

11 It is because: Okay, I didn't start in
12 the first 90 days.

13 That's okay. You don't have to start in
14 the first 90 days.

15 But, I really pushed it then for the next
16 three months, and, in that kind of flexibility,
17 students respond to that flexibility.

18 I think something that everybody isn't
19 saying here but is true of all of these projects, and
20 the emphasis on students, is the focus on planning
21 and development and instructional design up front.

22 Those issues, of how do you work with

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

166

1 students in those environments, they have to be
2 thought about, worked with, developed up front before
3 the course ever goes online--places where there are
4 barriers, places where you have students--

5 You can't look at classroom students and
6 say: This is this learning style.

7 You have to provide that kind of option
8 and flexibility in the course up front. You have to
9 remember a kid can't ask at 2:00 o'clock in the
10 morning this question.

11 You can't see a confused face and respond.
12 You have to think about all of that up front, so the
13 design and development process that goes in is what
14 helps keep the completion rates high and the
15 attrition rates low.

16 LINDA ROBERTS: Great. Let me ask a
17 question. It is 3:30. Do we have to end right now?

18 One more question. Okay, one more
19 question. Yes, sir.

20 GALEN JOHNSON: Thank you very much.

21 Galen Johnson with the state of Iowa, and my question
22 is, with the experience on the panel, if you are

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

167

410-684-2550

1 offering either the AP Science courses or other
2 Science courses that require a lab experience, how
3 are you handling that and how successful has it been?

4 LINDA ROBERTS: Okay, very brief answers.
5 Hands-on laboratory work. You know, how do you do
6 it? Karen?

7 KAREN DEAVER: With my course, which is a
8 Statistics course, I actually use software which many
9 of the other teachers also do.

10 In the Calculus class, it is going to be
11 offered next year. We will also use a software
12 package to see the visual stuff that Bryan showed.

13 There is going to be an AP Chem class next
14 year. He's actually sending out labs, and I think
15 the school, actually, that provides the course that
16 has the teacher actually have to purchase the labs,
17 just as if the students were actually at their
18 school.

19 They get returned at the end of the
20 semester or the end of the year.

21 GALEN JOHNSON: You would require that a
22 Chemistry teacher be on-site that would conduct the

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

168

410-684-2550

1 lab, is that correct?

2 KAREN DEAVER: If the Chemistry teacher
3 was at our school, or if I was teaching a Chemistry
4 class, I would actually send out the materials and
5 then give the students the information to actually do
6 the labs over the Internet.

7 I think what this Chemistry teacher is
8 doing is sending out some kind of a software package
9 that kind of demonstrates it.

10 Then, the student will do it, also. They
11 will have to be in a Chemistry classroom when doing
12 the labs.

13 So, that has been set up, I know, for this
14 one specific teacher.

15 BRYAN BARNETT: I think all of us probably
16 are pursuing a similar strategy. Many of the things
17 that a student needs to know about a lab experience
18 for the AP exam can be communicated outside of a lab.

19 All of us, I think, are building that
20 aspect into our curriculums.

21 At the same time, local school districts
22 and many colleges and universities simply require a

1 physical wet lab, and they will not accept a
2 substitute.

3 So, in most cases, we provide a lab
4 similar to a lab book activity, and the school
5 district has to arrange for students to go into a
6 Chem lab with supervision at a local community
7 college or in a high school and complete those.

8 RAY RAVAGLIA: One of the reasons why one
9 can't just do a software simulation of a lab is that
10 what's important in a laboratory course is learning
11 error analysis and the sort of unpredictability of
12 physical apparatus.

13 That is just not something that is built
14 into laboratory simulation software.

15 So, we have been looking at a kit called
16 ZAP, which is sort of used at Cal Tech and MIT for
17 freshmen, which is a Physics lab sort of built out of
18 a bunch of \$50 worth of microcircuits.

19 We had a lot of mixed results with that,
20 so this is really very much an open question as how
21 to deliver an effective laboratory.

22 LINDA ROBERTS: Well, I think we have just

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 begun to scratch the surface of questions, and that
2 is really what we wanted to do today.

3 The last thing I want-- I am the Director
4 of Technology, but the last thing I wanted to make
5 you think--walk away thinking--was that this was
6 going to be a piece of cake.

7 I really think we have learned a lot, and
8 we are continuing to learn a lot, and I will tell you
9 that I am very interested in figuring out how we can
10 be helpful to the states and to districts as they are
11 trying to sort through these difficult choices.

12 Clearly, there are questions about
13 quality. There are questions about the nature of the
14 learning experience and students, and interactivity.

15 There are questions when this seems to be
16 the only way--virtual courses seem to be the only way
17 to reach the goal.

18 I hope that this is the beginning of a
19 dialogue that we can maintain and continue to really
20 share with each other across these projects, and with
21 you, the kinds of strategies that are moving forward
22 and helping us meet the needs of our students.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

171

410-684-2550

1 I want to thank our panel and our
2 presenter, and I want to thank all of you for just
3 incredible sea time.

4 I am told to tell you that you get a
5 reward. You have ten minutes to break and come back.
6 Thank you all very much.

7 (Applause.)

8 (Recess.)

9 IRENE SPERO: Good afternoon. I am going
10 to ask everybody to take their seats so we can begin
11 this session.

12 (Pause.)

13 IRENE SPERO: Thank you. I know you must
14 feel that this has been an absolutely incredible 24
15 hours.

16 It is hard to believe that it was only
17 yesterday afternoon that we started this conference
18 and so much has happened since then.

19 But, this is the moment that you all have
20 waited for. Throughout our sessions and throughout
21 the presentations, you have heard reference over and
22 over again to that \$15 million that is available.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

172

410-684-2550

1 I am pleased to say that we have with us
2 two individuals who are going to be able to lead us
3 through the application process, who are going to be
4 able to talk about the \$15 million that is available,
5 what it can be used for, how it can be structured,
6 and the like.

7 Frank Robinson, who is Director of the
8 Advanced Placement Incentive Program at the
9 Department of Education, and Cathy Grimes-Miller, who
10 is with the Office of General Counsel at the
11 Department of Education, both of them have been
12 absolutely integral to the planning of this
13 conference and are really the experts on the Advanced
14 Placement Incentive Program.

15 A couple of announcements. At the end of
16 our session, the application packets will be
17 available for you to pick up outside at the
18 registration desk.

19 Also, you should have on your table an
20 evaluation form. That evaluation form is very
21 important to us.

22 We really want to be able to look at that

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

173

410-684-2550

1 and say what worked, what didn't, what can we do
2 better as we plan for next year's conference.

3 So, at the end of this session when you
4 leave the room, and before you go upstairs to our
5 reception, we ask you to complete the evaluation and
6 then turn it in as you pick up your application
7 packet.

8 We are also going to be videoing and
9 recording this session, so I know many of you are
10 going to have questions about the application.

11 When you ask either Frank or Cathy those
12 questions, please stand, identify yourself, and
13 identify your state, so that, in going back and
14 reviewing these tapes, we can answer your questions
15 more fully than we might be able to do so today.

16 Tomorrow, when you all meet in state teams
17 tomorrow morning, there will be additional
18 opportunity for you to look at the applications and
19 think about that next step about going back to your
20 state and writing those proposals.

21 So, I am going to now turn this over to
22 Frank and let him tell us about the \$15 million.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

174

410-684-2550

1 (Pause.)

2 FRANK ROBINSON: Thank you very much,
3 Irene. It's been certainly a pleasure and a very
4 challenging experience and opportunity to work with
5 the College Board jointly on this very special event
6 that we've had the last several days.

7 I guess, when we sit around the table to
8 start talking about these kinds of things, we--a few
9 of us shook our heads and said no way, given the time
10 frame.

11 But, there are a lot of folks that said:
12 Yes, there is a way. Obviously, we did find one.

13 Before I get into the discussion about our
14 process and how we hope to assist you today with this
15 important AP Incentive Program, I would just like to
16 say that, first of all, the Department is relatively
17 new--a new kid on the block in terms of being a part
18 of the AP family.

19 We appreciate you all taking us in and
20 hope that we can do our part, and maybe more.

21 It is also very interesting to note that,
22 for the past couple of years, I have been in

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

175

410-684-2550

1 communication with many of you by phone and by E-
2 Mail.

3 But, we have never met personally face to
4 face. If you just bear with me a little bit, it
5 reminds me of an event--story--that my wife claims I
6 embellish, but this is really the truth.

7 (Laughter.)

8 FRANK ROBINSON: I am a native Iowan and
9 had the very fortunate experience of working for
10 Governor Harold Hughes--

11 (Applause.)

12 FRANK ROBINSON: I had the very fortunate
13 experience of working with Governor Harold Hughes in
14 the mid-'60's.

15 We had a labor mobility project with
16 Alabama and Mississippi. We were bringing displaced
17 black farmers to Iowa to regroup and to start a new
18 life.

19 All right, I'll raise the-- Is this
20 better? Okay? All right.

21 Let me go back to cement it. Anyway, we
22 had the mobility project with both Alabama and

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

176

410-684-2550

1 Mississippi.

2 I had been negotiating with a Colonel Polk
3 Huff from Jackson, Mississippi, and, of course,
4 Colonel Polk Huff, I assume, was a brother, because,
5 where I grew up in the neighborhood, everybody had a
6 nickname as Colonel or Junebug, or--

7 (Laughter.)

8 FRANK ROBINSON: --whatever. You never
9 knew anybody's first name, really, you know. It was
10 always Brother. You see Brother.

11 So, about three months after these
12 negotiations by phone we decided it's time for me to
13 go to Jackson and meet with Colonel Polk Huff.

14 Well, I got to the airport in Jackson, and
15 I am looking for Brother, and he is looking for a
16 non-Brother.

17 (Laughter.)

18 FRANK ROBINSON: We even were, I think,
19 paged at one point, but we still-- The connection
20 didn't quite register.

21 But, eventually, once the terminal
22 cleared, we finally dawned on us. We said: Look,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

177

410-684-2550

1 this is what it is.

2 So, I am just saying all that to say now
3 we won't just be passing one another. I know who you
4 are, and so forth, so I appreciate that.

5 Also, I would like to acknowledge
6 Secretary Riley. Of course, his remarks are always
7 very inspiring.

8 But, it was my good pleasure to have
9 ridden up with him on the elevator about seven years
10 ago, right after he gave some remarks at Martin
11 Luther King's memorial event over in the HHS
12 building.

13 That really started the ride. I mean, the
14 ride has been just fantastic in the Department, and I
15 think most folks that work there will agree with me.

16 We are certainly very privileged to have
17 his leadership, the stability that he has brought to
18 the Department, and the guidance, and certainly the
19 impetus he has given to the AP program.

20 So, I just want to mention those two
21 things in passing.

22 Now, to get to what you are here for, we

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

178

410-684-2550

1 would like to just briefly cover our funding again.

2 I know you are aware of the \$15 million.

3 I'll talk just a little bit about the legislative
4 history just to give you a sense of how we got to
5 where we are.

6 Then, we want to go into some discussion
7 about our content of this program.

8 We want to call on Cathy Grimes-Miller to
9 discuss some allowable activities as well as our
10 priorities, both absolute and invitational.

11 Then, we will talk a little bit about the
12 process, just how you get the application into the
13 Department, and what some of the steps are, and then
14 followed up with some expectations.

15 Hopefully, we can do this and then allow
16 time for questions from you.

17 As Irene has mentioned, we do have the
18 packets available after this session is concluded,
19 and, incidentally, we do have some non-regulatory
20 guidance that you can access as well out there.

21 So, there are two pieces of information
22 that will be available.

1 First of all, in terms of funding history,
2 just to give you an idea here, because we did include
3 the states.

4 I know this is sort of--for those of you
5 who have heard the \$15 million.

6 But, I want to give you a break-out of
7 where we are.

8 First of all, our first year we had 32
9 states that applied and received \$3 million, roughly,
10 in fee payment program money only.

11 That is, we provided funds to pay test
12 fees for students who met the low-income criteria.

13 In Fiscal Year 1999, we had two
14 competitions during that year, and that was just this
15 past year.

16 The first was we had 33 states and the
17 District of Columbia, and that included several
18 states who also applied for the other activities--
19 quote, other activities that we'll be focusing on
20 today.

21 Then, we ran a second competition last
22 summer for the remaining \$1.2 million.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

180

410-684-2550

1 We had 20 states apply for that money,
2 because it is a competitive award, and, of those 20,
3 we awarded ten states and the District of Columbia
4 those funds.

5 As you know now, we are talking about the
6 \$15 million that is available for the competition
7 that you will be preparing applications for shortly.

8 Of course, the President's budget request
9 that will be negotiated with the Congress is for \$20
10 million for 2001.

11 So, that's where we are with our funding
12 history.

13 In terms of-- I want to just briefly talk
14 a little bit about our legislative history in terms
15 of where we started and where we are at this point.

16 Actually, we have legislation-- The
17 program was authorized in the Higher Education Act
18 and has been amended in 1998.

19 Funds were not available, as you know,
20 until Fiscal Year 1998, that we use them for the
21 first time.

22 But, during that time, the program was

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

181

410-684-2550

1 amended, which allowed for other activities, whereby
2 Cathy Grimes-Miller will talk to you about shortly.

3 Now, let's talk just a little bit about
4 the content of the application, because I think this
5 basically will serve as sort of the centerpiece for
6 what you will be developing.

7 These are actually criteria that will
8 appear in your application package, and you will
9 develop these criteria.

10 They are weighted criteria. There are
11 points that are assigned to each of these when you
12 develop your application.

13 Some of you are grant writers. Some of
14 you have written proposals and applications and sent
15 them to the Department before.

16 This may be quite familiar to you. There
17 are others of you here who may be taking this
18 information back to someone else, and you would want
19 the guidance to give this to them.

20 I can only say that, really, the heart, in
21 terms of weighted points, the management plan and the
22 quality of the service and project design weight very

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

182 410-684-2550

1 heavily in the application process.

2 This is not to minimize any of the others,
3 but, in terms of weighted scales, these areas do
4 attract the most weight.

5 I would like to mention, in terms of
6 resources, you will notice in this category when you
7 get the application package, there is a portion in
8 there that relates to the reasonableness of the
9 budget request.

10 You should know that this year, for the
11 first time, we are dealing with a multi-year funded
12 program.

13 That is, you can submit an application for
14 a three-year budget period, and, subject to your
15 performance in each of those years and availability
16 of funds, you will be awarded a three-year program
17 for the AP program.

18 This is the first year for multi-year
19 funded programs.

20 (Applause.)

21 FRANK ROBINSON: Thank you. All right.

22 At this point, I think we probably, because so much

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

183 410-684-2550

1 of this you will want to look through and sort
2 through, I don't want to get too detailed in all of
3 the areas.

4 But, I thought I would just like to
5 highlight those particular portions of it, because--
6 particularly with the multi-year funding efforts--
7 because this is relatively new for everyone.

8 As I say, the whole key to this is
9 performance, and we would have to look at how well a
10 project has performed in that particular year before
11 funds would be made available for the next year.

12 With that, I believe one of the important
13 aspects of this whole thing, and a new area and one
14 that may require some clarification, is the area that
15 deals with our allowable activities and also the area
16 that deals with our priorities, because we do have an
17 absolute priority for the program.

18 We also have an invitational priority for
19 the program, and, for that discussion, I have asked
20 our General Counsel--our program attorney--Cathy
21 Grimes-Miller, to discuss it.

22 CATHY GRIMES-MILLER: Good afternoon,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

184

410-684-2550

1 everyone. I would just like to reiterate what
2 everyone before me has said about just how amazing
3 this whole conference has been.

4 I sit behind a desk quite often and push
5 paper, and try to provide legal analyses, and I
6 really don't get very many opportunities to be out in
7 the field and feel the energy that you guys provide
8 and the passion that you have for educating our
9 children.

10 But, this, I must say, is one of the most
11 rewarding parts of my job, because I really get to
12 see that the work that we put in, the long hours that
13 we put in, the weekends that we work, is really
14 paying off in the form of actual success stories for
15 children, in general.

16 Let me see if I can-- As Frank said, I am
17 going to talk a little bit about the allowable
18 activities under the Advanced Placement Incentive
19 Program as well as a couple of priorities that we
20 have established for this year's competition.

21 For those of you who have received grants
22 under the program previously, you probably are aware,

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

185

410-684-2550

1 at least to some extent, of the activities that are
2 allowable under the program.

3 There are two basic categories of
4 allowable activities under the Advanced Placement
5 Incentive Program.

6 The first category is the payment of
7 Advanced Placement test fees.

8 That category is pretty well defined, and
9 it allows state grantees to use program funds to pay
10 Advanced Placement test fees on behalf of eligible
11 low-income individuals.

12 Now, the second category of funding is
13 broader, obviously, and there is a prerequisite for
14 states to be eligible to receive that funding.

15 That category is the use of program funds
16 to support activities that are directly related to
17 increasing the enrollment of low-income students in
18 Advanced Placement courses, the participation of low-
19 income students in Advanced Placement tests, and the
20 availability of Advanced Placement courses in schools
21 serving high-poverty areas.

22 In order for states to qualify for that

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

186

410-684-2550

1 funding, the state would have to pay all of the
2 Advanced Placement test fees in core subjects on
3 behalf of eligible low-income individuals in that
4 state.

5 Basically, what that means is that no low-
6 income student that--no student that meets the
7 standard for low income under the Advanced Placement
8 Incentive Program should be required to pay more than
9 a nominal fee to take Advanced Placement courses--to
10 take Advanced Placement tests in core subjects.

11 Essentially, that money-- A state can use
12 Federal funds under this program.

13 It can use state funds, and it also can
14 use private funds to meet that requirement.

15 In fact, I should mention that this
16 authority is a new authority that was implemented
17 into the program during the reauthorization in 1998.

18 The issue had arisen that there were many
19 states--South Carolina is the one that comes to mind,
20 immediately, because it is Secretary Riley's home
21 state.

22 Also, the gentleman, Mr. Livingston, that

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

187

410-684-2550

1 spoke yesterday, is from South Carolina.

2 But, in South Carolina, they had an
3 Advanced Placement program where the state actually
4 paid all of the Advanced Placement test fees for
5 students within the state.

6 So, we realized that, for those types of
7 states who had been self-motivated and shown the
8 initiative, and recognized the importance of
9 providing low-income students with the opportunity to
10 take these tests, they really couldn't benefit from
11 the Advanced Placement program.

12 We felt that, to some extent, those states
13 were penalized for providing the funding for those
14 students to take the tests.

15 So, Congress actually amended the statute
16 in 1998 to provide a benefit even for those states to
17 get involved in the program to increase the
18 participation of low-income students.

19 So, in fact, we believe that these
20 activities, which are authorized under Section
21 810(D)(1) of the Advanced Placement Program statute
22 are really going to be important over the years to

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

188

410-684-2550

1 come.

2 It is not going to be enough just to pay
3 the Advanced Placement test fees on the low-income
4 students that are currently taking the courses and
5 the test, because we realize that they really aren't
6 enough involved.

7 Hopefully, the funds that are provided
8 under this authority will increase the participation
9 of those students, and in turn increase the need for
10 funds to pay the test fees themselves.

11 (Slide.)

12 CATHY GRIMES-MILLER: Frank also mentioned
13 that, for this year's competition, we are
14 establishing a couple of priorities under the
15 program.

16 I don't know how many of you are familiar
17 with the Federal grant process and understand the
18 legal lingo.

19 But, essentially, for Fiscal Year 2000, we
20 are establishing an Invitational Priority for the
21 states that wish to form consortia to apply for funds
22 under the program under Section 810(D)(1) which is

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

189

410-684-2550

1 the discretionary activities other than the payment
2 of test fees.

3 We are also establishing an absolute
4 priority for the payment of test fees.

5 Just to give you an indication of what we
6 mean by that, an Invitational Priority is merely a
7 priority where the Secretary encourages applicants to
8 submit proposals that meet a particular condition.

9 In this case, the Secretary is encouraging
10 applicants to form consortia to undertake activities
11 that are authorized under Section A.10(D)(1) of the
12 statute, or, in other words, activities that are
13 designed to increase the participation of low-income
14 students in the program.

15 Under an Invitational Priority, the
16 Department does not provide any competitive
17 preference or absolute preference for applicants.

18 So, in other words, it is purely
19 voluntary. You are not penalized for not meeting
20 that condition, nor are you rewarded in any way for
21 meeting it.

22 But, we like to encourage those types of

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

190

1 applications, I think primarily, hopefully, to spur
2 some innovation and creativity in terms of increasing
3 the participation of low-income students in the
4 program.

5 The absolute priority is being established
6 for proposals that are basically to pay test fees on
7 behalf of low-income individuals.

8 This is not all that different from what
9 we did last year.

10 Last year, we didn't call it an absolute
11 priority. We actually took advantage of a statutory
12 exception from rulemaking.

13 But, this year we are establishing an
14 absolute priority for proposals to pay test fees for
15 low-income students.

16 Under the absolute priority, basically
17 what means is that any state that applies for funding
18 to pay test fees for eligible low-income individuals
19 will receive funding at some level.

20 We have set aside a portion of the grant
21 funds that are available under the program for the
22 purpose of paying test fees.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

191

410-684-2550

1 Any state that meets the minimum
2 requirements for participation in the program and
3 propose to use program funds for that purpose will be
4 funded at some level.

5 The reason for that is because we feel
6 that it is important to at least be able to support
7 the low-income students that are currently taking the
8 courses and taking the tests.

9 We feel that it is important to support
10 them and to enable them to take the tests in addition
11 to spurring more interest and more participation in
12 the program.

13 For proposals to pay test fees, the
14 selection criteria that Frank mentioned earlier will
15 not apply.

16 Again, the reason that won't apply is
17 because this will not be a competitive grant award.

18 For the test fees, any application meeting
19 the minimum requirements for eligibility and
20 proposing to pay test fees will be funded at some
21 level.

22 Now, the amount of funding that those

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

1 applicants will receive will depend on a number of
2 factors, primarily the state's ability to support the
3 amount of funds requested.

4 Based on past experience, we actually
5 expect about anywhere from \$3 million to \$4 million
6 of the available funds to be used for the payment of
7 test fees.

8 We expect to have about \$11 million
9 available for the other activities under Section
10 810(D)(1) of the statute.

11 That's all I have, and I guess Frank will
12 open it up to questions after he finishes his part.
13 Thank you.

14 (Pause.)

15 FRANK ROBINSON: I appreciate that Cathy,
16 and I think you may have an opportunity to let some
17 of this sink in a little bit, and perhaps have a few
18 questions as we wrap this part of it up.

19 But, I would like to just give you a
20 little background on the process, that is, once you
21 go back and develop your application.

22 First of all, the Department is available

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

193

410-684-2550

1 for technical assistance, not to the point that we
2 are going to write your application for you.

3 But, the fact is we can answer questions,
4 and we want to make sure that your understanding with
5 our purpose is consistent.

6 So, don't hesitate to call if you do have
7 questions, but, during this process--which you will
8 see the closing date on the application packet--once
9 you have developed and met a postmark date, which is
10 crucial, the application packages do not go to the
11 program office.

12 They are received by the application
13 control center.

14 There have been instances where
15 applications have been mis-sent, and unfortunately
16 grantee--prospective grantees have been eliminated
17 because of this.

18 So, just read the directions carefully in
19 terms of that particular area, and I am sure there
20 won't be a problem.

21 What happens in the process is that these
22 applications will be reviewed by a panel--three per

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

194 410-684-2550

1 12 applications.

2 They are folks that are now very familiar
3 with AP. I make sure we get the people that have
4 read previously and have an objective understanding
5 of the program, and can make decisions.

6 We do not require consensus, but, if there
7 appears to be a wide disparity between readers, we do
8 convene and discuss to make sure there wasn't an
9 omission that somebody made and did not notice, or
10 that they misread something.

11 So, we do try to make sure that, whatever
12 the panel's decisions have been made, that they are
13 well documented, and you have an opportunity to
14 receive these comments as well, as some of you have
15 already from our past programs.

16 Once the decisions have been made, we are
17 prepared to announce awards, and we expect that that
18 will happen about mid-May in terms of AP Incentive
19 Program awards for this year.

20 We are fortunate to have had Cathy's help
21 and other staff to move with our application package
22 so that we are on a pretty good, safe timetable now

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

195

1 for that amount of money and awards to be made about
2 that date.

3 I am going to just close with what I think
4 is something that we want to make sure we have, that
5 you all will be able to do.

6 I have heard a little bit of this in terms
7 of some of the workshops that I have attended today.

8 There certainly have been a lot of folks
9 telling the story -- what has worked, the
10 effectiveness of it.

11 Because, as I say, we are relatively new
12 to the AP arena, it is very important to the
13 Department that we hear from you.

14 I noticed that there were some issues
15 discussed about measurable objectives determining how
16 much gains have been made among students within
17 certain categories of tests, types of students that
18 take the tests, and that sort of thing.

19 So, we are very, very interested in
20 getting best practices to the Department so that we
21 can share those with our education community.

22 Of course, information dissemination is

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

196

410-684-2550

1 very important. Not only is it important for you
2 all, as state contact and local folks, to get the
3 word out about AP and recruit teachers and students,
4 we also like to have that information disseminated
5 through us so that we can also share the good work
6 you are doing with others.

7 With that, I realize we are moving a
8 little bit ahead of the time, and I don't think that
9 is basically a problem.

10 (Laughter.)

11 FRANK ROBINSON: I think what we would
12 like to do now--and I believe it is probably in the
13 best interests of everyone--is to have questions,
14 because I believe you should have an opportunity to
15 get as many of those answered as possible.

16 Once you leave with the packet and all, it
17 may be a little--take a little more time to get back
18 to you.

19 So, while we are here, we are available.

20 Questions? Yes, sir. Yes, would you state your
21 name, please, when you--and where you are from.

22 ROBERT VAUGHN: My name is Robert Vaughn.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

197 410-684-2550

1 I am from Seattle school district, and I am part of a
2 team from the state of Washington here to the
3 conference.

4 My question is please clarify who is
5 eligible for exam fee reduction. In our state, we
6 keep records on students eligible for free and
7 reduced-price lunches.

8 These are low-income students whom we
9 document, and many of the states, I believe, document
10 students who participate in these programs.

11 The AP program has an additional different
12 system for identifying who is low income.

13 You fill out forms, counselors certify it,
14 there's a different income structure that they have
15 to attend to.

16 It is slightly-- It overlaps with but it
17 is not the same as the kids who are in the free lunch
18 program.

19 It would greatly help our state to hear
20 from you that any student who qualifies for free or
21 reduced lunch program is also eligible for exam cost
22 reduction.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

198 410-684-2550

1 (Applause.)

2 FRANK ROBINSON: That happens to be a Q&A
3 that is in our non-regulatory guidance, but I think--
4 Cathy, I think we have addressed that issue
5 earlier.

6 But, let our attorney speak to that. I
7 think the news will be--

8 ROBERT VAUGHN: I think other people are
9 interested in that question, too.

10 CATHY GRIMES-MILLER: Well, the reason
11 that question was included in the non-regulatory
12 guidance that we issued is because it was a question
13 that came up quite often.

14 I should say that, as you all know, when
15 there is a statute that authorizes a program, we are
16 bound to follow the letter of the law in terms of how
17 we administer that program.

18 The Advanced Placement Incentive Program
19 authorizing statute does define low-income student.

20 That definition is based on the definition
21 of low-income student that is in the Higher Education
22 Act of 1965, which basically says that a low-income

1 student is a student whose family income is about at
2 150 percent of the poverty level, based on the U.S.
3 Census Bureau count.

4 Again, we have to follow the statutory
5 language, but, on the other hand, we have really
6 tried to allow for a maximum amount of flexibility in
7 this program.

8 So, what we say in the Q&A is that, for
9 states who are interested in using free or reduced-
10 price meals as the standard for low income in terms
11 of determining a student's eligibility, what we say
12 is that you should submit any documentation that you
13 have that would indicate the state standard for low
14 income or free or reduced-price meals to the
15 Department with a request to rely on that standard.

16 We'll take a look at it, and, to the
17 extent that it is consistent with the definition,
18 we'll allow it.

19 When we say consistent, we don't mean
20 necessarily that it has to be exact, but, as long as
21 it is in the ballpark, we are going to try to be as
22 flexible as we can in allowing states to rely on that

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

200

410-684-2550

1 standard.

2 (Pause.)

3 KAREN FRALEY: I am Karen Fraley from
4 Idaho. Could you define "consortia"? Are you
5 talking about multi-state stakeholders within the
6 state? What does consortia mean?

7 FRANK ROBINSON: We're talking about a
8 multi-states--arrangements with other states in terms
9 of promoting and developing programs under AP.

10 It is not restricted to an in-state
11 activity, so it can be joined by a number of states--
12 one or more. Yes, sir?

13 (Pause.)

14 JOE MYZERICK: A follow-up on that one.
15 You say it is not restricted?

16 FRANK ROBINSON: Name, please?

17 JOE MYZERICK: Joe Myzerick, Florida. You
18 asked-- The question was asked what is "consortia,"
19 and you said inter-states, but can it be somebody
20 within the state? Partners within the state?

21 FRANK ROBINSON: It can be within the
22 state. I am correct on this. And, it is also-- It

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

201

410-684-2550

1 is intended to include more than one state--the
2 arrangement is.

3 CATHY GRIMES-MILLER: Essentially, the
4 authority under the program is for the Secretary to
5 award grants to states.

6 So, essentially there has to be a state
7 applicant. The purpose of the Invitational Priority
8 is to encourage states to form groups, basically to
9 join together--multiple states to join together and
10 apply for funds under the program.

11 I should also mention, because I am sure
12 this is a question that will arise at some point, if
13 not today, when you get back and look at the
14 application, is that states may, in fact, apply as
15 members of consortia, as well as individually on
16 their own behalf.

17 The main thing that we would look at is to
18 make sure that we are not funding the same activity.

19 So, assuming that it is a completely
20 different activity, there would be no prohibition
21 against a state applying individually as well as part
22 of a consortia.

1 JOE MYZERICK: Excuse me. Maybe I am-- I
2 think you are saying one thing, and you are saying
3 another thing.

4 That's what I am understanding. Can it be
5 just a series of groups or a group of individuals or
6 organizations within a state without including
7 another state?

8 CATHY GRIMES-MILLER: Again, the state has
9 to be the applicant, so, if there's a group of
10 individuals or groups within the state, they would
11 have to submit their proposal to the state.

12 The state would have to apply on their
13 behalf, and, of course, the state would be
14 responsible for the expenditure of funds in
15 accordance with the program requirements.

16 JOE MYZERICK: Will one state member on
17 that consortia-- It doesn't need two states?

18 CATHY GRIMES-MILLER: Well, the consortia
19 would not be amongst the members within the state.

20 The consortium would be among multiple
21 states. For example, if you have the state of Iowa,
22 South Carolina, Virginia, they may join together, and

1 their state educational agencies may apply to the
2 program for funds as a group. Is that clear?

3 VOICES: (Simultaneous conversation.)

4 (Pause.)

5 FRANK ROBINSON: Are there any other
6 questions?

7 JOYCE SILVERTHORNE: Joyce Silverthorne
8 from Montana.

9 FRANK ROBINSON: Excuse me, please. Would
10 you state your name and state, please?

11 JOYCE SILVERTHORNE: Joyce Silverthorne
12 from Montana. What is the date of--due date for
13 these?

14 FRANK ROBINSON: March 27, 2000.

15 VOICES: (Simultaneous conversation.)

16 (Pause.)

17 FRANK ROBINSON: Are there any additional
18 questions? I know there is a lot of discussion, but
19 are there any additional questions? Someone in the
20 back?

21 (No response.)

22 IRENE SPERO: I know that many of you are

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

204

410-684-2550

1 going to have more questions as you look at the
2 application.

3 First, let me say I want to thank Cathy
4 and Frank for their dedication. I don't think-- It
5 has been an absolutely--

6 (Applause.)

7 IRENE SPERO: --absolutely incredible
8 effort to get this application together in time, and
9 printed for you to have at this conference, so that
10 you could take it back to your states.

11 Just their involvement in it has been
12 truly extraordinary.

13 Let me also say that, once you look at the
14 application when you leave this room, there are going
15 to be lots of questions.

16 That's why tomorrow morning's session is
17 so vital. Tomorrow morning you are going to be able
18 to sit together as state teams and really start
19 planning the process--start planning for the
20 application.

21 During those sessions tomorrow morning,
22 there will be staff from the College Board and staff

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

205

410-684-2550

1 from the Department of Education roaming around the
2 room, to answer additional questions and to work with
3 you on moving ahead to really structure a really
4 effective proposal.

5 Finally, let me just make an announcement
6 for the New England state teams, and I think all of
7 you know who you are from New England -- please meet
8 College Board regional staff at 6:00 p.m. today at
9 the presenters' registration booth, which is right
10 out there.

11 Finally, you all have the evaluation
12 forms. Please take a moment to complete those.

13 As you leave the room and before you pick
14 up your application, please hand them in.

15 The reception will start, not at 6:00
16 o'clock as we had originally hoped, but, because we
17 started a little earlier, we are going to start the
18 reception this evening at 5:30, and that will be
19 upstairs in the Atrium.

20 I want to thank you all for really an
21 incredible day of energy and activity, and look
22 forward to seeing you all tomorrow.

ACE-FEDERAL REPORTERS, INC.

Nationwide Coverage

202-347-3700

800-336-6646

410-684-2550

206

1 - Thank you.
2 (Applause.)
3 (Whereupon, at 4:30 p.m., Friday, February
4 11, 2000, the meeting was adjourned.)
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

**Look-See
Concordance Report**

UNIQUE WORDS:
3,246
TOTAL
OCCURRENCES:
11,784
NOISE WORDS: **388**
TOTAL WORDS IN FILE:
32,470

SINGLE FILE
CONCORDANCE

CASE SENSITIVE

INCLUDES ALL TEXT
OCCURRENCES

DATES ON

INCLUDES PURE
NUMBERS

POSSESSIVE FORMS
ON

- DATES -

February 11, 2000 [2]
1:11; 204:3

July [1]
70:1

March [1]
59:17

March 1 [1]
156:10

March 27, 2000 [1]
201:14

May 3rd [1]
134:19

November 11, 2000 [1]
50:7

November of 1989 [1]
80:7

September [2]
52:7; 121:22

- \$ -

\$1 [1]
66:17

\$1.2 [1]
177:22

\$10 [5]
13:12; 15:3; 34:2;
64:18; 79:2

\$11 [3]
13:8, 12; 190:8

\$15 [10]
4:7; 14:20; 31:11;
150:2; 169:22; 170:4;
171:22; 176:2; 177:5;
178:6

\$2 [2]
31:13, 17

\$20 [6]
14:20; 33:21; 55:12,
19; 64:3; 178:9

\$3 [2]

177:9; 190:5
\$395 [1]
149:1
\$4 [3]
13:3, 10; 190:5
\$50 [1]
167:18
\$50,000 [2]
11:14; 152:10
\$900 [1]
79:6

- 1 -

1 [7]
3:4; 103:3; 156:10;
185:21; 186:22; 187:11;
190:10

10 [3]
100:16, 20, 22

100,000 [2]
8:19; 66:21

1000 [1]
65:20

10:45 [3]
3:3, 4; 50:3

10th [3]
14:5; 121:15; 123:13

11 [3]
1:11; 50:8; 204:4

11:00 [2]
3:5, 8

11th [2]
14:4, 5

12 [3]
32:9, 10; 192:1

1200 [1]
158:3

12:00 [2]
3:5, 9

12:10 [1]
3:11

12:15 [3]
3:12; 50:5, 9

12:55 [1]
77:14

12th [3]
14:4, 6; 30:11

12th-graders [2]
30:11; 65:21

13 [2]
39:13, 14

131 [1]
65:21

135 [1]
126:21

144 [1]
152:17

15 [3]
2:4; 104:9; 120:1

15,000 [2]
10:18; 161:1

150 [1]
197:2

16,000 [1]
126:19

19-year-old [1]
48:11

1965 [1]
196:22

1984 [2]

38:13; 65:18
1985 [1]
121:8
1987 [1]
90:10
1989 [2]
80:7, 18
1990 [1]
121:14
1992 [2]
51:15; 161:2
1994 [1]
79:2
1995 [1]
75:9
1997 [1]
38:13
1998 [6]
91:2, 3; 178:18, 20;
184:17; 185:16
1999 [2]
13:3; 177:13

- 2 -

2 [1]
3:6
20 [8]
30:17; 49:20; 118:22;
120:13; 146:5; 147:2;
178:1, 2

200,000 [1]
7:18

2000 [5]
1:11; 50:8; 186:19;
201:14; 204:4

2001 [3]
79:5; 81:11; 178:10

210 [1]
119:6

2143 [1]
75:11

215 [1]
119:20

21st [1]
65:1

24 [3]
1:21; 39:8; 169:14

25 [4]
1:22; 30:17; 88:10;

103:6

250-some [1]
101:5

250-some-odd [1]
101:6

26 [1]
39:5

27 [1]
201:14

28A [1]
162:3

2:00 [2]
78:5; 164:9

2:05 [2]
77:14; 78:2

- 3 -

3 [2]
62:20; 92:15
30 [4]
34:21; 35:6; 119:3;

127:18
30-some-odd [1]
92:14
30-year [2]
120:6; 121:5
300 [1]
161:15
312 [1]
75:10
31st [1]
70:16
32 [1]
177:8
33 [3]
28:3; 55:15; 177:16
34 [1]
12:11
35 [1]
159:15
37 [1]
39:5
3:30 [1]
164:17
3:45 [1]
55:21
3rd [1]
134:19

- 4 -

4 [1]
115:19
4's [2]
74:17; 115:2
40 [7]
17:8; 20:4; 34:21; 35:6;
88:4; 127:20; 159:15

400 [1]
161:15

400,000 [1]
8:9

41 [1]
30:12

43 [1]
5:3

48 [1]
162:10

49 [1]
32:11

49th [1]
70:16

4:30 [1]
204:3

- 5 -

5 [2]
99:9; 115:19

5's [2]
74:17; 115:2

5,000 [1]
126:19

50 [7]
61:2, 10; 65:20; 70:16;
121:19; 126:20; 156:22

50,000 [1]
10:19

50,000-above [1]
11:18

500 [2]
55:16; 93:9

5000-vote [1]

54:19
525 [1]
1:7
55 [2]
39:8; 127:17
58 [1]
70:12
59 [1]
28:6
5:30 [1]
203:18
5th [1]
124:16
5th-grade [1]
68:11
5th-graders [1]
68:17

- 6 -

6,000 [1]
126:19
60 [3]
88:2; 114:19; 148:15
60's [1]
173:14
65 [1]
159:15
6:00 [2]
203:8, 15
6th [2]
14:5; 123:12

- 7 -

70 [4]
114:19; 126:17; 159:15;
161:5
700,000 [1]
9:8
75 [1]
161:5
75,000 [1]
64:10
76 [1]
28:7
780 [1]
70:13
7th [4]
14:5; 121:15; 123:14;
124:17

- 8 -

80 [1]
35:3
80's [1]
24:14
810 [3]
185:21; 186:22; 190:10
82 [2]
11:20; 36:15
84 [2]
39:14; 92:13
85 [4]
35:3; 39:8; 119:5;
162:21
86 [1]
162:21
87 [4]
12:2; 92:10, 15; 162:22
8:30 [1]

3:1
8:34 [2]
 1:12; 2:2
8th [14]
 14:5; 27:5, 13; 30:6, 7,
 15; 43:9; 44:6, 13;
 45:7; 66:14; 123:4, 14;
 124:17
8th-grade [6]
 26:16, 21; 27:1, 2, 15,
 16

- 9 -

90 [3]
 111:7; 163:12, 14
90's [1]
 24:14
92 [1]
 36:15
97 [3]
 39:14; 65:19; 161:19
98 [4]
 11:15; 30:14; 59:18;
 91:14
9:00 [1]
 49:20
9:23 [1]
 50:7
9:30 [1]
 3:1
9:35 [2]
 49:21; 50:3
9:45 [2]
 3:3, 4
9th [1]
 14:5

- A -

A.10 [1]
 187:11
a.m. [3]
 1:12; 2:2; 50:7
abandon [1]
 103:9
abandoned [1]
 157:17
abilities [1]
 59:6
ability [5]
 59:12; 61:5; 125:9;
 133:13; 190:2
able [17]
 72:4; 79:14; 100:6;
 124:9, 14; 129:4, 11;
 130:11; 140:11; 153:18;
 170:2, 4, 22; 171:15;
 189:6; 193:5; 202:17
Absent [1]
 116:21
absolute [8]
 176:10; 181:17; 187:3,
 17; 188:5, 10, 14, 16
Absolutely [1]
 153:13
absolutely [7]
 10:8; 22:8; 95:22;
 169:14; 170:12; 202:5,
 7
abstract [1]
 99:11

Academic [1]
 83:5
academic [5]
 4:8; 24:8, 17; 52:2;
 127:3
accelerate [1]
 66:20
accept [5]
 41:4; 45:3, 4; 160:17;
 167:1
acceptance [1]
 61:9
accepted [1]
 157:2
ACCESS [1]
 1:3
access [21]
 4:8; 15:6; 52:8; 70:22;
 95:7, 9; 108:12; 113:4,
 8; 123:19, 20; 129:11;
 130:14; 134:10; 140:10;
 146:2; 149:3; 157:22;
 158:6, 9; 176:20
accomplish [1]
 96:4
accomplished [1]
 2:16
accomplishment [2]
 78:21; 88:3
accordance [1]
 200:15
accountable [1]
 133:10
accredited [3]
 114:3, 4; 127:4
accurately [1]
 94:12
achieve [2]
 22:7; 76:19
achievement [3]
 9:2; 60:13; 125:10
acknowledge [3]
 87:8; 94:7; 175:5
Act [2]
 178:17; 196:22
active [4]
 97:18; 98:14; 109:17;
 112:13
actively [1]
 85:17
activities [22]
 99:7, 17, 20; 101:7;
 106:10; 108:17; 111:11;
 142:11; 176:9; 177:18,
 19; 179:1; 181:15;
 182:18; 183:1, 4, 16;
 185:20; 187:1, 10, 12;
 190:9
Activity [1]
 111:3
activity [13]
 96:3; 100:13; 106:14;
 107:5; 112:8; 138:9;
 140:9; 142:13; 167:4;
 198:11; 199:18, 20;
 203:21
actor [1]
 103:11
actual [4]
 99:17, 22; 103:21;
 182:14

adapt [1]
 96:6
add [2]
 65:13; 75:1
added [1]
 81:12
addition [5]
 64:11; 70:15; 146:8,
 14; 189:10
additional [7]
 14:19; 34:2; 171:17;
 195:11; 201:17, 19;
 203:2
Address [1]
 52:7
address [3]
 17:1; 34:4; 105:22
addressed [1]
 196:4
addresses [2]
 3:12; 50:15
addressing [2]
 155:4, 5
adequate [3]
 130:14; 134:10; 159:8
adjourned [1]
 204:4
adjust [1]
 107:7
administer [1]
 196:17
Administration [2]
 55:10; 65:5
administrator [3]
 86:7, 11, 21
admiration [1]
 17:14
adopting [1]
 131:16
adult [1]
 138:13
adults [1]
 59:3
Advance [1]
 17:22
advance [1]
 132:3
ADVANCED [1]
 1:2
Advanced [58]
 11:11; 13:4; 15:15;
 20:19; 28:20; 29:19;
 31:11; 40:19; 42:20;
 43:11; 51:4, 20; 52:8;
 53:22; 55:11; 56:3;
 59:15; 62:9; 63:20;
 64:22; 65:8, 9; 66:15;
 67:8; 84:15; 86:15;
 88:22; 89:3, 4; 90:13;
 121:12; 122:13, 14;
 123:6, 12, 21; 124:1,
 16, 20; 170:8, 13;
 182:18; 183:4, 7, 10,
 18, 19, 20; 184:2, 7, 9,
 10; 185:3, 4, 11, 21;
 186:3; 196:18
advanced [19]
 5:1, 9; 7:1; 9:19; 10:2;
 12:15; 13:14, 19; 14:2;
 15:2, 6; 21:6; 23:6;
 42:20; 45:19; 47:21;

61:13; 65:14; 121:18
advances [1]
 20:20
advantage [4]
 50:1; 129:3, 6; 188:11
advantages [1]
 137:10
adventure [2]
 87:17; 144:17
advertised [1]
 143:21
advisers [1]
 127:3
Advisor [3]
 3:15, 19; 78:18
advocate [1]
 86:22
affect [1]
 134:9
afford [1]
 67:9
Africa [1]
 30:12
African-American [2]
 24:21; 72:10
after-school [1]
 66:8
AFTERNOON [1]
 78:1
afternoon [13]
 14:13; 50:11, 18; 78:11,
 12; 81:9, 22; 82:9;
 147:19; 154:1; 169:9,
 17; 181:22
afternoons [1]
 66:10
afterwards [1]
 117:13
age [1]
 123:9
agencies [1]
 201:1
agenda [5]
 2:18; 34:11; 36:2; 71:4;
 85:10
aggressive [1]
 70:12
aggressively [1]
 41:15
agree [3]
 21:4; 92:18; 175:15
agreed [1]
 62:9
agreements [1]
 151:3
aid [1]
 67:5
air [1]
 17:6
airplane [1]
 85:2
airport [1]
 174:14
Alabama [2]
 173:16, 22
alerts [1]
 158:20
Algebra [12]
 11:9; 25:2, 22; 30:7;
 43:8, 10, 15; 45:6;
 46:21; 122:10; 123:4;

124:8
algebra [6]
 27:15, 16; 30:15; 44:8,
 13; 66:13
Algebra-based [1]
 122:2
aligned [1]
 43:11
alignment [4]
 43:4, 5, 12, 18
Allen [3]
 85:8; 86:12; 90:11
allocation [1]
 79:2
allow [8]
 15:18; 32:20; 34:20;
 117:14; 129:4; 176:15;
 197:6, 18
allowable [5]
 176:9; 181:15; 182:17;
 183:2, 4
allowed [2]
 128:13; 179:1
allowing [2]
 60:19; 197:22
allows [2]
 162:2; 183:9
alternative [3]
 22:3; 72:14; 130:5
amazing [5]
 23:11; 27:8, 19; 40:11;
 182:2
ambitious [1]
 142:9
amen [1]
 37:7
amended [3]
 178:18; 179:1; 185:15
AMERICA [1]
 1:1
America [14]
 10:21; 32:9; 43:22;
 47:14; 51:9; 58:22;
 65:13; 67:15; 75:1;
 76:20; 77:4; 84:8; 88:2,
 8
American [5]
 17:17; 30:16; 32:11;
 65:5; 69:3
amongst [1]
 200:19
amount [10]
 67:4; 94:11; 101:8;
 116:13; 137:12; 161:9;
 189:22; 190:3; 193:1;
 197:6
amplify [1]
 155:13
analyses [1]
 182:5
analysis [2]
 131:2; 167:11
analyze [2]
 9:13; 46:18
Angela's [2]
 67:13, 16
Angles [1]
 29:6
angry [1]
 48:11
animals [2]

57:16, 20
animators [2]
 103:15; 110:17
announce [3]
 55:8; 65:4; 192:17
announcement [1]
 203:5
announcements [1]
 170:15
announcing [2]
 56:17, 20
answer [19]
 9:14; 19:12; 24:5;
 25:15, 16; 46:14; 74:3;
 90:3; 92:4; 93:5; 105:1,
 3, 4; 117:13; 143:10;
 155:10; 171:14; 191:3;
 203:2
answered [1]
 194:15
Answers [4]
 23:10, 19; 24:3; 41:12
answers [2]
 112:11; 165:4
anxious [3]
 114:15; 149:21; 150:5
Anybody [1]
 133:1
anybody [3]
 71:12; 90:4; 130:7
anybody's [2]
 80:14; 174:9
Anyhow [2]
 58:22; 59:20
anyhow [1]
 60:2
anymore [2]
 48:14; 117:4
anytime [3]
 29:4; 117:1; 122:11
Anyway [1]
 173:21
anyway [2]
 101:19; 115:17
anywhere [4]
 20:17; 71:10; 132:19;
 190:5
AOL [1]
 109:3
AP [112]
 6:1; 13:6; 18:4; 21:2, 3,
 4; 23:5; 25:20; 28:2, 4,
 5, 7; 29:9; 31:11; 32:9,
 12, 19, 21; 33:1, 3, 7,
 16; 35:4; 38:19; 39:15;
 40:14; 41:16; 46:1, 4;
 60:3, 17, 20; 61:16, 19;
 62:6; 64:4, 6, 10, 13,
 14, 16, 21; 65:6, 19;
 66:1, 2; 70:22; 71:2;
 72:5, 6; 73:10, 16, 21;
 74:8, 9, 11, 16; 75:1,
 17, 21; 76:1, 5, 8, 13,
 20; 86:8, 22; 87:3;
 88:2, 6, 8; 91:2, 15;
 92:7, 14; 93:2; 94:16;
 114:11; 115:2, 15, 19;
 116:3, 17; 118:4; 119:6,
 7, 9; 125:14; 132:19;
 133:2; 149:12; 152:13;
 156:4, 6, 7, 11, 13;

159:20; 165:1, 13;
 166:18; 172:15, 18;
 175:19; 180:17; 192:3,
 18; 193:12; 194:3;
 195:11; 198:9
ap [2]
 110:14, 18
Apex [8]
 83:5; 91:6; 96:9;
 110:21; 120:17; 128:1;
 134:4, 20
apiece [1]
 104:12
aplet [1]
 106:22
apologize [1]
 101:14
apparatus [1]
 167:12
appealing [1]
 140:12
appear [1]
 179:8
appears [3]
 13:8; 79:5; 192:7
Applause [23]
 4:13; 5:17; 6:13; 17:4;
 42:22; 45:14; 49:1, 14;
 52:19; 58:15; 63:15;
 69:14; 71:8; 77:7;
 79:12; 87:11; 117:18;
 169:7; 173:11; 180:20;
 196:1; 202:6; 204:2
applause [2]
 5:16; 6:12
applicant [2]
 199:7; 200:9
applicants [4]
 187:7, 10, 17; 190:1
application [28]
 14:15; 23:16; 55:22;
 110:17; 170:3, 16;
 171:6, 10; 176:12;
 179:4, 8, 12; 180:1, 7,
 13; 189:18; 190:21;
 191:2, 8, 10, 12;
 192:21; 199:14; 202:2,
 8, 14, 20; 203:14
applications [7]
 171:18; 178:7; 179:14;
 188:1; 191:15, 22;
 192:1
applied [2]
 177:9, 18
applies [1]
 188:17
apply [11]
 13:13; 106:10; 122:16;
 178:1; 186:21; 189:15,
 16; 199:10, 14; 200:12;
 201:1
applying [1]
 199:21
appoint [1]
 113:6
appreciate [5]
 33:20; 63:14; 172:19;
 175:4; 190:15
appreciates [1]
 71:13
appreciation [1]

5:12
appreciative [1]
 72:2
approach [4]
 86:2; 90:21; 93:12;
 135:3
approached [1]
 149:7
approaches [2]
 13:17, 18
appropriation [1]
 31:22
approve [1]
 55:18
approximately [2]
 64:9; 127:18
area [5]
 8:3; 181:13, 14, 15;
 191:19
areas [6]
 102:21; 127:2; 140:10;
 180:3; 181:3; 183:21
Aren't [1]
 85:1
aren't [4]
 48:14; 119:6; 141:2;
 186:5
arena [1]
 193:12
argue [1]
 28:19
argument [3]
 22:9; 29:22; 45:3
arise [1]
 199:12
arisen [1]
 184:18
Armed [1]
 8:19
arrange [1]
 167:5
arrangement [1]
 199:2
arrangements [1]
 198:8
arrive [3]
 22:10; 28:18; 77:13
Art [1]
 64:14
art [1]
 46:4
arts [1]
 27:10
Ashes [2]
 67:13, 16
aside [3]
 22:9; 155:8; 188:20
asking [5]
 14:18; 34:1; 37:19;
 66:7; 67:2
ASN [1]
 111:12
aspect [1]
 166:20
aspects [2]
 94:22; 181:13
assess [1]
 44:11
Assessment [1]
 80:8
assessment [2]

30:9; 47:1
assign [2]
 105:15, 16
assigned [1]
 179:11
assigning [1]
 133:16
Assignment [1]
 111:12
assignment [5]
 29:2; 105:17; 111:14,
 15; 135:12
assignments [6]
 112:1, 4, 7; 114:12;
 116:5; 159:2
assist [1]
 172:14
assistance [5]
 4:11; 26:10; 33:10;
 94:11; 191:1
Assistant [4]
 16:12; 31:14; 71:21;
 125:18
associated [1]
 79:7
Association [6]
 6:9; 16:15; 34:15; 44:4;
 114:4; 127:5
assume [3]
 70:20; 125:7; 174:4
assumed [1]
 69:22
assuming [2]
 134:10; 199:19
assumptions [2]
 59:6, 12
astound [1]
 81:7
asynchronous [1]
 109:6
atmosphere [1]
 140:21
Atrium [1]
 203:19
attachment [1]
 111:17
attempts [1]
 94:20
attend [1]
 195:15
attended [2]
 84:15; 193:7
attention [8]
 36:7; 38:21; 46:14;
 78:13; 85:15; 104:14;
 117:12; 135:2
attestation [1]
 38:7
attitudes [1]
 61:4
attorney [2]
 181:20; 196:6
attract [1]
 180:4
attributed [1]
 157:11
attrition [10]
 91:18; 156:17, 21;
 157:9; 159:12; 160:22;
 161:3, 10; 162:17;
 164:15

audience [6]
 4:18; 18:20; 25:7; 37:3;
 84:17; 141:14
audiences [1]
 41:3
audio [6]
 103:4; 152:7, 20;
 153:7; 161:13, 22
authority [4]
 184:16; 186:8; 199:4
authorized [3]
 178:17; 185:20; 187:11
authorizes [1]
 196:15
authorizing [1]
 196:19
automated [1]
 111:8
automatically [5]
 99:3; 111:22; 112:7,
 11; 158:21
availability [3]
 125:5; 180:15; 183:20
available [26]
 26:14; 55:20; 67:4;
 77:1; 88:12; 102:17;
 117:13; 125:8; 127:19,
 21; 149:22; 151:22;
 155:22; 169:22; 170:4,
 17; 176:18, 22; 178:6,
 19; 181:11; 188:21;
 190:6, 9, 22; 194:19
Avenue [1]
 1:7
average [6]
 24:11; 88:6; 100:19,
 21; 156:22; 162:21
award [3]
 178:2; 189:17; 199:5
awarded [2]
 178:3; 180:16
awards [3]
 192:17, 19; 193:1
aware [2]
 176:2; 182:22
axis [1]
 102:9

- B -

baby [1]
 88:18
Baccalaureate [1]
 6:7
baccalaureate [7]
 18:1; 20:19; 21:5;
 28:21; 29:20; 40:15;
 61:16
Bachelor [1]
 28:2
Bachelor's [4]
 8:4; 24:9; 25:3; 122:1
Back-To-School [1]
 52:6
background [4]
 8:6, 15; 15:22; 190:20
backward [1]
 45:9
balance [1]
 143:9
ballpark [1]

197:21
Ballroom [1]
 1:8
band [1]
 98:10
bar [14]
 18:1; 20:10, 16, 17;
 21:6; 26:20, 21; 27:1,
 2, 15, 16; 38:21; 39:1,
 7
BARBER [6]
 126:14; 136:18; 137:3;
 140:3; 150:11; 162:19
Barber [1]
 125:18
barely [1]
 10:12
BARNETT [22]
 84:12; 85:1, 4; 87:12,
 19; 88:1, 17; 102:11;
 103:4, 7; 104:22;
 115:5; 132:17; 141:16;
 142:4; 147:14, 18;
 148:3, 6, 10; 155:10;
 166:15
Barnett [2]
 82:21; 83:4
barrier [1]
 137:18
barriers [2]
 128:20; 164:4
bars [2]
 27:14; 38:16
barter [1]
 146:18
base [1]
 102:1
Based [2]
 45:1; 190:4
based [7]
 59:6, 12; 67:19;
 116:12; 150:20; 196:20;
 197:2
basic [3]
 104:6; 133:4; 183:3
Basically [2]
 93:12; 184:5
basically [9]
 31:18; 47:10; 115:21;
 179:5; 188:6, 16;
 194:9; 196:22; 199:8
basics [1]
 52:4
basis [2]
 44:7; 149:1
baud [1]
 162:3
bear [1]
 173:4
beauties [1]
 105:11
begins [1]
 104:14
begun [1]
 168:1
behalf [7]
 45:12; 69:3; 183:10;
 184:3; 188:7; 199:16;
 200:13
behaving [1]
 143:20

behind [7]
 99:15; 134:4; 158:22;
 159:2; 163:6, 9; 182:4
believe [16]
 26:13; 31:13; 61:21;
 65:12; 74:21; 75:19;
 76:16, 19; 80:22;
 87:13; 169:16; 181:12;
 185:19; 194:12, 14;
 195:9
believed [1]
 56:4
belt [1]
 116:6
benchmarking [1]
 40:14
beneficiaries [1]
 63:2
benefit [2]
 185:10, 16
benefiting [1]
 70:13
benefits [1]
 95:14
Benjamin [1]
 48:2
bifurcation [1]
 44:19
big-eyed [1]
 58:2
biggest [3]
 48:5, 6; 98:8
BILL [2]
 144:4; 145:3
Bill [3]
 67:6; 85:9; 144:4
billion [1]
 66:17
biographies [1]
 110:8
biography [1]
 67:12
Biology [1]
 64:17
bit [22]
 16:7; 43:4; 47:20; 83:3;
 85:19; 89:19; 126:11,
 12, 13; 135:6; 144:15;
 157:10; 159:4; 173:4;
 176:3, 11; 178:14;
 179:3; 182:17; 190:17;
 193:6; 194:8
black [6]
 28:12; 39:3; 108:2, 5,
 7; 173:17
blamed [1]
 60:12
block [2]
 39:3; 172:17
Blue [1]
 47:7
blue [4]
 47:5, 6; 112:12
bluntly [1]
 48:4
blur [1]
 105:13
Board [25]
 5:12, 20; 6:3; 13:9;
 29:9; 39:17; 49:17;
 51:6; 53:9; 69:21; 70:1,

6, 21; 71:4, 6; 72:1;
 74:2, 7; 75:3, 14; 94:8,
 14; 172:5; 202:22;
 203:8
board [1]
 25:7
Board's [1]
 70:5
boards [1]
 40:6
Bob [1]
 87:6
boil [1]
 151:15
boils [1]
 63:16
bold [1]
 15:21
book [11]
 19:14; 56:22; 57:9, 15,
 19; 58:13; 67:11; 68:2;
 110:19; 114:15; 167:4
books [2]
 57:7, 14
boom [2]
 88:18
booth [1]
 203:9
boring [1]
 57:21
born [1]
 115:13
borne [1]
 147:6
boss [2]
 48:9; 69:20
bought [1]
 14:22
bound [1]
 196:16
box [1]
 76:10
boy [1]
 53:4
brain [1]
 107:16
brain-builder [1]
 106:13
brainstorm [1]
 14:14
Brazil [1]
 3:18
break [3]
 3:2, 5; 169:5
break-out [1]
 177:6
Breakout [7]
 3:4, 6, 9; 49:21, 22;
 50:4, 21
breakout [1]
 3:2
brief [1]
 165:4
briefly [5]
 31:8; 62:5; 155:13;
 176:1; 178:13
bright [1]
 59:1
bright-colored [1]
 22:20
bringing [2]

60:15; 173:16,
brings [1]
 41:13
broad [2]
 15:8; 119:1
broader [2]
 139:2; 183:13
brochure [1]
 120:21
brochures [2]
 143:4, 12
broken [1]
 69:1
Bronx [1]
 72:11
Brother [3]
 174:10, 15
brother [2]
 72:12; 174:4
BROWN [2]
 152:3; 153:11
Brown [1]
 152:3
BRYAN [22]
 84:12; 85:1, 4; 87:12,
 19; 88:1, 17; 102:11;
 103:4, 7; 104:22;
 115:5; 132:17; 141:16;
 142:4; 147:14, 18;
 148:3, 6, 10; 155:10;
 166:15
Bryan [13]
 82:21; 83:4, 12; 84:11;
 119:12; 122:19; 126:5;
 135:6, 16; 151:16;
 154:9, 22; 165:12
Bryan's [1]
 118:16
Bud [2]
 36:10; 37:9
budget [6]
 55:9; 66:5; 81:11;
 178:8; 180:9, 14
build [7]
 9:12; 14:8; 15:14;
 74:19; 86:4; 99:18;
 150:19
building [11]
 29:18; 70:12; 71:1;
 99:19, 20; 125:16;
 128:9; 147:10; 162:16;
 166:19; 175:12
buildings [1]
 70:13
built [3]
 54:22; 167:13, 17
bulb [1]
 4:5
bulge [1]
 88:18
bullet [1]
 90:2
bunch [3]
 97:15; 110:5; 167:18
bunny [2]
 60:9; 63:20
burden [1]
 62:15
burdened [1]
 153:3
Bureau [1]

197:3
bureaucracy [1]
 35:9
business [4]
 9:6; 41:4; 85:10; 98:19
busy [3]
 77:9; 142:5
button [1]
 103:10
buy [1]
 146:16

- C -

C's [1]
 115:1
cable [1]
 81:5
cake [1]
 168:6
Cal [1]
 167:16
calculated [1]
 93:22
Calculus [21]
 64:16; 91:15; 92:7;
 97:9; 100:14; 101:8, 13,
 21; 102:6; 103:8, 17;
 107:9; 108:14; 115:15;
 121:10; 123:13; 124:17;
 148:16; 165:10
California [3]
 29:6; 144:5, 10
Californian [1]
 7:10
call [22]
 19:17; 20:14; 38:3;
 40:11; 41:1; 54:11;
 59:13; 81:12; 82:14;
 104:16; 106:8, 13;
 109:6; 114:14; 133:2,
 14; 137:1, 20; 162:6;
 176:8; 188:10; 191:6
Callaway [1]
 103:17
calls [1]
 66:5
cameras [1]
 58:12
Camille [4]
 72:10, 14; 73:7
Camilles [1]
 76:12
candid [1]
 23:15
capacity [4]
 3:22; 74:15; 75:14;
 147:11
CAPERTON [1]
 71:9
Caperton [7]
 51:7; 53:11; 69:21, 22;
 71:7; 79:17; 84:6
capital [3]
 144:9; 145:6; 147:21
capitalist [1]
 150:13
capitalists [2]
 126:6, 9
captured [2]
 105:6, 7

captures [2] 10:20; 20:3	65:1	40:22; 97:1, 2; 137:11;	Clifford [1] 23:11	comments [5] 120:21; 132:16; 137:4; 142:19; 192:14
capturing [1] 154:18	CEO [1] 83:8	163:6	Clinton [2] 51:14; 63:22	Commission [1] 127:5
card [1] 100:10	certificated [1] 126:22	chose [1] 51:14	Clinton's [1] 52:1	commitment [7] 29:19; 34:11, 13; 36:1; 71:14, 15; 162:13
care [3] 98:19; 115:12; 116:22	certification [1] 133:3	chosen [1] 152:21	Clinton-Gore [2] 55:10; 67:4	commitments [1] 114:17
career [1] 72:13	certify [1] 195:13	CINDY [2] 152:3; 153:11	closing [2] 80:1; 191:8	committed [1] 142:10
careful [2] 87:16; 152:18	cetera [1] 28:13	Cindy [1] 152:3	co-presenter [1] 6:10	committing [1] 143:16
carefully [1] 191:18	challenge [5] 30:21; 42:16, 17; 84:7; 118:6	circular [1] 101:22	co-sponsorship [1] 53:10	common [2] 53:12; 156:19
Carnegie [1] 38:3	challenged [1] 125:15	cite [1] 33:10	coffee [1] 2:5	Commonly [1] 134:5
Carolina [14] 3:18, 19, 21; 51:18, 21; 53:22; 62:7; 63:6; 135:21; 136:1; 184:19; 185:1, 2; 200:22	challenges [1] 155:1	city [3] 54:18, 19; 55:2	coherence [1] 44:21	commonly [1] 156:20
Carolinian [2] 7:9; 48:2	challenging [13] 4:8; 46:5; 51:10; 59:15; 61:9; 65:16; 69:10; 81:18, 19; 87:1; 89:5; 93:2; 172:4	claim [1] 79:7	cohort [2] 24:12; 89:6	communicate [1] 129:1
carried [1] 68:14	champions [3] 51:8, 9, 11	claims [1] 173:5	colleague [2] 48:8	communicated [1] 166:18
case [8] 7:2; 35:13; 126:4, 7; 143:19; 153:16; 163:9; 187:9	chance [6] 14:12; 15:9; 53:3; 76:13, 14; 87:8	clarification [1] 181:14	colleagues [1] 48:9	communication [1] 173:1
cases [3] 151:8; 157:10; 167:3	change [8] 17:7; 18:14; 22:18; 41:7; 60:15; 61:4, 12; 108:10	clarify [3] 135:1; 144:19; 195:4	collect [2] 96:4; 105:17	communities [3] 31:5; 81:17; 140:22
casting [1] 86:6	changing [2] 3:8; 97:12	Class [4] 127:10, 13; 128:14; 160:12	collectively [1] 97:15	community [10] 9:5; 41:19; 72:18; 94:16; 128:9; 136:3; 140:18; 162:16; 167:6; 193:21
catalysts [1] 15:1	channel [1] 75:15	class [36] 24:11; 28:5; 52:5; 66:21; 68:9, 11; 92:6; 93:19; 94:6; 97:2; 101:1; 104:17; 105:21; 106:1; 108:19; 109:6; 111:6; 112:5; 116:21; 117:5; 118:21, 22; 119:13, 15; 126:8; 146:5; 150:8; 153:1; 154:7; 158:11; 162:11; 165:10, 13; 166:4	College [23] 5:12; 13:9; 29:9; 39:17; 49:17; 51:6; 53:9; 69:21; 70:1, 4, 6, 21; 71:4, 6; 72:1; 74:2, 7; 75:3, 14; 94:8; 172:5; 202:22; 203:8	company [3] 90:12; 147:15; 148:19
categories [2] 183:3; 193:17	characteristics [1] 139:14	class-size [1] 152:15	college [26] 8:16, 22; 9:17, 18; 10:14, 15; 11:15, 21; 12:3; 16:10; 24:15; 26:18; 27:7, 20; 61:18; 62:19; 63:6; 66:16; 67:3, 8, 9; 71:3; 72:12, 18; 122:11; 167:7	compared [1] 30:10
category [5] 180:6; 183:6, 8, 12, 15	chart [1] 28:2	classes [7] 26:17; 98:11; 119:1, 4, 6, 9; 162:10	college-level [1] 124:5	comparing [1] 40:10
CATHY [6] 181:22; 186:12; 196:10; 199:3; 200:8, 18	charting [1] 85:10	classics [1] 89:13	college-prep [1] 37:15	competition [4] 177:21; 178:6; 182:20; 186:13
Cathy [8] 170:9; 171:11; 176:8; 179:2; 181:20; 190:15; 196:4; 202:3	chat [2] 97:7; 109:1	classified [1] 142:6	Colleges [1] 114:5	competitions [1] 177:14
Cathy's [1] 192:20	check [2] 104:18; 156:13	classroom [23] 22:13; 89:8; 93:17, 18; 102:17; 104:3; 105:9, 12; 107:13; 110:21; 115:13; 140:14; 141:21; 142:2; 149:6; 152:10, 11; 155:22; 156:3; 159:21; 161:22; 164:5; 166:11	colleges [5] 3:19; 15:21; 62:19; 76:4; 166:22	competitive [3] 178:2; 187:16; 189:17
caught [1] 33:22	Chem [3] 101:15; 165:13; 167:6	classrooms [1] 81:6	Colony [1] 174:2, 4, 6, 13	compacency [2] 41:11; 42:6
caution [1] 141:7	Chemistry [6] 11:9; 165:22; 166:2, 3, 7, 11	cleaned [1] 159:3	color [3] 49:3, 4; 59:7	complaint [1] 98:8
CDs [1] 143:5	Chief [2] 3:19; 6:6	clear [5] 17:6; 116:16; 132:18; 133:1; 201:2	color-blind [1] 47:5	complement [1] 142:22
cement [2] 106:5; 173:21	child [2] 57:1; 68:4	cleared [1] 174:22	color-coded [1] 111:1	Complete [1] 111:3
Census [1] 197:3	childhood [1] 67:19	clearer [1] 40:2	coming [8] 54:7; 83:22; 88:18; 111:20, 21; 132:14; 139:7; 159:10	complete [11] 100:3, 7, 19, 22; 107:5; 157:6, 19; 163:4; 167:7; 171:5; 203:12
census [2] 54:15, 22	children [8] 21:16; 54:19; 55:2; 59:1, 4; 68:11; 182:9, 15	click [5] 97:4, 5; 101:10; 103:10; 111:10	columns [1] 10:17	completed [1] 114:19
center [2] 109:16; 191:13	china [1] 60:4		comment [5] 43:17; 109:9; 151:11; 160:21; 161:13	completely [3] 119:15, 17; 199:19
centerpiece [2] 71:3; 179:5	choice [6] 41:14; 46:10, 11, 12, 13			completes [1] 108:18
centers [1] 62:14	choices [2] 42:5; 168:11			completing [2] 93:8; 158:6
Central [1] 127:5	choose [5]			completion [9] 9:18; 24:8, 17; 28:3; 161:4, 17; 162:20; 164:14
centrally [1] 96:4				complex [1]
century [1]				

131:2	considered [1]	comer [1]	100:1, 3, 13, 19; 101:7;	63:17; 90:17; 93:16
complicated [1]	139:21	158:2	107:13; 108:18, 22;	creates [1]
106:20	consistent [4]	correctly [2]	109:5, 21; 110:10, 21;	128:17
components [3]	158:18; 191:5; 197:17,	136:17; 146:19	111:2; 112:18; 113:7,	creation [1]
129:21; 130:7, 10	19	correlated [1]	12, 21; 114:20; 116:13;	62:14
comprehension [1]	consortia [9]	24:9	117:6, 10; 121:10, 13;	creative [1]
104:18	186:21; 187:10; 198:4,	correlation [1]	122:3, 18; 123:6, 13;	15:9
comprehensive [1]	6, 18; 199:15, 22;	28:14	130:16; 132:6, 19;	creativity [1]
70:10	200:17, 18	correspondence [1]	133:1, 2, 9; 134:16;	188:2
Computer [1]	consortium [3]	90:18	135:14; 137:15; 138:7;	credible [1]
122:4	145:17; 146:20; 200:20	cost [6]	141:5; 143:8; 146:10,	88:3
computer [5]	consultants [1]	31:19; 144:6, 17;	12; 148:11, 14; 149:15;	credit [8]
95:21; 109:8; 111:9;	94:16	146:7; 151:12; 195:21	150:14; 157:17, 19;	56:6; 62:19; 91:9;
121:11; 157:22	contact [2]	costs [9]	158:6; 159:22; 161:5,	122:15; 124:14; 125:10;
computer-assisted [2]	49:7; 194:2	62:13; 144:20, 22;	18; 163:4, 7, 8; 164:3,	146:11; 151:1
120:7, 10	contain [1]	145:2, 9; 146:15;	8; 165:7, 8, 15; 167:10;	credits [3]
computer-based [1]	14:15	147:13; 151:8, 15	174:3; 175:6; 178:8;	63:6; 67:8, 9
121:6	content [8]	Council [1]	193:22; 200:13	crime [1]
computers [5]	81:18; 96:1; 99:19, 21;	6:6	course-taking [2]	88:5
70:10; 136:15; 146:2;	116:6; 163:4; 176:7;	Counsel [2]	46:15; 61:22	crisis [1]
158:1, 9	179:4	170:10; 181:20	courses [151]	90:5
conceive [1]	context [1]	counselor [2]	4:9; 5:1, 9; 7:1; 9:20;	criteria [5]
76:18	87:21	17:15; 20:6	10:2; 11:15, 22; 12:2,	177:12; 179:7, 9, 10;
concentrate [2]	continually [2]	counselors [1]	15; 13:6, 14, 19; 14:2,	189:14
13:19; 94:4	22:14; 99:3	195:13	10; 15:2, 5, 6; 20:14,	critical [10]
concentrated [1]	continue [7]	count [5]	20; 22:17; 23:6; 25:15;	5:1; 7:1; 9:4; 18:8;
8:3	6:17; 8:13; 28:16; 41:4;	54:19; 84:17; 152:21;	26:4; 27:21; 28:21;	19:20; 24:18; 39:22;
concept [2]	67:2; 76:1; 168:19	157:4; 197:3	29:20; 31:12; 32:10, 12,	46:6; 110:9; 125:17
44:6; 102:16	continued [1]	counted [1]	19, 21; 33:7, 11, 12,	critics [1]
concern [2]	73:6	55:3	16; 34:2, 7; 35:4; 37:1,	22:2
70:3; 92:22	continues [2]	counting [1]	16; 38:19; 40:14, 16,	crop [1]
concerned [1]	39:18; 50:19	17:10	18, 20; 41:16; 42:20;	92:10
92:2	Continuing [1]	countries [3]	43:4; 44:22; 45:19;	cross-sectional [1]
concluded [1]	122:7	30:12, 13; 126:21	46:2, 4, 19; 47:3, 9, 16,	102:21
176:18	continuing [2]	country [29]	22; 52:9; 59:16; 60:3,	crossroad [1]
condition [2]	104:4; 168:8	5:10; 17:17; 18:12, 19;	7, 20; 61:13, 17, 18,	40:1
187:8, 20	continuous [1]	19:2; 22:6; 27:9; 28:15;	19; 62:4, 22; 63:9;	crossroads [2]
conduct [1]	106:3	30:6, 10; 41:8; 59:5, 8;	64:6, 9, 13, 14, 21;	18:8, 17
165:22	contract [1]	60:22; 69:5, 6; 71:19;	65:6, 17; 66:13; 75:16;	crowd [1]
cone [3]	114:1	74:10; 76:22; 80:20;	76:2, 5, 9; 90:18; 91:2,	57:4
101:22; 102:3, 9	contribution [2]	84:9; 91:16; 95:18;	11; 93:8; 94:12, 18;	crucial [1]
conference [12]	87:9; 133:18	97:10, 17; 119:21;	98:8, 9; 99:18; 101:4;	191:10
5:14; 6:19; 16:1; 34:21;	contributor [1]	140:20; 156:12; 159:20	113:22; 114:9; 121:7,	Crudeman [2]
79:15; 143:9; 169:17;	5:13	country's [1]	19; 122:2, 4, 6, 14, 15;	73:9, 18
170:13; 171:2; 182:3;	control [1]	69:16	123:9, 17, 19; 125:8, 9;	cry [1]
195:3; 202:9	191:13	counts [2]	127:16, 17, 18, 20;	98:3
confident [1]	convene [2]	66:6; 157:5	128:4, 8, 9; 129:8;	current [6]
81:14	93:20; 192:8	County [1]	130:20; 131:5, 7, 9, 10,	55:16; 67:18; 70:20;
confused [1]	conventions [1]	73:10	15; 133:22; 134:10;	89:18; 92:10; 159:12
164:11	103:10	couple [15]	135:8; 143:15, 22;	currently [5]
Congress [6]	conversation [7]	31:14; 35:7; 47:18;	147:6; 148:22; 151:21;	16:14; 64:7; 127:18;
14:21; 21:9; 55:18;	20:18; 50:17; 82:10;	50:15; 56:17; 87:20;	155:14; 156:21; 159:6,	186:4; 189:7
67:2; 178:9; 185:15	86:10, 18; 201:3, 15	92:7; 107:17; 120:21;	14; 160:15; 161:3, 14,	curricula [1]
Congressional [1]	conversations [2]	122:19; 143:17; 170:15;	15, 18, 21; 163:1;	125:16
80:5	44:3; 144:12	172:22; 182:19; 186:14	165:1, 2; 168:16;	curriculum [25]
connected [2]	convince [1]	courageous [1]	183:18, 20; 184:9;	24:20; 25:17; 26:7;
110:4; 136:20	85:12	42:11	186:4; 189:8	28:9; 31:3; 43:22;
connection [1]	coordinator [6]	Course [6]	coursework [8]	45:20; 46:3; 48:13, 17;
174:19	135:16, 18; 136:2, 4,	37:4, 6, 9, 13, 21;	51:11; 69:10; 124:13,	64:12; 87:2; 88:9;
connections [1]	10, 13	39:11	18, 19, 22; 125:2;	93:21; 95:13; 117:2;
162:3	cop-out [1]	course [107]	132:3	129:9, 15; 132:20;
conscious [1]	21:19	3:21; 17:14; 19:4; 25:1,	Court [1]	133:4, 5; 134:17;
138:3	copies [1]	4, 12, 21; 31:16, 20,	1:6	149:3; 151:6; 156:1
consensus [1]	49:16	21; 32:20; 33:1, 5;	cover [2]	curriculums [1]
192:6	copious [1]	36:21, 22; 38:5; 52:10;	87:19; 176:1	166:20
Consequently [1]	26:15	55:18; 65:14; 67:18;	crashing [1]	curve [4]
158:8	copy [1]	72:19, 21; 73:1, 2, 3, 5,	60:11	103:3; 107:21; 108:2;
consider [1]	49:3	6, 16, 21; 75:2; 77:1;	cream [3]	154:17
144:15	core [6]	80:10; 86:10; 89:3;	57:16; 58:11, 22	cut [2]
consideration [1]	24:8, 18; 70:4; 133:4;	92:12; 94:13; 96:10;	create [7]	27:9, 10
145:4	184:2, 10	98:15, 21; 99:5, 7, 11;	15:1, 4, 16; 48:11;	Cypress [1]

30:12

- D -

D.C. [1]
29:2
Dade [1]
73:10
Darese [1]
91:4
daring [1]
101:16
dark [1]
27:16
darker [1]
27:2
data [6]
10:8; 36:16, 17; 38:8;
49:10; 96:4
date [6]
111:2; 191:8, 9; 193:2;
201:12
dates [2]
135:7; 159:1
DAVID [1]
154:22
David [2]
6:5; 154:21
dawned [1]
174:22
day [11]
50:9, 19; 106:1; 131:6;
12; 134:11, 20, 21;
152:17; 153:4; 203:21
days [6]
35:7; 86:12; 135:10;
163:12, 14; 172:6
deal [7]
7:19; 19:21; 58:6;
68:15; 129:10; 140:19;
142:5
dealing [1]
180:11
deals [3]
68:5; 181:15, 16
dealt [1]
6:16
DEAVER [7]
118:14; 135:5; 145:14;
146:22; 147:4; 165:7;
166:2
Deaver [1]
118:2
debate [3]
28:15, 19; 47:11
debating [1]
24:1
debt [1]
94:8
decided [7]
72:18, 20; 91:10;
93:20; 136:1; 138:2;
174:12
decision [2]
138:3; 160:14
decisions [6]
25:10; 62:16; 160:18;
192:5, 12, 16
decline [1]
92:19
decrease [1]

37:1
dedicate [1]
89:8
dedicated [1]
158:11
dedication [2]
133:15; 202:4
deep [3]
5:11; 89:16; 94:7
deeply [2]
72:2; 74:21
defense [1]
9:7
define [2]
196:19; 198:4
defined [1]
183:8
definitely [1]
143:19
definition [4]
40:12; 196:20; 197:17
defy [1]
37:3
degree [9]
8:5, 16, 17, 22; 24:10;
25:3; 28:3; 122:1, 17
delegate [1]
160:14
delighted [1]
31:9
delightful [2]
84:13; 113:20
deliver [2]
22:15; 167:21
delivered [1]
155:7
delivering [1]
96:1
Delivery [1]
29:5
delivery [2]
81:5; 145:1
demand [2]
88:15, 22
demanding [1]
31:6
demo [3]
96:12; 101:3; 151:16
demographer [1]
36:11
demonstrated [1]
132:20
demonstrates [1]
166:9
demonstration [2]
82:15, 22
DEPARTMENT [1]
1:1
Department [31]
4:21; 6:15; 13:9; 16:12;
23:8; 34:10, 14, 19;
49:17; 72:3; 78:18;
79:1, 3; 80:4; 118:8;
127:6; 145:16; 147:20;
170:9, 11; 172:16;
175:14, 18; 176:13;
179:15; 187:16; 190:22;
193:13, 20; 197:15;
203:1
depend [2]
145:10; 190:1

depending [4]
99:15; 150:22; 156:18;
157:4
deployed [1]
153:16
depressed [1]
68:14
Deputy [1]
120:4
derivative [4]
107:21; 108:1, 3, 10
describe [4]
10:12; 62:5; 138:20;
147:10
described [1]
74:22
description [1]
99:11
descriptions [1]
94:13
deserves [1]
91:9
design [6]
90:14; 93:21; 100:21;
163:21; 164:13; 179:22
designated [2]
57:1; 136:4
designed [1]
187:13
designers [2]
93:21; 103:15
desk [2]
170:18; 182:4
despite [1]
8:18
detach [1]
111:17
detailed [1]
181:2
determine [2]
41:1; 69:4
determining [2]
193:15; 197:11
develop [10]
33:11; 64:12, 20;
95:12; 126:12; 148:12;
14; 179:9, 12; 190:21
developed [3]
91:12; 164:2; 191:9
developing [6]
91:2; 120:7; 121:6;
126:3; 179:6; 198:9
development [14]
22:15; 32:21; 71:1;
91:3, 7; 94:18; 118:9;
128:18; 144:21; 145:5;
147:9; 150:14; 163:21;
164:13
device [2]
95:22; 96:2
devise [1]
119:13
devoted [1]
86:21
dialogue [3]
5:6; 109:14; 168:19
Diane [3]
91:4, 7; 101:5
Dick [1]
17:15
die [1]

150:17
differ [1]
156:18
difference [14]
12:6, 9, 12; 27:19;
28:22; 32:16; 47:2, 10;
54:4; 77:4; 83:11;
148:8; 153:20; 161:20
differs [1]
150:21
difficult [7]
60:15; 123:5; 130:17;
131:15; 132:5, 11;
168:11
digested [1]
98:21
dimension [1]
81:12
diploma [4]
127:7, 14; 129:5, 6
diplomas [1]
114:6
directed [3]
80:4; 127:21, 22
directions [3]
46:8; 49:9; 191:18
Director [4]
120:4; 125:18; 168:3;
170:7
disabuse [1]
90:6
disadvantaged [1]
52:3
disaggregate [1]
32:14
disciplinary [2]
72:15; 73:13
disconnect [1]
44:18
discourage [3]
139:16; 141:4; 159:5
discourse [1]
24:1
discover [1]
69:11
discreet [1]
100:17
discretionary [1]
187:1
discuss [6]
9:21; 14:12; 28:16;
176:9; 181:21; 192:8
discussed [1]
193:15
discussing [2]
24:1; 44:1
discussion [9]
82:21; 83:14, 15;
108:21; 112:12; 172:13;
176:6; 181:19; 201:18
discussions [9]
34:14; 39:17; 97:19;
98:14, 15; 109:1, 4, 17,
20
diseases [1]
68:13
dishes [1]
99:3
disparity [1]
192:7
displaced [1]

173:16
disseminate [1]
35:15
disseminated [1]
194:4
dissemination [1]
193:22
dissent [1]
93:4
Distance [1]
125:19
distance [18]
34:8; 65:1; 80:12;
85:18, 19; 107:13;
110:22; 125:22; 129:22;
131:9; 133:9; 140:9;
152:6; 155:14; 156:21;
157:3, 7, 15
distance-delivered [1]
129:5
distinct [1]
52:16
distinction [1]
105:12
distinguished [1]
51:3
distraction [1]
47:13
District [2]
177:17; 178:3
district [4]
35:10; 62:16; 167:5;
195:1
districts [9]
15:14, 20; 64:5; 147:7;
148:11; 155:15; 156:12;
166:21; 168:10
doable [1]
75:2
document [3]
124:4; 195:9
documentation [2]
124:7; 197:12
documented [1]
192:13
doesn't [9]
45:20; 66:2; 91:1;
99:13; 105:10; 133:2;
139:18; 150:17; 200:17
dog [1]
42:2
dole [1]
68:12
dollars [3]
31:20; 146:16; 148:14
door [2]
52:11; 67:3
doors [3]
49:18; 51:12; 61:13
doubles [2]
25:2, 5
doubt [2]
29:4; 97:21
downloads [1]
112:9
dozen [1]
57:20
drama [1]
98:10
dramatic [3]
36:22; 47:2; 66:7

dramatically [3]
27:6; 42:20; 117:2
Draw [1]
108:5
draw [2]
107:19; 108:7
drawing [1]
108:3
drifting [1]
162:8
drill [4]
99:8; 100:10; 111:10;
112:19
drive [2]
21:12; 137:15
driving [3]
32:18; 41:18; 53:21
dropout [1]
48:12
drug-free [1]
54:21
dual [1]
61:17
due [5]
135:7, 11, 12; 159:1;
201:12
dynamic [4]
97:12; 128:2; 154:6, 12

- E -

E-Mail [3]
134:2; 137:20; 173:1
E-mail [4]
106:7; 111:17; 113:10;
115:8
eager [6]
59:2; 64:1; 86:1, 5;
91:21; 140:1
early [9]
2:19; 8:3; 24:14; 54:9;
66:22; 91:3; 125:15;
154:17; 158:20
earn [1]
67:8
earned [1]
63:5
earth [1]
115:13
easier [3]
62:16; 98:11; 108:13
easiest [2]
46:18; 102:8
easily [2]
143:15, 20
easy [5]
84:20; 100:6; 102:20,
21; 131:9
eating [4]
53:4; 57:16; 58:10, 22
echo [1]
88:18
economic [2]
51:12; 59:8
Economics [1]
106:12
economics [1]
88:14
economize [1]
98:4
Ed [1]

37:1
Edelman [2]
23:11; 45:2
Edelman's [3]
23:19; 25:19; 32:17
educated [1]
76:7
educating [1]
182:8
EDUCATION [1]
1:1
Education [34]
4:21; 5:20; 6:3, 8, 15;
16:13; 23:8; 34:10, 14;
49:17; 51:5, 15, 22;
52:17; 56:7; 58:18;
70:19; 71:16, 22; 72:3;
78:18; 80:4; 118:8;
120:4; 121:4; 125:19;
127:6; 145:16; 147:20;
170:9, 11; 178:17;
196:21; 203:1
education [49]
3:17, 20; 5:5; 12:5;
16:9; 17:17, 18; 18:6,
8, 12, 14; 20:5; 33:18;
37:16; 39:22; 41:2;
51:9, 17; 53:13; 54:1,
16, 17; 55:5, 8; 59:7;
60:2; 66:4, 5; 68:5, 7,
15; 69:4, 16; 70:8;
80:10, 21, 22; 81:1;
82:6; 95:4, 8; 110:14,
18; 117:3; 132:22;
155:7; 193:21
Educational [1]
78:17
educational [8]
30:9; 42:7, 10; 78:19;
79:3; 97:22; 113:22;
201:1
educators [3]
40:22; 56:10; 95:20
effect [2]
24:21; 76:21
effective [3]
133:20; 167:21; 203:4
effectively [1]
93:1
effectiveness [1]
193:10
efficient [1]
98:5
effort [7]
14:20; 64:15; 84:10;
137:12; 142:22; 144:11;
202:8
efforts [7]
51:17; 52:2; 64:1;
66:20; 77:10; 80:19;
181:6
eight [1]
39:5
Eisenhower [1]
54:20
electronic [1]
95:3
elementary [2]
56:21; 124:9
elements [1]
130:3

elephant [1]
58:3
elevating [1]
56:12
elevator [1]
175:9
eligibility [2]
189:19; 197:11
eligible [9]
32:2; 92:14; 183:10,
14; 184:3; 188:18;
195:5, 6, 21
eliminate [2]
37:13, 14
eliminated [1]
191:16
elite [1]
160:8
eloquently [1]
48:4
embark [1]
79:17
embedding [1]
95:13
embellish [1]
173:6
embody [1]
99:21
emphasis [1]
163:20
emphasize [2]
97:20; 130:9
employees [1]
8:10
empty [1]
68:20
enable [2]
96:6; 189:10
enables [1]
113:13
encourage [3]
110:8; 187:22; 199:8
encouraged [2]
59:3, 15
encouragement [1]
141:11
encourages [1]
187:7
encouraging [1]
187:9
end [16]
29:8; 35:21; 67:10;
91:22; 112:16, 17;
113:21; 117:6, 9;
150:17; 159:8; 164:17;
165:19, 20; 170:15;
171:3
endorse [1]
94:9
endorsed [1]
127:1
energy [3]
70:2; 182:7; 203:21
engagement [1]
110:10
engaging [2]
69:10; 104:8
England [2]
203:6, 7
English [6]
25:21; 26:3, 5; 46:2;

73:17; 122:4
enhance [1]
129:9
enjoy [2]
141:19, 20
enlarge [1]
13:22
enriches [1]
74:18
enroll [2]
72:18; 163:2
enrolled [4]
93:9; 97:1; 122:7;
150:22
enrollment [2]
61:17; 183:17
enrollments [4]
7:20; 126:19; 161:1, 15
ensure [3]
22:6; 30:5; 52:7
ensuring [2]
133:4; 139:2
enter [2]
63:6; 88:20
enterprise [2]
18:11; 97:22
enthusiasm [1]
48:21
entitled [1]
19:14
envelope [6]
19:9, 10; 24:5; 25:16;
42:15; 81:15
environment [14]
93:1; 128:2, 13, 17;
129:22; 130:20; 137:7,
11; 138:22; 141:4, 6,
20; 154:10; 157:4
environments [3]
129:2; 139:22; 164:1
EPGY [2]
121:8; 122:7
equals [1]
103:3
equity [3]
21:12; 34:4; 51:11
error [1]
167:11
essence [2]
36:5; 118:12
essential [2]
130:6; 131:1
Essentially [2]
184:11; 199:3
essentially [2]
186:19; 199:6
established [3]
103:9; 182:20; 188:5
establishing [4]
186:14, 20; 187:3;
188:13
estimate [1]
8:12
estimates [2]
8:9; 156:18
et [1]
28:13
evaluated [1]
25:12
evaluation [5]
147:12; 170:20; 171:5;

203:11
evening [2]
63:1; 203:18
event [3]
172:5; 173:5; 175:11
eventually [2]
15:12; 174:21
Everybody [1]
84:20
everybody [10]
2:5; 41:9; 43:15; 54:8;
92:21; 94:10; 159:19;
163:18; 169:10; 174:5
everybody's [1]
92:5
everyday [1]
137:1
everyone's [1]
78:13
exact [2]
119:14; 197:20
Exactly [1]
147:4
exactly [2]
105:22; 136:11
exam [19]
62:20; 92:12, 15; 94:1,
15; 112:17; 115:2, 19;
116:3, 7, 18; 134:13,
18, 21; 156:6, 11;
166:18; 195:5, 21
examination [1]
73:22
examinations [2]
74:17; 75:10
example [12]
8:8, 18; 29:1; 63:8;
65:12; 82:15; 101:21;
122:21; 134:5; 154:4;
158:13; 200:21
examples [4]
7:17; 82:10, 11; 103:21
exams [11]
60:21; 61:17; 62:10;
65:19, 20, 21; 92:7;
93:3; 114:11; 125:4;
156:9
excellence [2]
38:8; 51:11
except [1]
119:12
exception [1]
188:12
excess [1]
148:13
exchanging [2]
2:14; 106:7
Excite [1]
96:22
excite [1]
14:9
excited [3]
56:2; 109:22; 126:2
exciting [3]
84:2; 127:11; 129:2
Excuse [3]
92:13; 200:1; 201:9
Executive [1]
6:8
exhaust [1]
130:12

existence [1] 126:17	extent [4] 29:9; 183:1; 185:12; 197:17	fantastic [1] 175:14	46:8; 112:16; 134:12, 18	flux [1] 148:20
existing [1] 148:7	extra [2] 4:19; 50:2	farmers [1] 173:17	financial [2] 62:15; 67:5	flying [1] 85:2
exodus [1] 159:22	extraordinary [1] 202:12	fascinated [1] 154:9	find [13] 12:5, 6; 28:13; 42:15; 46:20; 50:12; 83:18; 102:20, 21; 140:11; 162:19; 163:5; 172:12	focus [6] 10:1; 93:14; 120:15; 135:2; 137:16; 163:20
EXPAND [1] 1:2	extreme [2] 122:21; 161:20	fast [1] 98:9	Fine [1] 134:20	focused [2] 81:17; 90:13
Expand [1] 51:4	extremely [2] 26:2; 138:17	faster [1] 96:13	fine [1] 57:17	focusing [1] 177:19
expand [9] 13:14, 19; 15:15; 61:15; 64:4; 76:14; 79:22; 93:10; 95:18	- F -	fastest [2] 9:6; 48:11	fingers [1] 17:10	fold [1] 11:3
expanded [1] 66:9	fabric [1] 132:9	father [1] 120:10	finish [1] 163:8	folks [8] 10:14; 107:9; 120:17; 172:11; 175:15; 192:2; 193:8; 194:2
expanding [8] 4:8; 14:20; 56:3; 60:17; 62:6; 71:1; 75:14; 123:21	face [4] 131:11; 164:11; 173:3, 4	fax [1] 137:20	finished [3] 73:21; 92:11; 110:12	follow [4] 17:19; 27:14; 196:16; 197:4
expansion [5] 51:20; 63:3; 66:7; 70:10; 74:8	face-to-face [1] 157:17	February [2] 1:11; 204:3	finishes [1] 190:12	follow-up [3] 34:13, 20; 198:14
expect [8] 21:22; 28:17; 40:2; 55:20; 150:6; 190:5, 8; 192:17	faces [1] 84:17	Federal [13] 13:3; 15:11; 29:15; 31:8, 9; 55:8, 11, 22; 126:7; 144:8; 147:8; 184:12; 186:17	finishing [1] 25:1	followed [4] 24:12; 91:16; 115:20; 176:14
expectation [2] 30:20; 116:17	facial [1] 7:15	fee [3] 177:10; 184:9; 195:5	finite [1] 130:12	Following [2] 70:18; 73:7
expectations [6] 20:2; 22:16; 28:10; 59:14; 63:18; 176:14	fact [15] 21:12; 26:20; 32:6; 40:18; 44:12; 45:4; 80:21; 113:4; 114:3; 138:19; 160:17; 184:15; 185:19; 191:3; 199:14	feedback [6] 2:8; 105:2, 18; 106:3; 155:16; 158:18	First [7] 4:20; 120:21; 135:7; 177:1, 8; 190:22; 202:3	food [1] 77:13
expected [1] 86:19	factor [1] 12:8	feel [8] 18:20; 41:5, 6; 45:17; 169:14; 182:7; 189:5, 9	first [42] 2:17, 22; 3:2; 7:14; 10:9; 17:7; 30:1; 49:20; 50:4; 80:22; 82:13; 83:3, 13; 84:14; 87:7; 89:22; 98:7; 100:14; 102:22; 107:21; 108:9; 119:2; 132:6, 21; 133:6; 135:20; 144:3; 155:2; 159:21; 161:5, 11, 18; 163:12, 14; 172:16; 174:9; 177:8, 16; 178:21; 180:11, 18; 183:6	footnote [2] 32:6; 33:13
expects [1] 23:2	factors [2] 157:12; 190:2	feeling [1] 140:18	first-ever [1] 4:22	force [1] 7:22
expenditure [1] 200:14	facts [1] 104:7	feels [2] 72:4; 133:9	first-year [1] 121:10	forced [2] 114:16; 149:17
expensive [2] 97:21; 151:17	faculty [1] 35:9	fees [20] 13:6, 11; 150:20; 177:12; 183:7, 10; 184:2; 185:4; 186:3, 10; 187:2, 4; 188:6, 14, 18, 22; 189:13, 18, 20; 190:7	Fiscal [3] 177:13; 178:20; 186:19	forces [1] 53:21
experience [21] 16:19; 20:4; 33:4; 45:16; 61:7; 74:18; 110:3; 113:19; 137:4; 138:14; 143:21; 157:7, 14; 164:22; 165:2; 166:17; 168:14; 172:4; 173:9, 13; 190:4	fad [1] 7:6	fell [1] 136:5	fits [1] 107:8	foreign [4] 26:2, 17; 27:4, 9
experienced [3] 74:5; 91:18; 133:7	failed [1] 158:5	fellow [2] 7:9; 57:7	Five [1] 58:16	forget [3] 143:3; 152:7; 153:12
experiences [6] 62:6; 86:1; 87:1; 89:1; 90:15; 117:16	failing [1] 48:5	felt [5] 22:12; 40:5; 44:15; 85:14; 185:12	five [15] 21:11; 23:8; 30:19; 57:2; 88:7; 93:10; 95:5; 100:22; 101:1; 104:11; 115:14; 119:9; 145:15; 158:7; 161:8	Forgetting [1] 88:17
experimentation [1] 125:22	fair [2] 18:16; 142:21	fiction [1] 58:13	five-year [2] 118:7; 127:16	forgive [1] 98:2
expert [1] 43:21	fairly [1] 36:22	field [4] 12:4; 17:8; 134:14; 182:7	flags [1] 158:21	form [7] 109:14; 170:20; 182:14; 186:21; 187:10; 199:8
experts [1] 170:13	fairness [1] 32:22	fifth [1] 99:14	flat [2] 108:6, 8	formats [1] 34:8
explain [3] 36:9; 38:16; 150:10	Fall [5] 35:22; 91:14; 149:5; 156:7; 159:14	figure [4] 40:7; 108:6; 156:19, 20	flexibility [5] 129:11; 163:16, 17; 164:8; 197:6	formula [1] 102:2
explore [1] 118:9	fall [1] 159:2	figures [1] 17:16	flexible [1] 197:22	forth [1] 175:4
exploring [1] 61:20	falling [3] 134:4; 158:22; 163:6	figuring [1] 168:9	Florida [2] 73:11; 198:17	fortunate [3] 173:9, 12; 192:20
express [1] 5:11	familiar [8] 84:18; 87:20; 96:21; 100:5; 109:2; 179:16; 186:16; 192:2	file [1] 111:20		FORUM [1] 1:2
expression [1] 21:18	families [1] 11:18	fill [3] 9:10; 69:7; 195:13		Forum [8] 4:3, 11; 51:4; 53:7, 10, 17, 20; 61:20
extend [1] 4:20	family [5] 11:18; 60:4; 72:5; 172:18; 197:1	filled [3] 59:1; 67:20; 103:21		forward [10] 14:16; 31:11; 36:2; 41:15; 45:12; 72:8; 85:11; 154:15; 168:21; 203:22
	fan [1] 21:3	final [4]		found [7] 2:12; 9:14; 24:3; 73:2; 103:13; 114:21; 157:15

Foundation [3]
45:21; 75:7; 121:10

foundation [1]
44:7

founded [2]
70:18; 85:8

founding [1]
83:6

four [10]
11:3, 10, 14, 19; 12:2,
11; 24:6; 57:4; 98:11;
102:1

four-year [2]
8:16; 75:11

fourth [1]
39:7

FRALEY [1]
198:3

Fralely [1]
198:3

frame [1]
172:10

FRANK [16]
172:2; 173:8, 12; 174:8,
18; 180:21; 190:15;
194:11; 196:2; 198:7,
16, 21; 201:5, 9, 14, 17

Frank [10]
67:12, 14; 170:7;
171:11, 22; 182:16;
186:12; 189:14; 190:11;
202:4

Frank's [2]
67:19; 68:8

frankly [2]
81:10; 95:4

free [6]
62:10; 195:6, 17, 20;
197:9, 14

free-hand [1]
107:20

fresh [1]
109:19

freshmen [1]
167:17

Friday [4]
1:11; 50:7; 98:22;
204:3

friend [5]
6:4; 17:3; 53:11, 14;
71:22

friends [1]
84:18

fringe [1]
19:17

front [8]
19:12; 24:5; 92:5;
95:21; 163:21; 164:2, 8,
12

fruition [1]
41:13

frustrated [1]
143:14

full [5]
42:13; 50:20; 91:3;
125:10; 126:22

fully [3]
127:4; 149:2; 171:15

fun [1]
108:19

function [1]

108:11

functions [1]
107:20

fund [1]
34:19

fundamentally [1]
132:8

funded [9]
85:11; 90:11; 118:8;
127:13; 145:15; 180:11,
19; 189:4, 20

funding [17]
55:11, 16, 17; 125:22;
150:18; 176:1; 177:1;
178:11; 181:6; 183:12,
14; 184:1; 185:13;
188:17, 19; 189:22;
199:18

Funds [1]
178:19

funds [21]
5:13; 64:12; 177:11;
178:4; 180:16; 181:11;
183:9, 15; 184:12, 13,
14; 186:7, 10, 21;
188:21; 189:3; 190:3,
6; 199:10; 200:14;
201:2

funny [1]
113:18

future [9]
8:1; 41:1; 52:10; 69:5;
82:2, 12; 95:1; 116:11

- G -

gaining [1]
61:9

gains [2]
79:7; 193:16

GALEN [2]
164:20; 165:21

Galen [1]
164:21

Gallanti [1]
29:5

Gaston [5]
51:7; 53:11; 69:21;
71:7; 84:6

gate-opener [1]
48:20

gate-openers [5]
10:3, 4, 6; 14:11; 48:21

gatekeepers [1]
160:13

Gates [1]
85:9

gave [2]
36:12; 175:10

geez [1]
154:3

gender [1]
59:12

generate [1]
113:9

Generation [1]
64:19

gentleman [3]
17:15; 41:18; 184:22

gentlemen [1]
37:2

geographical [1]
149:20

Geometry [1]
11:9

geometry [1]
66:14

Gerald [1]
6:10

GERRY [14]
17:5, 12; 19:1, 16;
28:1; 29:17; 36:9; 38:1,
7, 13; 42:1, 4; 43:1, 20

Gerry [12]
9:20; 11:5, 12; 14:3;
16:4, 8, 16, 17; 17:3;
45:15; 46:13; 49:13

Gerry's [1]
48:8

gestalt [1]
111:5

gets [6]
74:17; 88:14; 106:19;
107:4, 5; 142:14

GI [1]
67:6

giant [1]
57:4

Gifted [2]
120:5; 121:5

gifted [3]
120:14; 138:19; 142:7

give [35]
5:15; 6:11; 7:12, 17;
15:5; 46:8; 48:12; 56:5;
62:19; 63:13; 64:8;
66:8; 74:3; 76:11, 12;
82:1, 18; 86:3; 95:18;
96:16; 102:6; 105:18;
108:1; 115:5; 117:15,
20, 22; 145:22; 166:5;
176:4; 177:2, 6;
179:19; 187:5; 190:19

given [10]
57:6; 72:7; 85:9; 99:14;
106:18; 107:3; 114:22;
126:11; 172:9; 175:19

gives [7]
13:15; 15:9; 35:16;
48:18; 61:12; 105:2, 3

giving [3]
29:2; 49:9; 64:5

glad [1]
85:1

goal [8]
65:4, 10, 15; 90:17;
123:8, 18; 133:1;
168:17

Goals [1]
21:10

goals [5]
2:16; 48:6, 7, 18; 65:11

God [1]
89:13

goes [8]
16:17; 28:8; 35:20;
44:9; 112:9; 119:16;
164:3, 13

Gore [1]
63:22

gospel [1]
87:14

gotten [5]
10:11; 11:11; 116:4;
152:10; 155:16

Government [10]
31:9; 70:19; 91:17;
92:6, 12; 108:22;
110:1; 126:7; 144:8;
150:12

government [1]
89:11

Governor [16]
3:21; 51:7, 18; 52:11;
62:7; 69:21, 22; 70:7,
17, 18; 71:7; 79:16;
84:6; 173:10, 13

Governors [2]
25:8; 53:12

Goyten [1]
20:21

grab [1]
2:5

grade [25]
24:10; 27:5, 13; 30:1,
6, 7, 11, 15; 43:9; 44:6,
13; 45:7; 66:14; 99:6;
104:17; 105:18; 111:18;
112:2; 123:4, 13, 14;
124:16, 17; 153:5

Graded [1]
104:16

grader [1]
123:12

graders [4]
14:4, 6; 121:15

grades [3]
66:22; 114:7; 116:4

graduate [2]
76:4; 146:11

graduated [1]
123:15

Grand [1]
1:8

GRANT [1]
1:20

Grant [2]
7:11; 63:12

grant [19]
29:15; 31:9, 14; 32:16,
19; 33:8, 19, 21; 35:16;
55:22; 118:6; 121:9;
127:14, 17; 150:17;
179:13; 186:17; 188:20;
189:17

grantee [1]
191:16

grantees [2]
183:9; 191:16

grants [6]
55:12; 64:3, 20;
152:10; 182:21; 199:5

graph [4]
90:20; 107:1, 8; 108:10

graphic [1]
111:5

graphics [1]
162:1

gratified [2]
86:17, 20

Great [4]
120:3; 125:11; 152:1;
164:16

great [24]
6:14; 23:21; 31:16;
34:9; 36:11; 37:6; 39:6;
41:10; 48:16; 51:1;
53:14, 19; 67:20; 69:5,
6, 15, 16; 71:17, 22;
110:16, 19; 113:18;
114:15; 129:10

greatest [4]
17:14; 29:13; 36:20;
71:18

greatly [2]
15:15; 195:19

grew [3]
72:11; 114:15; 174:5

GRIMES-MILLER [6]
181:22; 186:12; 196:10;
199:3; 200:8, 18

Grimes-Miller [4]
170:9; 176:8; 179:2;
181:21

ground [1]
143:2

Group [1]
6:5

group [14]
10:18; 28:12; 29:6;
68:16; 82:8; 83:16;
91:15, 17; 92:5, 8, 20;
200:5, 9; 201:2

groups [5]
2:12; 154:5; 199:8;
200:5, 10

grow [5]
74:20; 76:14; 82:2

growing [4]
7:20; 9:6; 65:16; 152:9

grows [1]
121:5

growth [4]
36:20; 38:22; 39:2, 9

guarantee [1]
19:1

guaranteed [1]
131:8

guess [8]
23:8; 24:13; 42:16;
54:9; 82:14; 149:17;
172:7; 190:11

guest [1]
63:12

guests [1]
60:5

guidance [6]
142:18; 175:18; 176:20;
179:19; 196:3, 12

guide [1]
82:12

guiding [1]
94:11

guts [1]
47:15

guy [3]
56:12; 59:2; 102:9

guys [1]
182:7

- H -

hadn't [1]
73:13

half [5] 2:19; 9:1; 68:13; 119:21; 148:13	17; 129:10; 152:4; 153:22; 156:20; 169:21; 177:5; 193:6	183:21	203:16	48:11
hall [2] 78:8; 134:3	hearing [4] 43:14; 45:11; 53:1; 137:4	high-quality [2] 64:20; 86:22	Hopefully [2] 176:15; 186:7	illustrative [1] 113:18
hallmark [1] 84:13	heart [2] 76:19; 179:20	high-school [14] 10:15; 24:10; 25:10, 20; 30:21; 31:1; 34:22; 36:13, 14; 37:11; 39:2; 65:19; 152:15, 16	hopefully [2] 48:9; 188:1	imagine [4] 55:1; 68:9; 96:9; 105:9
hand [10] 39:13; 43:14; 49:9; 63:13; 91:5; 98:22; 107:10; 141:10; 197:5; 203:14	heavily [1] 180:1	high-school-level [1] 124:12	hoping [1] 50:22	immediate [1] 105:2
Hand-outs [1] 49:15	height [1] 102:1	high-tech [1] 11:2	horizontal [1] 108:11	immediately [6] 28:22; 105:1; 110:4; 128:22; 149:22; 184:20
handful [1] 88:8	held [1] 16:8	Higher [4] 6:8; 61:10; 178:17; 196:21	Hotel [1] 1:6	impact [2] 70:8; 139:19
handle [4] 8:3, 16; 67:22; 116:11	Hello [1] 78:4	higher [7] 32:15; 46:22; 56:13; 80:21; 82:6; 157:10	hour [1] 2:19	impacts [1] 147:12
handling [1] 165:3	help [28] 14:15; 15:6; 29:15; 31:11; 33:7; 52:3; 54:3; 64:9, 15, 20; 65:5, 12; 66:12; 67:2; 75:8, 13; 76:1, 5, 8; 81:9, 10; 85:12; 90:7; 94:10; 128:21; 132:11; 192:20; 195:19	higher-level [2] 32:18; 62:3	hours [9] 97:13, 16; 100:20, 22; 101:1; 158:7; 169:15; 182:12	impassioned [3] 7:8; 86:14, 21
Hands-on [1] 165:5	helped [1] 52:1	highest [1] 55:10	House [1] 54:15	imperative [1] 7:8
hands-on [1] 16:19	helpful [6] 6:17, 21; 35:14; 49:11; 117:20; 168:10	highlight [1] 181:5	house [2] 68:21; 69:11	impetus [1] 175:19
happening [3] 68:3; 137:17; 138:15	Helping [1] 142:12	highly [3] 7:18; 37:15; 51:16	houses [1] 50:20	implemented [3] 70:9, 11; 184:16
happens [8] 12:1, 10; 35:19; 47:4; 95:16; 150:18; 191:21; 196:2	helping [5] 33:10, 12; 69:7, 9; 168:22	hint [1] 105:4	Houston [2] 75:9, 10	implications [2] 23:22; 144:17
happy [5] 41:9; 96:16; 101:18; 130:8; 143:9	helps [2] 45:16; 164:14	hints [1] 35:14	huge [8] 12:8; 23:22; 30:21; 36:1; 47:11, 13; 77:4; 94:10	importance [4] 5:1; 31:7; 36:4; 185:8
hard [8] 38:14; 49:3; 60:18; 83:10; 98:4; 142:10; 158:16; 169:16	Hemi [1] 29:5	hire [1] 66:21	Hudson [1] 118:3	important [30] 5:6; 7:4; 18:9; 20:20; 26:3; 62:2; 63:8; 64:15; 79:15, 18; 120:18; 123:3, 21; 130:9, 13; 131:18; 152:14; 153:2, 7, 18; 167:10; 170:21; 172:15; 181:12; 185:22; 189:6, 9; 193:12; 194:1
hard-pressed [1] 45:3	Here's [2] 93:19; 100:12	hispanic [2] 28:12; 39:7	Huff [3] 174:3, 4, 13	importantly [2] 84:5; 130:1
harming [1] 55:1	hesitate [1] 191:6	historic [2] 52:2; 61:12	huge [8] 12:8; 23:22; 30:21; 36:1; 47:11, 13; 77:4; 94:10	impress [1] 158:5
Harold [2] 173:10, 13	HHS [1] 175:11	history [10] 26:2; 68:19; 71:17; 120:7; 121:5, 8; 176:4; 177:1; 178:12, 14	humming [1] 66:1	impressed [1] 63:11
Harvard [1] 63:6	HIGH [1] 1:4	hit [1] 137:18	hungry [2] 68:12, 13	impression [1] 115:6
hate [1] 54:11	High [15] 26:16; 27:13; 118:3, 5, 13, 15, 17, 19; 120:2; 121:2; 126:8; 135:20; 145:14, 21; 160:11	Hodgkinson [2] 36:10; 37:9	— —	impressive [2] 27:13; 79:9
haven't [7] 11:11; 14:21; 32:6; 53:3; 98:16; 131:13; 140:13	high [55] 5:2; 8:6; 9:20; 10:20; 11:17; 13:14; 21:13; 22:7, 9, 16; 24:20; 26:16; 27:13, 17, 21; 28:9, 13, 21; 29:21; 32:11; 33:15; 37:6; 40:4, 11, 19; 46:3; 51:10; 56:14; 60:8, 13; 61:18; 62:1; 63:18; 64:16; 65:5, 13; 66:2; 88:20; 123:7, 15; 124:5, 14, 19; 126:16, 18; 133:8; 149:12; 151:1, 2, 6; 156:22; 158:3; 159:20; 164:14; 167:7	hold [1] 91:5	id [2] 154:3, 8	improve [8] 18:5; 46:2; 51:17; 52:2, 5; 61:18; 62:8; 63:18
He's [2] 87:7; 165:14	high-level [3] 22:17; 29:19; 45:5	holding [1] 141:10	I'd [2] 154:3, 8	improvement [4] 30:18; 51:9; 92:3; 143:19
head [1] 16:14	high-poverty [1]	holes [1] 136:5	I've [7] 11:5; 54:14; 58:5; 85:4; 101:14; 107:14; 126:6	IMPROVING [1] 1:3
headed [3] 6:4; 80:17; 91:7		home [9] 15:13; 48:22; 85:2; 96:15; 105:17; 143:6; 148:4; 158:9; 184:20	ice [3] 57:16; 58:10, 22	in-state [1] 198:10
heads [2] 78:17; 172:9		homework [10] 29:2; 101:1; 105:16, 17; 111:13; 112:1, 4; 114:12; 135:12; 163:10	Idaho [1] 198:4	inadvertently [1] 80:1
healing [1] 42:12		honor [2] 51:2; 52:16	idea [6] 45:6; 57:10; 61:8; 143:21; 150:19; 177:2	Incentive [8] 170:8, 14; 172:15; 182:18; 183:5; 184:8; 192:18; 196:18
hear [10] 2:7; 14:12; 46:10; 54:10; 69:15; 97:19; 115:6; 136:6; 193:13; 195:19		Honorable [1] 52:18	Ideally [1] 116:20	incentive [3] 62:21; 64:6, 8
heard [22] 7:7; 10:7; 20:8, 9; 23:20; 41:17; 47:19; 56:15; 58:10; 63:3; 76:12, 16; 98:7; 115:2,		honored [2] 71:20; 72:4	ideas [4] 2:14; 17:1; 83:21; 107:15	incentives [1] 15:1
		hope [14] 6:16; 14:22; 33:22; 42:8; 44:20; 46:16; 90:8; 95:17; 100:20; 153:15; 168:18; 172:14, 20	identify [4] 123:1; 144:3; 171:12, 13	incentivize [1] 15:4
		hoped [1]	identifying [2] 125:15; 195:12	incidentally [1] 176:19
			II [4] 25:2, 4, 22; 46:21	include [2] 177:2; 199:1
			ill-prepared [1] 60:10	
			illiterate [1]	

included [3]
51:19; 177:17; 196:11

includes [2]
68:2; 149:2

inclusion [1]
46:4

incognito [1]
60:1

income [8]
10:18, 20; 184:7;
195:12, 14; 197:1, 10,
14

inconveniencing [1]
54:8

increase [14]
12:14; 13:7; 26:17;
36:22; 38:18; 39:15,
17; 55:15, 16; 66:11;
185:17; 186:8, 9;
187:13

increased [2]
28:6, 7

increases [1]
27:6

INCREASING [1]
1:3

increasing [6]
6:22; 7:20; 10:2; 70:22;
183:17; 188:2

incredible [6]
82:5; 154:15; 169:3,
14; 202:7; 203:21

incredibly [3]
79:18; 84:1; 101:15

indented [1]
109:14

independent [6]
88:20; 126:16, 18;
151:1, 2; 158:13

independent-study [1]
129:5

indicate [1]
197:13

indicates [1]
112:13

indication [1]
187:5

individual [4]
111:11; 113:14; 127:8;
129:8

individually [2]
199:15, 21

individuals [8]
9:9; 170:2; 183:11;
184:3; 188:7, 18; 200:5,
10

industry [3]
8:9; 9:7; 76:7

infectious [1]
68:13

influenced [1]
120:16

informal [1]
108:22

information [14]
8:8; 9:6; 26:14; 36:12;
95:2, 8, 9; 96:1; 104:7;
166:5; 176:21; 179:18;
193:22; 194:4

initial [2]
91:11; 147:9

initially [2]
90:11, 13

initiative [4]
15:1; 64:19; 66:18;
185:8

Initiatives [1]
81:13

initiatives [5]
15:16; 32:17; 51:19;
127:11; 150:4

inkling [1]
80:16

innovate [1]
63:17

Innovation [1]
81:13

innovation [2]
118:6; 188:2

innovations [1]
22:21

inroads [1]
159:18

insight [1]
82:3

insisted [1]
29:10

inspiration [2]
69:17; 87:4

inspiring [1]
175:7

instances [2]
98:3; 191:14

Institute [1]
70:19

institution [1]
9:5

instruction [7]
52:3; 96:7; 120:8, 10;
121:13; 131:20; 157:17

instructional [2]
103:15; 163:21

instructor [10]
97:3; 133:12; 137:17,
18, 20; 138:6; 143:1;
151:17, 19, 20

instructors [9]
97:4, 14; 112:2;
128:18; 130:15; 137:8;
142:16, 20; 158:17

integral [1]
170:12

Intel [1]
123:16

intellectual [1]
5:13

intelligence [1]
71:14

intelligent [1]
130:18

intended [1]
199:1

intensive [1]
24:20

intensively [1]
142:16

intents [1]
88:21

inter-states [1]
198:19

interact [1]
83:19

interaction [2]
128:10, 11

interactive [1]
128:2

interactivity [1]
168:14

interconnected [1]
9:22

interest [5]
53:12; 65:16; 80:12;
89:16; 189:11

interested [14]
18:5; 34:16; 53:1;
57:13; 88:12; 89:11;
110:1; 122:22; 137:3;
144:14; 168:9; 193:19;
196:9; 197:9

interesting [16]
23:7; 28:11; 39:8;
46:17; 60:14; 61:5;
67:22; 72:20; 94:1, 2;
96:2; 101:12, 15;
130:17; 154:1; 172:21

Interestingly [1]
33:2

interests [1]
194:13

interface [1]
104:22

interfere [1]
68:22

interim [1]
109:11

internal [1]
140:5

International [1]
6:7

international [8]
17:22; 20:19; 21:5;
28:20; 29:20; 30:8;
40:14; 61:16

Internet [18]
64:21; 75:14; 89:20;
90:1, 18; 95:2, 11, 20;
96:5, 15; 105:8, 14;
110:15; 146:3, 13;
157:15; 158:1; 166:6

intervene [1]
128:21

intimidating [1]
157:16

introduce [10]
16:4; 17:2; 51:3; 52:17;
71:6; 72:9; 83:2; 93:17;
110:9; 152:2

introducing [2]
3:14; 69:19

introduction [2]
17:6; 63:4

investment [5]
66:11; 75:13; 144:7,
11; 147:8

investments [1]
85:10

investor [1]
147:21

investors [1]
148:7

Invitational [4]
186:20; 187:6, 15;
199:7

invitational [2]
176:10; 181:18

involve [1]
82:3

involved [12]
13:2; 22:14; 24:1; 25:9;
27:21; 30:22; 53:22;
85:18; 127:11; 146:7;
185:17; 186:6

involvement [1]
202:11

Iowa [3]
164:21; 173:17; 200:21

Iowan [1]
173:8

IP [1]
111:3

Ireland [2]
67:15; 68:10

IRENE [5]
1:15; 169:9, 13;
201:22; 202:7

Irene [2]
172:3; 176:17

Irish [1]
67:21

irony [1]
131:14

isolating [1]
110:3

issue [7]
6:22; 34:4; 40:22;
133:6; 142:12; 184:18;
196:4

issued [2]
23:7; 196:12

issues [4]
19:20; 155:1; 163:22;
193:14

- J -

Jackson [3]
174:3, 13, 14

Jay [3]
59:18; 60:2

JEFF [1]
1:19

Jeff [1]
7:10

Jeffrey [3]
63:3, 5, 10

Jeffreys [1]
76:12

Jenny [1]
73:9

Jersey [1]
1:7

job [5]
16:3, 8, 20; 18:13;
182:11

jobs [2]
16:17; 17:7

JOE [4]
198:14, 17; 200:1, 16

Joe [1]
198:17

John [1]
41:20

Johnny [1]
19:2

JOHNSON [3]
1:17; 164:20; 165:21

Johnson [1]
164:21

join [4]
118:18; 199:9; 200:22

joined [2]
79:1; 198:11

joining [1]
70:6

joins [1]
146:19

jointly [1]
172:5

JONES [11]
1:16; 2:3; 49:13, 15;
50:11, 18; 52:14;
69:15; 77:8; 78:4, 11

JORDANNA [1]
1:20

Jordanna [2]
7:10; 63:12

Jordannas [1]
76:13

journalist [1]
59:18

Journalists [1]
59:22

joy [1]
69:8

JOYCE [2]
201:7, 11

Joyce [2]
201:7, 11

judgment [1]
116:12

JUDITH [1]
1:17

July [1]
70:1

jump [1]
102:13

junction [1]
43:18

Junebug [1]
174:6

justified [1]
60:9

- K -

K-12 [1]
80:22

kangaroo [1]
58:4

Kansas [1]
151:5

KAREN [8]
118:14; 135:5; 145:14;
146:22; 147:4; 165:7;
166:2; 198:3

Karen [7]
118:2, 12; 121:1;
135:3; 145:13; 165:6;
198:3

keep [14]
14:18, 19; 20:16; 21:4;
65:22; 66:1; 111:7;
113:11; 136:20, 21;
154:16; 158:18; 164:14;
195:6

keeping [1] 20:13	165:14, 16; 166:6, 12	learners [1] 86:1	licenses [2] 149:19; 156:13	Livingston [3] 7:10; 63:3; 184:22
keeps [2] 47:14; 99:10	lack [1] 157:16	Learning [2] 80:9; 83:5	licensing [1] 151:3	local [6] 9:5; 40:6; 147:7; 166:21; 167:6; 194:2
Kentucky [1] 151:5	Ladies [1] 37:2	learning [53] 34:8; 65:1; 66:9; 80:6, 13, 15, 16; 81:15, 20; 82:15; 83:13; 84:4; 85:12, 18, 20; 86:1, 3; 87:1; 89:1; 90:14; 94:21; 96:3, 6; 99:17, 20; 100:2, 5; 101:7, 19; 107:13; 110:22; 117:5; 125:17; 126:1; 128:5; 129:22; 131:9; 133:9; 140:9; 141:8, 19, 21; 150:4; 152:6; 154:13; 155:14; 156:21; 157:3, 7, 15; 164:6; 167:10; 168:14	lies [1] 48:6	locally [1] 132:14
kept [2] 58:2; 111:8	language [9] 26:2, 16, 17, 21; 27:2, 3, 5, 9; 197:5	leave [5] 54:9; 171:4; 194:16; 202:14; 203:13	life [2] 48:5; 173:18	log [5] 96:11, 18; 105:20; 110:20, 22
Ketchum [1] 91:6	lapse [1] 156:8	leaves [1] 13:12	light [5] 4:5; 27:1, 15; 65:16; 153:19	logging [2] 96:18, 19
Key [1] 24:22	laptop [3] 96:12; 101:16; 146:16	LEE [11] 1:16; 2:3; 49:13, 15; 50:11, 18; 52:14; 69:15; 77:8; 78:4, 11	lighter [1] 26:20	long-lasting [1] 89:17
key [7] 24:6; 29:17; 37:12; 62:12; 125:13; 181:8	large [6] 10:21; 13:21; 65:2; 124:21; 157:5, 18	Lee [5] 19:2; 49:8; 52:22; 71:9; 75:4	lightest [1] 38:21	long-time [1] 53:11
keynote [4] 3:12; 50:14; 51:3; 69:20	larger [1] 91:17	legal [2] 182:5; 186:18	liked [1] 41:3	LONGENECKER [1] 154:22
kickoff [1] 2:8	larger-scale [1] 144:16	legislation [2] 150:2; 178:16	likelihood [3] 26:18; 27:6, 20	Longenecker [1] 154:21
kid [5] 57:2; 58:10; 116:12; 164:9; 172:17	Last [3] 114:10; 157:9; 188:10	legislative [2] 176:3; 178:14	Limerick [1] 68:4	Longenecker [1] 6:5
Kids [1] 160:2	last [20] 10:7; 21:11; 25:11; 32:8; 39:13; 52:7; 70:1; 104:9, 11; 110:11; 123:15; 131:11; 155:10; 159:3, 16; 168:3, 4; 172:6; 177:21; 188:9	legislature [1] 15:19	limited [1] 115:1	longitudinal [1] 36:16
kids [31] 10:15; 11:18; 13:22; 15:6; 20:11; 21:19, 21; 22:6; 25:17; 28:17; 35:4; 47:9; 89:10; 92:11; 105:18; 108:6; 115:3, 6, 9, 11, 17, 20; 125:8; 136:5; 138:21, 22; 139:13, 14; 152:21; 158:3; 195:17	late [1] 14:7	lesson [2] 93:15; 119:15	Lincoln [1] 126:15	looks [4] 68:16; 82:16; 103:1; 136:11
killer [2] 110:14, 18	Latin [1] 89:14	Let's [5] 63:13; 101:22; 102:5, 6; 120:3	LINDA [33] 79:13; 117:19; 120:3, 13; 125:11; 129:16; 132:16; 135:3; 136:16, 19; 138:16; 141:13; 143:11; 144:2, 19; 145:12; 146:18; 147:1, 5, 16; 148:1, 5, 8; 150:8; 151:10; 152:1; 153:9, 13; 160:20; 162:18; 164:16; 165:4; 167:22	LORRAINE [1] 1:18
kindergarten [1] 57:2	Latino [1] 24:22	let's [8] 11:1; 43:14; 50:3; 96:8; 101:21; 102:3, 14; 179:3	Linda [6] 71:21; 78:16; 79:10; 84:12; 121:3; 148:4	Lorraine [3] 7:8; 20:8, 10
kindergarten-level [1] 121:20	Laughter [28] 11:4, 7; 17:11; 18:22; 19:15; 38:6; 41:22; 42:3; 52:13; 53:5; 54:13; 57:11, 22; 58:14, 20; 59:21; 85:3; 87:18; 104:21; 115:4; 142:3; 144:1; 147:22; 148:9; 173:7; 174:7, 17; 194:10	letter [1] 196:16	line [8] 21:21; 103:6; 108:2, 3, 5, 7, 8	Los [1] 29:6
kinds [9] 102:19; 108:17; 126:2; 138:20; 139:22; 144:13, 18; 168:21; 172:8	launch [4] 52:1; 66:17; 77:10; 85:22	letting [1] 150:16	lingo [1] 186:18	losing [1] 6:2
King [2] 48:3; 52:12	law [2] 152:15; 196:16	level [14] 5:7; 25:2, 4; 53:2; 55:11; 66:6; 122:13; 125:3, 9; 160:8; 188:19; 189:4, 21; 197:2	link [1] 81:6	loss [1] 155:3
King's [1] 175:11	lay [1] 92:21	leveling [1] 12:4	linked [2] 37:16; 44:14	lot [56] 2:13, 16; 13:10; 16:17; 31:17; 33:13; 34:5, 7; 38:8; 39:18; 43:7; 46:10; 49:22; 51:1; 54:17; 56:5, 8; 61:1, 2; 65:11; 68:5; 84:18; 85:13, 16; 88:11; 90:7, 19; 91:9; 95:11; 99:21; 107:14, 17; 108:13; 114:12; 117:7; 124:2, 3; 126:5; 132:2; 133:7; 135:1; 138:17; 142:10; 148:12, 17; 152:4, 9; 155:17; 161:11; 167:19; 168:7, 8; 172:11; 193:8; 201:18
kit [1] 167:15	lead [2] 121:12; 170:2	levels [2] 3:16; 87:2	linking [1] 80:9	love [2] 19:5; 154:4
knowing [1] 124:10	leader [2] 48:21; 53:20	levers [1] 107:7	Listen [1] 116:1	loves [1] 68:6
knowledge [2] 69:8; 154:18	leaders [4] 5:4; 56:9; 69:17; 84:10	library [2] 95:3; 158:2	listen [1] 87:15	low [11] 10:18; 20:1; 27:18; 59:14; 60:12, 13; 164:15; 184:7; 195:12; 197:10, 13
knowledgeable [1] 94:17	leadership [4] 42:12, 13; 44:4; 175:17	license [2] 148:18; 149:10	literally [1] 115:11	low-income [29] 4:9; 9:14, 16; 10:5; 12:1, 11; 13:6, 22; 14:1; 47:4; 177:12;
Koreas [1] 30:14	leads [1] 42:13		literature [1] 45:1	
- L -	learn [13] 8:4; 48:14; 61:8; 68:18; 74:15; 76:14; 79:20; 92:22; 93:1; 94:2; 107:19; 142:13; 168:8		live [1] 161:21	
lab [10] 165:2; 166:1, 17, 18; 167:1, 3, 4, 6, 9, 17	learned [4] 50:22; 105:19; 108:14; 168:7		liven [1] 58:6	
labor [1] 173:15			living [1] 6:1	
laboratory [5] 26:1; 165:5; 167:10, 14, 21			LIVINGSTON [1] 1:19	
labs [4]				

183:11, 17, 18; 184:3,
5; 185:9, 18; 186:3;
187:13; 188:3, 7, 15,
18; 189:7; 195:8;
196:19, 21, 22
low-performing [1]
35:1
lower [2]
22:3; 60:20
lowest-achieving [1]
20:11
lucky [1]
53:19
Lunch [1]
77:14
lunch [5]
50:13; 77:11; 121:1;
195:17, 21
lunches [1]
195:7
Luther [2]
48:3; 175:11

- M -

ma'am [1]
43:2
machine [1]
158:7
machines [1]
158:2
magazine [1]
59:17
magnitude [1]
79:8
mail [2]
97:6; 112:17
mailed [1]
113:10
main [1]
199:17
Maine [1]
41:19
maintain [1]
168:19
maintenance [1]
145:1
major [11]
5:5, 13; 13:7; 18:11;
22:18; 35:12, 17; 37:10,
18; 75:13; 80:5
majority [1]
23:14
man [3]
12:8; 71:12; 76:19
manage [1]
142:13
management [4]
96:19; 112:1; 142:12;
179:21
manually [1]
111:7
map [2]
94:12; 138:7
March [3]
59:17; 156:10; 201:14
MARIE [6]
126:14; 136:18; 137:3;
140:3; 150:11; 162:19
Marie [4]
125:18; 136:16; 140:1;

162:18
Mark [1]
6:4
marketplace [1]
37:17
martial [2]
75:5, 18
Martin [2]
48:2; 175:10
Massive [1]
12:12
master [1]
52:4
Master's [2]
8:5, 17
mastery [1]
106:5
material [6]
46:6; 93:2; 99:6; 117:6;
132:11; 143:5
materials [7]
94:3; 102:17; 110:21;
128:16; 150:14; 151:12;
166:4
math [27]
9:2; 20:15; 25:1, 4, 22;
26:3, 4; 27:13, 17, 18,
21; 29:7; 30:9; 43:11,
22; 45:5; 46:1, 17, 18;
52:4; 107:9; 108:16;
122:2; 161:3
mathematics [7]
43:13; 44:5; 118:3;
121:20, 21; 123:6;
132:6
matter [4]
32:6; 105:10; 113:4;
127:2
matters [2]
47:15; 78:19
Matthews [2]
59:18; 60:6
maximize [1]
90:15
maximum [1]
197:6
May [1]
134:19
Mays [2]
48:2, 4
McCort's [1]
67:12
meals [2]
197:10, 14
mean [30]
18:11; 35:16; 37:18;
40:15; 44:5, 12; 45:20;
99:13; 100:16; 130:3;
132:18; 133:3; 136:19;
137:1; 139:13, 20;
141:19; 142:19; 145:8;
148:10, 13; 149:12, 13;
150:1; 154:12; 160:1;
175:13; 187:6; 197:19;
198:6
means [7]
11:8; 84:18; 88:3, 7;
106:6; 184:5; 188:17
meantime [1]
55:19
measurable [1]

193:15
Mechanics [1]
122:3
mechanisms [1]
132:13
mediate [1]
139:12
medium [1]
110:4
meet [8]
56:8; 65:15; 168:22;
171:16; 174:13; 184:14;
187:8; 203:7
meeting [10]
6:18; 12:16; 16:2; 50:8;
54:14; 84:15; 187:19,
21; 189:18; 204:4
meetings [1]
74:2
meets [2]
184:6; 189:1
member [4]
83:6; 113:3, 6; 200:16
members [5]
25:7; 83:1; 136:3;
199:15; 200:19
memoir [1]
67:19
memorial [1]
175:11
men [1]
51:8
mention [7]
5:19; 45:18; 143:3;
175:20; 180:5; 184:15;
199:11
mentioned [7]
64:1; 81:11; 143:4;
155:1; 176:17; 186:12;
189:14
mentioning [1]
54:18
mentions [2]
135:17; 150:3
mentor [3]
48:2; 120:11; 135:17
mentoring [2]
66:12; 113:7
mentors [2]
133:15, 20
message [1]
33:20
metaphor [2]
20:3; 42:4
meter [1]
95:6
Mexico [1]
149:9
Michigan [1]
149:9
microcircuits [1]
167:18
microphones [2]
83:17; 139:6
Microsoft [2]
85:9; 111:18
mid [1]
173:14
mid-May [1]
192:18
middle [10]
9:20; 27:17; 45:5; 46:3;
62:1; 88:19; 101:17;
124:10, 13; 152:16
middle-level [1]
31:1
middle-school [1]
66:12
military [1]
8:19
million [34]
4:7; 13:3, 8, 10, 12, 13;
14:20, 21; 15:3; 31:11,
13, 17; 33:21; 34:2;
55:12, 20; 64:3, 19;
79:2, 6; 148:14; 150:2;
169:22; 170:4; 171:22;
176:2; 177:5, 9, 22;
178:6, 10; 190:5, 8
mind [12]
14:18; 68:18, 20, 21;
69:1; 76:18; 92:5; 93:5;
135:1; 154:16; 184:19
minds [1]
139:9
minimize [1]
180:2
minimum [6]
22:3; 26:1; 89:6, 9;
189:1, 19
minority [4]
9:15, 16; 10:5; 13:22
minus [1]
103:3
minute [7]
7:2; 9:3; 10:13; 11:1;
87:5; 97:20; 131:11
minutes [9]
50:2, 15; 64:2; 100:16;
104:10, 11; 117:8;
133:21; 169:5
mis-sent [1]
191:15
misread [1]
192:10
missed [1]
138:8
Mississippi [3]
173:16; 174:1, 3
mistake [3]
48:15; 59:11; 74:7
misunderstand [1]
18:10
MIT [1]
167:16
mixed [1]
167:19
mob [1]
57:3
mobility [2]
173:15, 22
model [2]
82:10; 122:18
models [1]
82:12
modem [1]
162:3
moderator [1]
78:16
modest [2]
78:21, 22
moment [6]

22:4; 26:6; 29:14;
142:20; 169:19; 203:12
momentum [1]
65:22
Monday [1]
55:9
money [20]
13:3, 5; 14:19; 15:8,
11, 18; 31:17; 32:5;
33:6, 15; 126:6, 12;
145:5; 148:12, 17;
150:13; 177:10; 178:1;
184:11; 193:1
monies [2]
15:11, 12
monitor [2]
96:3; 113:13
monitored [1]
99:2
Montana [2]
201:8, 12
months [5]
23:9; 68:14; 73:1;
163:16; 174:11
moral [2]
7:7; 87:12
morale [1]
41:10
morning [15]
2:3, 17, 21; 3:13; 4:15,
16, 19; 6:10; 34:18;
105:20; 154:1; 164:10;
171:17; 202:17, 21
morning's [1]
202:16
mostly [2]
81:4; 147:6
mother [1]
58:17
motivate [1]
14:9
motivated [1]
62:3
motivation [5]
47:16; 60:12; 69:17;
140:4; 141:1
mountainous [1]
60:11
move [13]
14:16; 36:2; 41:15;
72:7; 82:20; 83:13, 15;
106:9, 19; 140:11;
154:15; 163:3; 192:21
moved [1]
95:6
movement [3]
21:8, 12; 74:22
moves [1]
108:11
movie [2]
67:18; 142:2
moving [9]
34:11; 124:17; 137:21;
149:18; 152:12; 158:19;
168:21; 194:7; 203:3
multi-state [1]
198:5
multi-states [1]
198:8
multi-year [3]
180:11, 18; 181:6

multimedia [3]
103:10; 110:16; 128:2

multiple [5]
97:3, 4; 118:10; 199:9;
200:20

multipoint [1]
161:22

MUNROE [1]
1:18

Munroe [2]
7:8; 20:8

Music [2]
64:14; 122:4

music [1]
46:4

Musick [1]
6:4

mustn't [1]
152:7

myself [1]
154:3

MYZERICK [4]
198:14, 17; 200:1, 16

Myzerick [1]
198:17

- N -

N.W. [1]
1:7

Name [1]
198:16

name [5]
87:6; 174:9; 194:21,
22; 201:10

named [1]
72:10

names [2]
97:5; 111:1

Nancy [1]
141:22

narrowing [1]
45:20

NASSP [2]
34:15; 37:10

nation [2]
7:15; 70:16

nation's [1]
69:7

National [7]
6:8; 16:14; 21:10;
34:15; 44:4; 51:4;
121:9

national [4]
9:7; 23:12; 43:11;
51:16

nationally [1]
31:17

native [1]
173:8

nature [2]
160:1; 168:13

navigate [1]
101:17

navigates [1]
109:17

navigation [1]
128:15

Nebraska [5]
126:9, 15; 127:6;
150:16

Nebraska-Lincoln [1]
125:19

needle [1]
95:5

needs [10]
8:9; 96:7; 97:17; 98:19;
107:13; 130:10; 142:14,
22; 166:17; 168:22

negative [2]
59:5; 139:18

negotiated [1]
178:9

negotiating [1]
174:2

negotiations [1]
174:12

neighborhood [2]
34:21; 174:5

NELS [2]
36:16; 47:1

news [7]
36:6; 38:10, 11; 39:10,
18; 196:7

Newsweek [1]
59:17

Next-Generation [1]
81:12

nice [2]
17:6; 107:4

nickname [1]
174:6

night [3]
10:7; 58:17; 99:1

nine [1]
75:9

ninth [1]
66:14

nobody [2]
80:16; 141:12

noise [1]
53:2

nominal [1]
184:9

non-Brother [1]
174:16

non-regulatory [3]
176:19; 196:3, 11

normal [1]
7:21

North [3]
127:5; 135:21; 136:1

Northwest [1]
114:4

note [5]
34:12; 36:3; 39:4;
41:16; 172:21

noted [1]
52:6

notes [3]
26:15, 19; 116:21

notice [4]
26:20; 83:17; 180:6;
192:9

noticed [2]
137:21; 193:14

notion [3]
46:5; 90:6; 154:10

November [2]
50:7; 80:7

NS [1]
111:4

Number [1]
7:18

number [20]
18:2; 23:20; 54:22;
61:15; 65:19; 89:9;
114:10, 21; 123:17;
124:21; 125:4; 139:8;
149:7; 157:2, 6, 11, 18;
158:14; 190:1; 198:11

numbers [3]
65:2; 92:19; 127:16

nurse [1]
73:3

nursing [1]
72:21

- O -

o'clock [3]
78:5; 164:9; 203:16

O'Donnell [2]
45:21; 75:7

objective [1]
192:4

objectives [1]
193:15

Obviously [5]
8:14; 122:10; 125:12;
157:13; 172:12

obviously [7]
8:2; 12:7; 62:12;
120:16; 147:14; 150:1;
183:13

occurs [1]
60:8

odds [5]
11:15; 25:2, 5; 28:5, 7

offer [14]
32:12, 13; 61:17;
64:14; 65:6; 88:2; 89:2;
114:1, 6; 118:20;
127:7; 155:9, 11; 156:7

offered [2]
119:10; 165:11

offering [8]
5:9; 22:17; 40:19; 60:7;
61:16; 121:19; 148:21;
165:1

offerings [1]
25:12

offers [3]
88:6, 7; 159:20

Office [3]
78:17; 80:7; 170:10

office [4]
34:15; 97:13, 15;
191:11

Officer [1]
83:5

Officers [2]
6:6, 8

offices [1]
25:8

Oh [1]
138:7

Okay [11]
45:9; 101:10, 21;
107:11; 140:3; 141:13;
145:12; 163:11; 164:18;
165:4; 173:20

okay [4]
11:10; 131:2; 134:17;
163:13

Okahoma [4]
152:4, 9, 15; 153:8

old [3]
6:4; 57:2; 58:16

omission [1]
192:9

on-site [1]
165:22

on-tap [1]
9:10

one-semester [1]
163:4

ones [4]
97:5; 98:16; 103:22;
131:16

ongoing [1]
145:9

Online [1]
34:3

online [35]
15:2, 5; 34:2, 7; 80:15;
82:15, 17; 85:12;
90:14; 98:6; 103:18;
105:7, 10, 12; 106:7;
112:6, 11; 114:9;
127:14; 128:16; 129:22;
130:12; 133:11; 135:4;
140:9, 17; 142:17, 22;
148:22; 149:2; 150:3;
152:5; 158:6, 17; 164:3

open [10]
19:11; 24:4; 42:14;
61:13; 67:3; 111:18;
112:3; 156:11; 167:20;
190:12

open-enrollment [1]
162:22

opened [1]
52:11

opening [2]
17:20; 51:12

operate [2]
19:17; 117:21

operated [1]
89:7

opinion [2]
93:4; 147:9

OPPORTUNITIES [1]
1:3

Opportunities [1]
51:5

opportunities [18]
12:18; 14:14; 15:4, 16;
51:20; 56:3; 60:17;
61:21; 62:6; 64:5; 66:9;
80:1; 88:11; 106:18;
120:18; 123:22; 125:16;
182:6

opportunity [21]
12:19; 13:16; 22:7;
30:6; 51:12; 52:12;
58:8; 61:13, 15; 72:2;
79:22; 86:3; 115:10,
15; 154:15; 171:18;
172:4; 185:9; 190:16;
192:13; 194:14

oppose [1]
60:16

option [1]

164:7

options [1]
129:12

order [3]
96:5; 160:9; 183:22

Organization [1]
6:7

organization [1]
83:7

organizational [1]
5:14

organizations [2]
5:5; 200:6

organize [1]
99:12

organized [2]
47:17; 140:7

organizer [1]
3:18

organizing [1]
4:11

original [3]
87:4; 107:15; 109:12

originally [3]
108:14; 148:21; 203:16

ought [1]
153:18

ourselves [4]
99:19; 121:17; 160:19

outcomes-based [1]
132:22

outside [5]
63:2; 120:22; 143:6;
166:18; 170:17

outstanding [1]
56:10

ovation [2]
52:19; 69:14

overcame [1]
35:9

overhead [1]
14:17

overheads [1]
49:6

overlaps [1]
195:16

overnight [1]
29:1

oversight [1]
35:17

owe [1]
107:14

owns [1]
145:10

- P -

p.m. [5]
50:9; 77:14; 78:2;
203:8; 204:3

pace [3]
128:8; 140:12; 163:3

package [5]
165:12; 166:8; 179:8;
180:7; 192:21

packages [1]
191:10

packet [3]
171:7; 191:8; 194:16

packets [2]
170:16; 176:18

- page** [2]
 58:7; 108:21
paged [1]
 174:19
paid [3]
 31:21; 62:13; 185:4
paint [1]
 116:16
paired [1]
 103:14
palace [1]
 69:2
palaces [1]
 69:7
Panel [1]
 21:10
panel [8]
 81:21; 82:20, 22; 83:14,
 15; 164:22; 169:1;
 191:22
panel's [1]
 192:12
panelists [2]
 117:15; 144:15
paper [3]
 11:3; 35:13; 182:5
pardon [1]
 21:18
parent [2]
 3:18; 113:1
parents [6]
 59:7; 60:16; 61:3;
 72:17; 81:16; 95:15
Part [1]
 42:19
part [28]
 9:13; 10:21; 16:3; 34:1;
 72:5; 75:18; 76:16;
 79:15; 84:9; 88:9;
 89:20; 104:17; 105:14;
 109:5; 110:13; 134:17;
 138:3, 8, 14; 143:1;
 152:22; 154:5; 172:17,
 20; 190:12, 18; 195:1;
 199:21
participate [3]
 91:21; 160:9; 195:10
participating [5]
 5:6; 64:11; 113:5;
 119:20; 139:17
participation [13]
 4:22; 5:8; 7:1; 9:18;
 10:2; 12:14; 183:18;
 185:18; 186:8; 187:13;
 188:3; 189:2, 11
partly [1]
 162:22
Partners [1]
 198:20
partners [1]
 53:16
partnerships [3]
 15:15; 63:17; 82:6
parts [1]
 182:11
pass [1]
 60:21
passages [2]
 68:2, 8
passed [3]
 29:10; 73:21; 159:14
passing [4]
 7:5; 29:9; 175:3, 21
passion [1]
 182:8
passionate [3]
 70:3; 87:14; 89:16
passionately [1]
 89:11
password [2]
 96:17; 113:2
Pat [1]
 120:9
path [2]
 94:12; 138:6
paths [1]
 40:22
patient [1]
 148:7
pattern [1]
 114:14
Paul [5]
 85:8, 10, 14; 86:12;
 90:11
Pause [15]
 5:21; 10:10; 12:21;
 29:16; 36:8; 50:16;
 78:10; 84:22; 169:12;
 172:1; 190:14; 198:2,
 13; 201:4, 16
pause [2]
 94:7; 104:4
pauses [1]
 103:22
pay [19]
 13:5, 10; 33:12, 15;
 38:21; 46:14; 62:10;
 64:9; 177:11; 183:9;
 184:1, 8; 186:2, 10;
 188:6, 14, 18; 189:13,
 20
paying [3]
 85:15; 182:14; 188:22
payment [5]
 177:10; 183:6; 187:1,
 4; 190:6
pays [1]
 32:19
pedagogical [1]
 94:13
peer [1]
 128:12
penalized [2]
 185:13; 187:19
penalties [1]
 160:3
People [1]
 19:8
people [45]
 2:12; 4:7; 8:2, 14;
 12:15; 20:7; 21:17;
 25:11; 31:6; 33:14, 17;
 39:16; 40:11; 44:3;
 53:16, 18; 56:5, 9, 11,
 13; 57:4; 62:3; 69:4, 6;
 71:14; 72:1, 6; 73:2, 3;
 75:4, 10, 15; 76:7;
 79:6; 81:19; 85:14;
 86:5; 94:17; 95:19;
 107:22; 130:4; 135:21;
 157:6; 192:3; 196:8
people's [1]
 135:2
per-student [1]
 149:18
percent [34]
 11:16, 20; 12:3, 12;
 28:3, 6, 7; 30:14, 17;
 32:9, 10, 11; 35:3;
 39:6, 8; 55:15, 16;
 88:2, 4; 92:11, 13, 15;
 111:7; 114:19; 156:22;
 159:15; 161:5, 8, 19;
 162:21, 22; 197:2
percentage [3]
 32:15; 36:13; 38:18
percentages [1]
 13:21
perfectly [1]
 108:7
performance [8]
 47:2, 10; 95:14; 114:8;
 116:12; 154:11; 180:15;
 181:9
performed [2]
 115:1; 181:10
period [8]
 24:13; 34:17; 36:21;
 39:14; 73:15; 75:11;
 158:11; 180:14
persistence [1]
 155:3
person [8]
 48:12; 53:15; 54:1;
 73:10; 110:1; 131:19;
 136:14, 15
person's [1]
 133:17
personalization [1]
 96:22
personalize [1]
 94:20
personally [2]
 84:14; 173:3
perspective [4]
 79:19; 117:21; 125:12;
 153:17
perspectives [1]
 118:1
persuade [1]
 90:8
PETERSON [14]
 4:14, 17; 5:18, 22;
 6:14; 10:11, 17; 11:5,
 8; 13:1; 26:12; 27:12;
 45:15; 49:2
Peterson [3]
 3:14; 17:13; 53:20
Ph.D. [2]
 8:17; 104:19
phenomenon [1]
 80:12
phone [3]
 106:8; 173:1; 174:12
phrase [1]
 20:2
physical [2]
 167:1, 12
physician [1]
 73:8
physicians [1]
 73:4
Physics [1]
 167:17
physics [2]
 122:2, 3
pick [4]
 57:9; 170:17; 171:6;
 203:13
picked [1]
 107:16
picture [1]
 116:16
piece [3]
 11:3; 153:12; 168:6
pieces [1]
 176:21
piloting [2]
 91:11; 147:10
pioneering [1]
 80:19
pipeline [5]
 9:12; 14:8; 66:1; 71:2;
 74:20
place [16]
 41:7; 56:1; 61:10; 64:6;
 85:22; 86:15, 16, 18;
 107:2, 8; 110:6; 115:9;
 125:21; 128:5; 154:6
place-free [1]
 128:3
placed [1]
 120:22
PLACEMENT [1]
 1:3
Placement [57]
 11:12; 13:4; 15:15;
 17:22; 20:19; 28:20;
 29:19; 40:20; 42:21;
 51:4, 20; 52:8; 54:1;
 55:11; 56:3; 59:15;
 62:9; 63:20; 64:22;
 65:8, 9; 66:15; 67:8;
 84:15; 86:15; 88:22;
 89:3, 5; 90:13; 121:13;
 122:13, 14; 123:6, 13,
 22; 124:1, 17, 20;
 170:8, 14; 182:18;
 183:4, 7, 10, 18, 19,
 20; 184:2, 7, 9, 10;
 185:3, 4, 11, 21; 186:3;
 196:18
places [5]
 19:6, 7; 147:2; 164:3, 4
Plan [1]
 93:19
plan [5]
 14:14; 75:5, 18; 171:2;
 179:21
plane [1]
 103:2
planning [5]
 93:15; 163:20; 170:12;
 202:19
plans [1]
 119:15
platform [2]
 17:13; 72:7
played [1]
 162:16
players [1]
 125:13
playing [1]
 12:4
plays [1]
 42:7
plea [1]
 86:14
Please [2]
 42:18; 203:12
please [16]
 5:16; 6:12, 20; 72:17;
 90:5; 91:6; 103:5;
 116:11; 171:12; 194:21;
 195:4; 198:16; 201:9,
 10; 203:7, 14
pleased [4]
 50:19; 53:7; 91:4;
 170:1
pleasure [9]
 3:13; 17:12; 67:14;
 69:19; 71:5, 10; 79:14;
 172:3; 175:8
plus [1]
 65:10
podium [3]
 78:16; 79:10; 95:22
point [17]
 24:10; 29:12, 17; 38:1;
 42:5; 44:9; 123:3;
 130:19; 141:15; 153:14;
 155:13; 161:12; 174:19;
 178:15; 180:22; 191:1;
 199:12
pointed [3]
 24:18; 25:18; 78:21
pointing [1]
 162:5
points [5]
 24:7; 122:20; 133:8;
 179:11, 21
policies [1]
 114:16
policy [2]
 25:9; 145:4
policymakers [1]
 25:7
Political [1]
 104:20
Polk [3]
 174:2, 4, 13
pool [2]
 9:10; 14:1
poor [9]
 21:19, 21; 28:17;
 31:19; 34:5; 52:3; 68:4,
 11, 22
Poorer [1]
 32:2
poorest [2]
 20:11; 68:10
poorly [1]
 72:15
population [5]
 28:12; 39:2; 88:19;
 139:2; 161:8
portion [3]
 145:19; 180:7; 188:20
portions [1]
 181:5
pose [1]
 104:2
posit [1]
 28:20
position [2]

48:16; 70:2
positions [2]
 8:12; 9:11
positive [2]
 2:8; 6:17
possibilities [2]
 81:4, 7
post [2]
 109:8; 110:8
posted [1]
 109:11
posting [1]
 109:19
postings [4]
 98:16; 109:12, 13;
 112:13
postmark [1]
 191:9
potential [8]
 5:8; 10:7; 27:5; 34:9;
 45:17; 59:4; 65:2;
 138:22
potentially [3]
 21:1; 55:20; 139:1
poverty [3]
 67:20, 22; 197:2
power [5]
 11:21; 26:7, 8; 84:2;
 85:13
powerful [7]
 10:5; 11:12; 30:4;
 83:21; 94:22; 107:11;
 156:2
powers [1]
 111:9
practical [1]
 88:21
practice [3]
 60:6; 90:22; 106:10
practices [2]
 94:13; 193:20
preach [1]
 87:14
precious [1]
 97:21
prefer [1]
 162:20
preference [2]
 187:17
Prep [1]
 36:22
PREPARATION [1]
 1:4
preparation [2]
 8:15; 52:6
prepare [8]
 14:8; 66:18; 75:16;
 93:2, 22; 116:19;
 133:5; 146:12
prepared [7]
 8:2; 22:14; 32:3; 76:8;
 116:8; 159:7; 192:17
preparing [3]
 14:1; 33:7; 178:7
prerequisite [1]
 183:13
prescription [3]
 42:15, 17, 19
PRESENT [1]
 1:14
present [1]

117:4
presentation [4]
 29:18; 81:21; 101:17;
 104:6
presentations [2]
 45:22; 169:21
presenter [1]
 169:2
presenters [1]
 203:9
presently [1]
 121:19
presidency [1]
 69:22
President [11]
 21:9; 51:6, 14; 52:1;
 63:22; 64:18; 69:20;
 70:5; 71:6; 83:4
president [1]
 16:10
President's [2]
 66:4; 178:8
press [1]
 57:5
pretty [13]
 79:9; 91:12; 107:6;
 108:6; 115:21; 116:3;
 132:18; 133:1; 142:16;
 152:8; 159:17; 183:8;
 192:22
prevents [1]
 162:8
previously [3]
 119:19; 182:22; 192:4
pricing [7]
 144:13; 148:19; 149:19;
 150:7, 9, 15, 21
primarily [3]
 133:10; 188:1; 190:2
principal [2]
 16:9; 20:6
Principals [3]
 6:9; 16:15; 34:16
principals [10]
 25:10; 30:22; 31:1;
 34:22; 35:6; 37:11;
 60:16; 61:3; 127:4
principles [1]
 89:8
print [1]
 27:15
printed [1]
 202:9
Prior [1]
 70:6
prior [1]
 157:14
priorities [4]
 176:10; 181:16; 182:19;
 186:14
prioritized [1]
 142:14
Priority [4]
 186:20; 187:6, 15;
 199:7
priority [8]
 181:17, 18; 187:4, 7;
 188:5, 11, 14, 16
private [7]
 47:8; 75:7, 12; 82:7;
 120:1; 147:15; 184:14

private-school [1]
 46:11
privileged [2]
 56:8; 175:16
problem [16]
 20:3, 8; 21:18; 44:16;
 72:16; 88:15; 89:2, 21;
 90:3; 106:19; 137:22;
 155:6; 158:1; 191:20;
 194:9
problem-solving [1]
 106:14
problems [5]
 73:13; 90:8; 112:10;
 157:20; 159:4
process [13]
 55:22; 85:16; 133:3;
 164:13; 170:3; 172:14;
 176:12; 180:1; 186:17;
 190:20; 191:7, 21;
 202:19
proctored [1]
 112:16
produce [2]
 148:11, 15
produced [2]
 91:8; 150:2
productivity [1]
 79:7
products [1]
 149:6
professional [3]
 22:14; 33:4; 71:1
profile [1]
 141:17
Program [13]
 120:5; 121:4; 122:7;
 126:1; 170:8, 14;
 172:15; 182:19; 183:5;
 184:8; 185:21; 192:19;
 196:18
program [59]
 8:4; 33:1; 56:18; 70:12;
 72:3, 22; 73:10; 91:22;
 110:22; 120:15; 124:1,
 20; 125:1; 144:18;
 150:17, 20; 160:6, 10;
 175:19; 176:7; 177:10;
 178:17, 22; 180:12, 16,
 17; 181:17, 19, 20;
 182:22; 183:2, 9, 15;
 184:12, 17; 185:3, 11,
 17; 186:15, 22; 187:14;
 188:4, 21; 189:2, 3, 12;
 191:11; 192:5; 195:11,
 18, 21; 196:15, 17;
 197:7; 199:4, 10;
 200:15; 201:2
programs [12]
 13:4; 29:20; 36:15;
 54:21; 66:8, 12; 79:3;
 139:17; 180:19; 192:15;
 195:10; 198:9
Progress [2]
 100:9; 111:4
progress [15]
 30:9; 84:14; 95:14;
 96:5; 98:20; 99:5, 10;
 112:21; 113:11, 14;
 128:19; 137:9; 138:11,
 12; 154:11

prohibition [1]
 199:20
Project [4]
 127:10, 13; 128:14;
 160:12
project [17]
 85:22; 90:10; 118:5, 7,
 9; 126:8, 9; 127:21, 22;
 129:3; 132:14; 135:12;
 147:7; 173:15, 22;
 179:22; 181:10
project-based [1]
 140:21
projects [5]
 85:11; 127:22; 143:11;
 163:19; 168:20
promote [2]
 45:5; 130:2
promoted [1]
 21:15
promotes [1]
 42:12
promoting [4]
 42:20; 44:13; 51:10;
 198:9
prophetically [1]
 80:9
proposal [3]
 34:19; 200:11; 203:4
proposals [6]
 171:20; 179:14; 187:8;
 188:6, 14; 189:13
propose [2]
 55:12; 189:3
proposed [1]
 64:18
proposing [1]
 189:20
prospective [1]
 191:16
proud [3]
 55:9; 61:1; 63:10
prove [1]
 92:17
proves [1]
 92:17
provide [16]
 64:20; 106:2; 113:4, 8,
 22; 129:11; 133:13;
 138:11; 158:17; 159:7;
 164:7; 167:3; 182:5, 7;
 185:16; 187:16
provided [3]
 114:3; 177:11; 186:7
provides [4]
 42:11; 128:14, 15;
 165:15
providing [10]
 125:22; 127:21; 131:20;
 142:17; 150:13; 151:20,
 21; 152:13; 185:9, 13
PSE [1]
 10:14
psychology [1]
 89:13
public [13]
 9:5; 17:17; 18:6, 12,
 14; 30:16; 39:22; 41:2;
 47:8; 62:18; 71:15;
 119:22; 145:4
public-school [1]

46:11
publication [1]
 23:12
publicly [1]
 87:8
published [1]
 94:14
publishers [1]
 151:14
pulled [1]
 57:15
pulling [1]
 16:2
pulse [1]
 42:8
punching [1]
 117:5
purchase [1]
 165:16
purchasing [1]
 151:19
purely [1]
 187:18
purpose [6]
 31:18; 81:8; 188:22;
 189:3; 191:5; 199:7
purposes [1]
 88:22
pursuing [1]
 166:16
push [7]
 19:9, 10; 31:10; 45:6;
 81:15; 85:11; 182:4
pushed [1]
 163:15
puts [1]
 101:3
putting [6]
 31:10; 82:8; 120:19;
 131:10, 17; 160:3

- Q -

qualified [5]
 7:18; 8:10; 9:9; 67:1;
 90:5
qualifies [1]
 195:20
quality [1]
 183:22
quality [8]
 22:13; 23:1; 40:16;
 61:19; 158:18; 160:9;
 168:13; 179:22
Quantum [1]
 122:3
question [27]
 32:18; 43:2; 92:4, 22;
 93:5, 7; 104:2; 129:20;
 139:5; 144:2, 5, 20;
 145:8; 153:10; 155:11;
 164:10; 17, 18, 19, 21;
 167:20; 195:4; 196:9,
 11, 12; 198:18; 199:12
questioners [1]
 141:14
Questions [1]
 194:20
questions [38]
 6:19; 37:20; 39:20;
 43:1; 45:10; 74:3, 4;

101:3; 117:9, 13;
130:17; 132:1, 4, 7, 11;
139:7, 8, 10; 143:10;
168:1, 12, 13, 15;
171:10, 12, 14; 176:16;
190:12, 18; 191:3, 7;
194:13; 201:6, 18, 19;
202:1, 15; 203:2
quick [4]
98:20; 111:5; 151:11;
155:8
quicker [1]
98:12
quikky [7]
3:10; 5:19; 23:4; 36:3;
112:20, 22; 159:3
quieter [1]
4:17
quintessential [1]
17:16
quiver [1]
15:6
quiz [2]
112:15; 135:11
quizzes [1]
112:15
quo [4]
41:4, 9, 15; 42:6
quote [4]
37:6; 42:10; 60:8;
177:19
quotes [1]
47:19

- R -

racing [1]
114:13
radius [1]
102:1
raise [4]
20:17; 52:2; 107:10;
173:19
raised [1]
155:2
raises [2]
18:1; 21:6
raising [2]
20:10; 36:5
ran [1]
177:21
range [1]
119:1
rank [1]
24:11
rapid [1]
143:18
rare [2]
13:15; 15:8
rate [6]
60:21; 108:10; 156:17;
161:17; 162:20
rates [8]
9:18; 156:21; 157:9;
158:10; 159:12, 13;
164:14, 15
rationale [1]
16:1
RAVAGLIA [7]
120:12, 20; 130:8;
143:13; 151:11; 160:22;

167:8
Ravaglia [2]
107:15; 120:4
RAY [7]
120:12, 20; 130:8;
143:13; 151:11; 160:22;
167:8
Ray [12]
107:15; 120:3, 4;
132:18; 133:7; 135:6,
16; 143:3, 12; 151:10;
160:5, 20
Ray's [1]
160:6
reach [14]
21:19, 22; 22:1; 48:5,
7, 19; 56:13, 15; 59:4;
64:16; 65:10; 76:3, 6;
168:17
react [1]
159:2
Read [1]
56:19
read [12]
27:14; 38:14; 56:22;
57:10; 67:12, 16;
98:17; 103:11; 107:1;
134:2; 191:18; 192:4
readers [2]
94:16; 192:7
reading [7]
20:15; 52:4; 56:18;
57:19; 58:2; 60:11;
67:1
real [11]
34:11; 59:11; 61:4;
62:20; 75:5; 103:7;
108:3; 129:6; 151:15;
152:18; 162:12
realize [5]
123:22; 147:15, 19;
186:5; 194:7
realized [1]
185:6
reason [7]
7:14; 10:1; 124:15;
161:20; 189:5, 16;
196:10
reasonableness [1]
180:8
reasons [5]
7:12; 91:19; 92:1;
162:4; 167:8
reassemble [1]
3:11
reauthorization [1]
184:17
receipt [1]
111:22
receive [6]
23:12; 25:3; 183:14;
188:19; 190:1; 192:14
received [4]
121:9; 177:9; 182:21;
191:12
recent [3]
32:7; 36:18; 121:8
reception [4]
2:11; 171:5; 203:15, 18
Recess [1]
169:8

recess [1]
77:14
recessed [1]
50:8
recognition [2]
51:16; 124:11
recognized [1]
185:8
recognizing [2]
133:16, 17
recommendation [2]
37:19; 55:19
recommendations [1]
37:11
reconvene [1]
50:8
record [2]
62:9; 71:15
recording [1]
171:9
records [1]
195:6
recourse [2]
130:14; 131:22
recovered [1]
145:6
recovery [1]
42:13
recruit [3]
66:18; 93:17; 194:3
recruited [1]
85:8
recruits [3]
8:20, 21; 9:1
red [3]
108:3, 5, 8
reduce [2]
52:5; 66:21
reduced [1]
195:21
reduced-price [3]
195:7; 197:9, 14
reduction [3]
11:2; 195:5, 22
reference [6]
19:9; 23:5; 24:4; 29:14;
97:11; 169:21
referencing [1]
21:5
referred [1]
63:4
refers [1]
20:1
refocus [1]
121:17
reform [10]
17:21; 18:18, 19; 19:7,
18, 21; 24:2; 27:9;
28:16; 42:14
reformed [1]
18:20
refresh [1]
102:16
Regards [1]
156:17
regime [2]
89:18; 132:22
region [1]
103:2
Regional [2]
5:20; 6:3

regional [2]
74:2; 203:8
register [1]
174:20
registration [2]
170:18; 203:9
regroup [1]
173:17
regular [2]
158:13; 159:1
reiterate [2]
45:19; 182:1
related [2]
17:21; 183:16
relates [1]
180:8
relatively [5]
78:21; 161:16; 172:16;
181:7; 193:11
release [1]
149:5
released [1]
80:8
rely [3]
84:19; 197:15, 22
remainder [1]
117:15
remaining [1]
177:22
remark [1]
143:14
remarks [3]
49:16; 175:6, 10
remedial [3]
20:13; 26:3; 33:18
remember [6]
4:4; 19:3; 50:5; 102:2;
120:9; 164:9
remind [5]
41:3; 48:1; 134:3;
159:19; 160:5
reminding [1]
47:19
reminds [1]
173:5
renovations [1]
70:13
replacements [1]
7:21
replacing [1]
48:17
report [12]
23:18, 22; 25:19;
28:11; 32:17; 36:11,
17; 37:9; 45:3; 80:8;
100:10; 114:7
reported [1]
36:14
reporting [3]
95:14; 149:4; 154:10
reports [5]
23:12; 113:10; 114:18;
138:11, 12
representative [1]
92:9
representatives [1]
5:5
represented [1]
18:3
representing [1]
53:16

represents [2]
36:13; 38:3
register [5]
14:21; 15:3; 178:8;
180:9; 197:15
requested [2]
64:4; 190:3
require [7]
82:5; 113:5; 165:2, 21;
166:22; 181:14; 192:6
required [5]
62:18; 114:17; 133:5;
161:21; 184:8
requirement [2]
132:21; 184:14
requirements [3]
189:2, 19; 200:15
requires [2]
89:3, 5
research [11]
23:12, 14; 30:4; 45:2;
65:18; 73:4; 85:17;
104:12; 118:8; 147:12;
150:14
researchers [1]
23:15
resides [1]
25:16
resource [3]
22:18; 29:13; 97:21
resources [12]
12:20; 15:13; 22:5, 10;
28:18; 48:20; 97:11;
113:15; 120:18; 130:12;
180:6
respect [3]
17:14; 22:5, 8
respective [2]
25:12; 31:4
respond [2]
163:17; 164:11
responded [1]
109:19
response [3]
130:18; 135:5; 201:21
responses [2]
109:11, 13
responsibility [4]
128:5; 133:16, 19;
141:8
responsible [2]
113:6; 200:14
responsive [1]
156:15
rest [4]
85:13; 92:21; 101:3;
116:5
restricted [2]
198:10, 15
result [1]
59:13
results [3]
150:15; 158:8; 167:19
retake [1]
29:10
retention [3]
92:3; 156:17; 159:12
retirements [1]
7:21
retiring [1]
75:22

retreat [1]
73:12

return [4]
31:22; 48:22; 147:2;
151:13

returned [2]
32:5; 165:19

reveal [2]
147:16, 17

review [4]
106:4; 128:12; 156:6,
11

reviewed [2]
2:18; 191:22

reviewing [3]
55:22; 102:14; 171:14

revolution [3]
102:13, 22; 104:11

revolutionary [1]
70:9

revolutionizing [1]
61:22

reward [1]
169:5

rewarded [2]
2:10; 187:20

rewarding [3]
2:7; 133:17; 182:11

rich [4]
95:13, 14; 96:1; 154:10

Richard [5]
3:15, 20; 51:5, 14;
52:18

richest [1]
104:7

rid [1]
7:2

ridden [1]
175:9

ride [2]
175:13, 14

Right [1]
13:7

right [38]
6:15; 8:10; 10:21;
19:12; 24:5; 38:15, 20;
40:5; 58:18; 66:13;
77:3; 82:3; 84:16; 87:7;
91:5; 92:5; 96:11;
101:22; 105:1, 4; 107:2,
8; 118:13; 119:20;
120:11, 22; 127:18;
133:13; 138:17; 145:14;
146:7; 147:18; 164:17;
173:19, 20; 175:10;
180:21; 203:9

rigor [4]
26:8; 28:8; 46:18;
132:20

rigorous [2]
25:16; 62:21

RILEY [9]
52:20; 53:6; 54:14;
57:12; 58:1, 16, 21;
59:22; 63:16

Riley [15]
3:15, 20; 17:15; 19:19;
21:9; 48:10; 51:6, 14;
52:18; 58:13; 71:11;
78:19; 79:16; 84:7;
175:6

Riley's [1]
184:20

risen [1]
67:5

road [3]
41:19; 66:2, 15

roads [1]
40:21

roaming [1]
203:1

ROBERT [2]
194:22; 196:8

Robert [1]
194:22

ROBERTS [33]
79:13; 117:19; 120:3,
13; 125:11; 129:16;
132:16; 135:3; 136:16,
19; 138:16; 141:13;
143:11; 144:2, 19;
145:12; 146:18; 147:1,
5, 16; 148:1, 5, 8;
150:8; 151:10; 152:1;
153:9, 13; 160:20;
162:18; 164:16; 165:4;
167:22

Roberts [2]
71:21; 78:16

ROBINSON [16]
172:2; 173:8, 12; 174:8,
18; 180:21; 190:15;
194:11; 196:2; 198:7,
16, 21; 201:5, 9, 14, 17

Robinson [2]
141:22; 170:7

role [4]
42:7; 70:20; 125:7, 12

roles [1]
44:4

rolling [1]
66:1

room [7]
89:22; 93:19; 115:14;
171:4; 202:14; 203:2,
13

rooms [1]
3:7

root [1]
86:3

rose [1]
70:15

roster [1]
97:12

roughly [3]
88:7; 100:22; 177:9

round [2]
5:15; 6:11

rulemaking [1]
188:12

run [2]
3:3; 162:20

running [8]
57:19; 96:12; 98:8;
135:21; 159:15; 161:4,
5, 19

runs [1]
73:10

rural [2]
34:5; 153:8

rush [1]
116:11

- S -

sad [1]
68:1

saddened [1]
74:4

safe [2]
54:20; 192:22

safer [1]
52:5

salaries [1]
70:15

satellite-based [1]
81:4

satisfaction [1]
42:6

satisfied [1]
89:17

save [1]
60:10

saying [11]
18:10; 76:16; 98:2;
114:18; 125:14; 135:6;
141:12; 163:19; 175:2;
200:2

scaffold [1]
156:2

scale [2]
25:19; 151:13

scales [1]
180:3

schedule [1]
99:16

scheduled [2]
97:16; 135:13

School [19]
6:6, 9; 16:15; 34:16;
118:3, 5, 13, 15, 17,
19; 120:2; 121:2;
126:8; 135:20; 145:14,
21; 146:19; 157:22;
160:11

school [99]
9:5; 15:14, 20; 22:19;
24:2, 21; 25:6; 26:16;
27:13; 29:21; 35:10;
37:7; 40:6; 42:7, 14;
46:3; 47:15, 17; 52:8;
56:21; 59:9; 61:16, 18;
62:16; 64:5; 65:5, 13;
66:2; 70:12, 13; 72:15;
74:9, 18; 75:1; 76:20,
22; 84:9; 88:6, 13, 19,
20; 89:2, 7, 10; 93:18;
96:6; 99:16; 110:2;
113:3; 115:18; 116:7;
118:18; 123:7, 15;
124:5, 9, 10, 13, 14,
19; 126:16, 18; 127:4;
130:22; 131:19; 133:8,
10, 11, 15; 134:5;
135:19; 136:2, 10;
143:1; 145:21; 146:4;
148:11; 149:12; 151:1,
2; 152:16; 155:9, 11,
15, 20; 156:12; 158:4,
10; 159:20; 165:15, 18;
166:3, 21; 167:4, 7;
195:1

school's [2]
60:21; 133:15

SCHOOLS [1]
1:4

Schools [6]
32:3; 114:4; 126:1;
127:6, 14; 148:18

schools [81]
5:2; 9:20; 13:14, 20,
21; 14:16; 20:11, 12;
23:17; 25:10, 13;
30:16; 32:12; 33:14,
15; 34:5; 35:1, 2, 3;
40:19; 41:8; 43:14;
44:16, 17; 45:6; 46:11;
47:8; 52:5; 54:21; 60:8,
13, 19; 62:1; 64:6, 12;
70:11; 74:8; 75:10;
82:4; 86:8; 88:2, 4, 8;
91:20; 109:21; 110:5;
112:17; 113:5, 11;
114:1, 8, 17, 22;
116:10; 118:10; 119:20,
22; 120:1; 127:9;
129:6, 7, 14; 134:6;
135:22; 145:2; 147:11;
151:7; 152:10, 12;
155:17, 19; 158:5, 11;
159:5; 160:14, 17;
183:20

Science [6]
104:20; 121:9; 122:4;
123:16; 165:1, 2

science [4]
26:1; 30:10; 46:1;
72:22

scientific [1]
157:2

scientists [1]
73:4

score [2]
47:1; 105:6

Scored [1]
104:16

scored [7]
30:11; 62:20; 92:15;
105:5, 22; 112:7, 11

scores [3]
24:10; 111:11; 112:3

scratch [1]
168:1

screen [1]
101:2

sea [2]
61:4; 169:3

sea-time [1]
38:4

seamless [1]
128:14

Search [1]
123:16

search [1]
75:19

seat [2]
2:6; 78:7

seats [3]
50:12; 78:14; 169:10

Seattle [2]
86:8; 195:1

Second [1]
5:11

second [13]
2:4; 3:9; 8:8; 10:1;

13:22; 14:17; 16:3;
34:1; 39:1; 69:20;
93:13; 177:21; 183:12

Secondary [3]
6:9; 16:15; 34:15

secret [3]
20:10, 13, 17

Secretaries [1]
71:18

SECRETARY [9]
52:20; 53:6; 54:14;
57:12; 58:1, 16, 21;
59:22; 63:16

Secretary [26]
3:15; 16:12; 19:19;
21:8; 31:15; 48:9; 51:5,
15, 22; 52:17; 56:7;
58:18; 71:11, 16, 18,
21; 74:22; 78:19;
79:16; 81:11; 84:7;
175:6; 184:20; 187:7,
9; 199:4

Secretary's [1]
31:10

Section [4]
185:20; 186:22; 187:11;
190:9

section [1]
97:8

sections [3]
97:9, 15; 104:10

sector [4]
9:6; 75:8, 12; 82:7

sectors [1]
9:4

seed [1]
150:13

seeks [1]
131:22

sees [3]
41:19; 137:18; 152:22

select [2]
47:22; 66:13

selecting [1]
161:7

selection [2]
12:7; 189:14

selective [2]
92:20; 160:7

self-check [1]
104:16

self-checks [1]
106:2

Self-motivated [1]
141:2

self-motivated [4]
138:18; 140:4, 6; 185:7

self-motivation [1]
141:3

self-paced [4]
128:7, 12; 137:6, 10

sell [1]
148:11

semester [5]
99:15; 100:14; 149:1;
159:14; 165:20

seminar [1]
35:7

send [8]
97:5; 111:16, 19; 114:7,
17; 134:2, 20; 166:4

sending [2] 165:14; 166:8	share [8] 16:5; 26:9; 113:2; 141:15; 155:5; 168:20; 193:21; 194:5	sincerely [2] 33:22; 44:20	58:19; 116:14, 18	south [1] 54:18
sends [1] 33:19	shared [2] 158:3; 162:1	sine [1] 106:22	smarter [1] 56:5	Southern [2] 5:20; 6:3
Senior [2] 3:15; 78:18	Shawna [1] 103:17	sing [1] 19:3	smartest [1] 56:11	speak [6] 20:7; 33:2; 45:11; 54:8; 134:6; 196:6
sense [18] 18:2; 19:9; 20:4; 22:12; 26:7; 41:5, 6, 11; 82:1, 19; 92:2; 124:8; 129:16; 140:5; 162:12, 14, 16; 176:4	shed [1] 153:19	Singapores [1] 30:13	Smith [1] 41:20	speaker [1] 69:20
sensitive [1] 55:4	shelf [1] 57:7	singer [1] 19:2	software [5] 165:8, 11; 166:8; 167:9, 14	speakers [1] 51:3
sentence [2] 38:4; 103:11	shocked [1] 10:8	single [2] 112:19; 141:17	solid [4] 8:14; 24:8, 17; 26:21	speaking [1] 157:1
September [2] 52:7; 121:22	shocking [1] 36:19	sink [1] 190:17	solidify [1] 106:8	special [4] 60:5; 74:12, 14; 172:5
sequence [2] 127:7, 14	shoes [1] 69:1	sir [3] 164:19; 194:20; 198:12	solids [2] 102:20, 22	specially [1] 89:4
sequences [1] 121:20	shook [1] 172:9	sit [7] 57:6; 77:12; 117:14; 134:21; 172:7; 182:4; 202:18	solution [2] 89:21; 104:4	specific [2] 32:22; 166:14
series [2] 35:13; 200:5	shopping [2] 86:13; 132:19	Site [1] 119:16	solve [2] 90:7; 106:18	specifically [3] 35:18; 93:22; 150:3
serious [4] 65:7, 8; 101:4; 144:12	shortage [1] 7:16	site [9] 96:19; 135:15, 18; 136:1, 4, 10, 13; 156:12; 162:15	Somebody [3] 54:18; 57:10; 59:19	speech [1] 54:10
seriously [1] 9:17	shot [1] 145:13	sitting [9] 2:13; 4:4; 49:18; 58:1; 87:7; 91:5; 95:21; 107:16; 109:7	somebody [6] 118:21; 141:9; 151:19; 154:4; 192:9; 198:19	spend [4] 4:7; 133:20; 148:12, 13
seriousness [1] 5:8	shoulders [1] 134:3	six [2] 23:9; 156:6	somehow [3] 90:4; 139:18; 146:17	spending [1] 74:1
serve [3] 51:15; 97:16; 179:5	show [15] 10:8; 11:21; 71:17; 83:12; 87:4; 91:8; 96:14; 101:2, 18; 102:22; 104:19; 107:11, 20; 110:7, 12	situation [3] 140:15, 17; 145:7	Someone [2] 19:13; 201:19	SPERO [5] 1:15; 169:9, 13; 201:22; 202:7
served [4] 38:4; 70:7; 71:13; 124:1	showing [2] 34:10; 119:12	size [3] 52:5; 66:21; 153:1	someone [6] 130:16; 131:12, 19; 141:14; 162:6; 179:18	Spider [1] 58:9
server [2] 99:2; 105:7	shows [7] 5:8; 26:13; 38:22; 65:18; 104:12; 105:4; 108:10	skiers [1] 60:10	somewhat [2] 91:17; 92:20	spider [3] 58:8, 10, 22
serves [4] 3:21; 107:12; 124:3; 126:18	shy [1] 83:16	skills [3] 9:2; 33:11; 116:3	somewhere [3] 34:21; 109:1; 161:6	spoke [1] 185:1
service [3] 71:15; 113:22; 179:22	sick [1] 68:13	skin [1] 59:7	song [1] 19:3	sponsors [1] 5:19
Services [1] 8:19	sign [3] 41:19; 53:7; 72:19	skip [1] 150:8	sons [1] 86:9	Spring [1] 91:16
services [1] 151:3	significant [9] 18:2; 34:1; 38:18; 91:18; 92:9; 101:8; 144:7, 11; 159:18	skipping [1] 123:14	sooner [1] 122:12	spring [1] 80:20
serving [1] 183:21	significantly [1] 151:9	slacking [1] 131:10	sophomore [1] 63:7	spur [1] 188:1
SESSION [1] 78:1	signing [2] 156:11; 159:6	sleeping [2] 83:19, 20	sorry [2] 27:1; 135:22	spurring [1] 189:11
Session [5] 3:4, 6, 9; 49:21; 50:4	signs [2] 41:20; 157:22	Slide [10] 10:16; 12:22; 26:11; 27:11, 22; 37:22; 38:12; 87:22; 88:16; 186:11	sort [24] 4:5; 15:12; 86:6; 113:17; 121:17; 122:21; 124:6; 132:20; 137:9; 144:13, 14, 16; 145:9; 151:13; 155:8; 161:9; 167:11, 16, 17; 168:11; 177:4; 179:5; 181:1; 193:18	squared [1] 103:6
session [12] 2:22; 55:21; 78:5, 15; 81:8; 83:3; 169:11; 170:16; 171:3, 9; 176:18; 202:16	Silicon [1] 52:12	slide [3] 26:12, 19; 46:9	sorts [2] 132:2, 13	squeezing [1] 10:12
Sessions [2] 50:1, 21	silver [1] 90:1	slides [6] 24:18; 25:18; 26:1, 9; 49:3, 15	sought-after [1] 86:1	stability [1] 175:17
sessions [7] 2:21; 3:2; 78:12; 155:11; 161:22; 169:20; 202:21	SILVERTHORNE [2] 201:7, 11	slight [1] 36:21	sounds [1] 138:16	stack [1] 143:4
setting [2] 2:22; 53:20	Silverthorne [2] 201:7, 11	slightly [1] 195:16	Soupes [1] 120:9	staff [18] 41:10; 49:7, 16; 53:18, 19; 94:8; 97:15; 113:3, 6, 15; 126:22; 133:10; 137:8; 143:1; 192:21; 202:22; 203:8
seven [3] 23:9; 56:8; 175:9	simple [4] 88:14; 111:5; 134:8; 148:22	slopes [3] 60:9; 63:20	source [2] 15:11; 95:2	stakeholders [1] 198:5
Shakespeare [1] 73:20	simulation [2] 167:9, 14	slow-motion [1] 142:2	South [15] 3:18, 19, 21; 7:9; 30:12; 48:1; 51:17, 21; 53:22; 62:7; 63:6; 184:19; 185:1, 2; 200:22	stampede [1] 55:21
shamelessly [1] 107:17	Simultaneous [3] 50:17; 201:3, 15	smaller [1] 8:18		Stand [1] 29:4
		smart [3]		stand [2] 43:21; 171:12
				standard [8]

97:11; 116:17; 133:5; 184:7; 197:10, 13, 15; 198:1	40:2; 153:10	straightforward [1] 7:15	43:5, 8; 44:6; 46:20, 21, 22; 47:4; 48:18; 51:13, 21; 52:3, 4, 7; 59:6, 14; 60:7, 10, 18, 20; 61:2, 8, 11, 14; 62:11, 20, 21; 63:19; 64:8, 16; 65:2, 20; 66:9, 12; 67:7; 69:7, 9; 70:3, 14; 71:2; 74:12; 75:16; 76:4; 81:16; 82:5; 84:8; 88:11, 19; 89:6, 9, 12, 15; 91:15, 17; 92:6, 7, 13, 22; 93:8, 9, 22; 94:2, 4; 95:7, 15; 97:8, 17; 98:6, 7, 99:22; 100:6; 104:3; 106:9, 16; 107:4, 19; 108:20; 109:11, 21; 110:5, 8; 111:2; 113:7, 12, 14, 16; 114:8, 9, 10, 18, 22; 115:14; 116:14; 119:1; 121:14, 18; 122:6, 13; 123:1, 4, 9, 19; 124:3, 8, 21; 125:2, 8, 15; 126:20; 127:8; 128:6, 15, 16, 19, 21; 129:1, 4, 8, 12; 130:11, 14, 15; 131:4; 132:2; 133:21; 134:9; 136:9, 12, 16; 137:9, 14; 138:1, 4, 12, 13, 17; 139:2, 16; 140:4, 8, 13, 19; 141:2, 19, 20; 142:1, 5, 6, 17; 143:2, 14; 145:2; 146:6, 21, 22; 147:1; 151:22; 152:17; 154:5; 155:3; 156:7, 13; 157:13, 18; 158:6, 9, 12, 18, 22; 159:2, 6; 160:4, 15; 161:7; 162:8, 10, 13; 163:5, 17, 20; 164:1, 4, 5; 165:17; 166:5; 167:5; 168:14, 22; 177:12; 183:17, 19; 185:5, 9, 14, 18; 186:4, 9; 187:14; 188:3, 15; 189:7; 193:16, 17; 194:3; 195:6, 8, 10	88:7; 93:10; 184:2, 10
standardized [1] 100:4	statements [1] 28:16	strategies [6] 13:16; 14:15; 153:15, 16, 20; 168:21	submit [5] 106:22; 180:13; 187:8; 197:12; 200:11	
standards [30] 8:7; 21:8, 11, 13, 16, 20, 22; 22:1, 3, 7, 9; 28:9, 21; 36:6; 40:4, 8, 11; 43:6, 11, 16; 44:11, 14, 16, 21; 51:10; 52:2; 61:9, 10; 64:16	STATES [1] 1:1	strategy [4] 82:16; 126:12; 131:17; 166:16	submits [2] 111:14; 112:10	
standing [3] 52:19; 57:8; 69:14	States [1] 126:20	streams [1] 96:15	submitted [1] 112:4	
stands [3] 111:3, 4, 12	states [52] 2:13; 5:3; 13:13; 18:3; 19:19; 21:14; 31:5, 22; 32:5; 40:6, 8, 17; 43:12; 61:2, 11; 64:5, 11; 70:16; 119:22; 126:20; 149:7, 21; 150:5; 151:4; 153:8; 168:10; 177:3, 9, 16, 18; 178:1, 3; 183:14, 22; 184:19; 185:7, 12, 16; 186:21; 195:9; 197:9, 22; 198:8, 11; 199:5, 8, 9, 14; 200:17, 21; 202:10	stretch [1] 74:16	submitting [1] 114:11	
Stanford [10] 19:13; 120:5, 6; 121:6; 122:1, 8, 17; 131:2; 160:9	statewide [1] 149:11	stretches [1] 48:18	substantial [1] 9:13	
Star [2] 126:1; 127:13	statistic [1] 32:8	striking [1] 80:19	substitute [1] 167:2	
stark [2] 7:17; 12:6	statistically [1] 92:9	strong [2] 31:10; 33:20	succeed [1] 131:16	
start [26] 2:16; 3:3, 13; 31:6; 34:7; 37:19; 40:10; 49:20; 53:3; 78:12; 86:16; 108:15; 130:7, 8; 139:5, 9; 146:9; 163:6, 11, 13; 172:8; 173:17; 202:18, 19; 203:15, 17	Statistics [2] 118:4; 165:8	strongest [1] 24:21	Successful [1] 161:4	
start-up [2] 15:12; 62:13	status [6] 41:4, 9, 15; 42:6; 59:8; 113:1	strongly [1] 24:9	successful [9] 24:14; 51:17; 72:13; 94:4; 138:10; 139:3; 140:14; 161:17; 165:3	
Started [2] 100:9; 111:4	statute [6] 185:15, 21; 187:12; 190:10; 196:15, 19	structure [5] 150:9, 15, 21; 195:14; 203:3	successfully [1] 157:6	
started [20] 2:4, 6; 4:5; 17:9; 31:13; 57:19; 78:6, 9, 14; 87:3; 91:2; 111:2; 114:12; 119:2; 155:14; 157:8; 169:17; 175:13; 178:15; 203:17	statutory [2] 188:11; 197:4	structured [2] 109:4; 170:5	suggest [4] 30:3; 40:13; 49:19; 142:19	
starter [1] 157:5	stay [3] 3:7; 59:22; 136:19	structures [1] 148:20	suggestions [1] 155:18	
starting [4] 2:19; 8:3; 80:20; 103:8	stays [1] 108:8	struggle [1] 107:22	suggests [2] 156:19, 20	
starts [2] 101:19; 124:15	step [11] 26:6; 30:19; 35:18; 44:10; 45:8; 61:22; 106:14, 16, 19; 125:7; 171:19	stuck [1] 142:2	suitable [1] 85:21	
State [2] 6:6, 7	stepped [1] 25:11	student [65] 7:20; 25:3; 32:20; 61:5; 63:12; 67:4; 72:9, 10; 73:12, 14; 74:14; 93:14; 94:21; 96:9; 97:7; 99:13; 100:1, 18; 101:9; 106:3; 108:18; 109:16, 17, 18; 111:14, 21; 112:9, 19, 21; 117:3; 119:16; 124:15; 130:2; 131:1, 20, 21, 22; 133:6, 8, 14; 134:2, 11, 19; 135:11; 137:11, 19; 140:7; 141:4, 18; 143:20; 150:22; 161:1, 4, 15, 18; 166:10, 17; 184:6; 195:20; 196:19, 21; 197:1	suited [2] 125:9; 138:21	
state [60] 14:16; 15:14; 16:11; 40:10; 44:10, 12; 55:12; 56:10; 62:9, 12, 18; 85:19; 143:18; 144:5, 10; 149:8, 9; 152:4; 164:21; 171:13, 16, 20; 183:9; 184:1, 4, 11, 13, 21; 185:3, 5; 188:17; 189:1; 194:2, 20; 195:2, 5, 19; 197:13; 198:6, 20, 22; 199:1, 6, 21; 200:6, 7, 8, 10, 11, 12, 13, 16, 19, 21; 201:1, 10; 202:18; 203:6	steps [2] 62:8; 176:13	student's [3] 112:21; 113:1; 197:11	summarizing [1] 114:8	
state's [2] 44:14; 190:2	stick [1] 102:8	student-centered [1] 128:4	summary [2] 98:20; 100:12	
statement [2]	stimulated [1] 4:2	student-to-student [1] 128:10	Summer [2] 155:20	
	Stock [2] 68:20	student-to-teacher [1] 128:11	summer [5] 35:21; 56:18; 155:9, 11; 177:22	
	stool [2] 57:6, 18	Students [8] 28:2, 5; 107:22; 109:8; 124:12; 128:7; 143:14; 163:2	summers [1] 66:10	
	stop [2] 9:3; 134:2	students [240] 4:9; 5:9; 9:14, 15, 16; 10:5; 11:9; 12:2; 13:6; 14:1, 9; 20:21; 22:17; 23:3; 24:13, 22; 25:20; 28:3, 6, 10; 30:15; 32:1, 2, 9; 36:14; 38:18; 39:2, 3, 7; 40:3;	summit [1] 5:1	
	stopped [1] 114:11		superintendent [2] 16:11; 20:6	
	store [1] 96:4		superintendents [1] 25:6	
	stories [3] 14:13; 113:19; 182:14		supervising [1] 113:6	
	story [10] 35:5, 18; 41:17; 56:16; 67:11; 85:5; 87:13; 113:18; 173:5; 193:9		supervision [1] 167:6	
			supervisors [2] 138:12, 13	
			supply [1] 88:15	
			Support [1] 70:22	
			support [25] 4:8; 5:14; 6:15; 22:21; 44:5; 52:15; 64:1; 65:3; 66:5, 8, 18; 69:17; 79:3; 91:22; 100:4;	

132:13; 133:14; 141:11;
142:17; 146:17; 159:8;
183:16; 189:6, 9; 190:2

suppose [1]
102:14

supposed [3]
43:16; 58:18; 94:19

surest [1]
48:10

surface [1]
168:1

surprise [1]
56:14

surprises [2]
23:18; 31:16

sustain [2]
150:16, 19

switch [1]
149:13

symbolic [1]
108:16

symmetry [1]
102:9

synopsis [1]
98:21

system [16]
3:17; 96:20; 100:8;
111:9, 15, 19, 20;
113:4, 9; 116:21;
128:15; 146:18; 147:2;
158:21; 195:12

system-wide [1]
149:20

systems [1]
81:5

- T -

T.V. [1]
57:19

table [5]
4:4; 120:22; 143:7;
170:19; 172:7

tables [1]
2:12

takes [7]
55:22; 100:19, 21;
129:3; 148:17; 154:6;
161:18

Talent [1]
123:16

talent [1]
7:15

talented [2]
138:19; 142:7

Talk [1]
12:4

talk [37]
14:3; 16:6, 7; 17:20;
18:4, 18; 20:7; 21:2;
13; 35:6; 36:4; 43:4, 7;
45:22; 56:22; 61:2;
74:3; 87:17; 89:19;
108:20; 115:9; 123:1;
130:15; 144:15; 147:13;
148:3; 150:3; 156:18;
170:4; 176:3, 11;
178:13; 179:2, 3;
182:17

talked [5]
19:5; 55:13; 75:3;

129:18; 154:9

talking [28]
14:5; 21:15; 23:6; 31:8;
43:5; 45:19; 53:4;
56:12; 63:21; 67:10;
68:9; 74:7; 86:8, 9;
120:9; 128:1; 135:16;
144:20, 22; 145:1;
149:8, 9, 21; 151:5;
172:8; 178:5; 198:5, 7

talks [3]
18:19; 19:20; 95:17

tap [1]
134:3

tapes [1]
171:14

tapped [1]
94:17

target [2]
86:15; 113:14

task [2]
85:9; 112:9

tasks [2]
100:2, 5

taught [2]
74:13; 94:3

Taxidermist [1]
41:21

taxidermist [2]
41:18; 42:8

teach [24]
8:5, 6; 32:21; 33:1, 5,
11; 34:6; 43:13, 16;
44:17; 64:13; 67:1;
76:1, 5, 8; 94:1; 97:14;
103:16; 118:21, 22;
133:1; 146:12, 21;
148:16

teacher [60]
3:17; 7:20; 16:9; 20:6;
22:13, 16; 23:2; 29:13;
52:6; 62:14; 68:6, 9,
16; 70:15; 71:1; 73:19;
74:6; 89:4, 8; 96:6;
98:22; 102:17; 103:8,
19; 104:2; 105:10;
106:3, 7; 110:20;
111:16; 112:14; 113:15;
115:13; 118:2, 3, 4, 20,
22; 119:7, 13, 18;
135:4, 19; 145:22;
146:5, 9, 15, 20; 149:3;
152:16, 22; 162:12;
165:16, 22; 166:2, 7,
14

Teachers [1]
44:5

teachers [45]
7:19; 8:1; 32:21; 33:2,
11; 34:6; 43:22; 47:16;
60:16; 61:3; 62:13;
64:13; 66:19, 21, 22;
75:16, 19, 21; 81:6;
82:4; 90:5; 93:17; 94:1,
3; 95:15; 97:20; 98:1,
6; 102:18; 103:13;
118:11; 119:14; 125:5;
127:1; 129:14, 15;
131:5; 149:15; 151:7;
153:2; 156:1, 3; 165:9;
194:3

teaches [1]
103:17

teaching [19]
7:21; 61:19; 63:18;
81:16; 84:5; 86:2; 89:4;
90:21; 105:12, 13;
119:3, 14; 146:5, 9;
151:3; 153:20; 154:13;
156:4; 166:3

teaching-learning [1]
22:22

team [5]
91:3, 7; 93:21; 97:14;
195:2

teams [8]
5:3; 74:20; 76:21;
94:18; 128:18; 171:16;
202:18; 203:6

Tech [1]
167:16

technical [2]
26:10; 191:1

technically [1]
152:19

technological [1]
130:10

technologically [1]
155:7

technologies [1]
118:10

Technology [5]
64:19; 78:17; 80:8;
81:13; 168:4

technology [38]
8:9; 9:7; 22:21; 70:11;
78:19; 79:4, 20; 80:2,
5, 17; 84:3, 20; 85:12;
89:20; 90:1, 7, 16, 20;
91:22; 94:20, 22;
107:12; 111:9, 13;
118:6; 119:11; 120:14;
134:11; 136:14, 22;
143:18; 145:18; 146:1;
157:16, 20; 159:4, 8

teleconference [1]
152:11

telephone [1]
86:7

televisions [1]
57:4

telling [5]
28:2; 38:17; 113:17;
115:18; 193:9

tells [3]
30:5; 105:1; 106:22

ten [12]
7:19; 21:11; 39:4; 50:2;
65:14; 77:1; 81:2;
93:10; 158:7; 161:8;
169:5; 178:3

ten-year [1]
36:20

tend [1]
162:10

tenure [1]
70:14

term [2]
70:18; 151:12

term-specific [1]
137:7

terminal [7]

20:15; 26:4; 29:7;
174:21

terms [28]
18:5; 27:19; 35:7, 18;
51:18; 52:1; 70:7;
81:18, 19; 102:5;
125:4; 129:11; 142:7;
145:4; 172:17; 177:1;
178:13, 14; 179:21;
180:3, 5; 188:2;
191:19; 192:18; 193:6;
196:16; 197:10; 198:8

terrific [2]
15:2; 45:15

territories [1]
5:4

TERRY [14]
4:14, 17; 5:18, 22;
6:14; 10:11, 17; 11:5,
8; 13:1; 26:12; 27:12;
45:15; 49:2

Terry [20]
3:14, 16; 4:1, 10, 12;
17:5, 13; 21:4; 23:5;
26:13; 33:20; 39:19;
42:16; 45:9, 12; 49:13;
53:19, 21; 54:4

Terry's [7]
17:19; 24:18; 25:18,
22; 26:10; 29:18; 49:16

test [24]
24:10; 32:3; 135:11;
143:15; 160:8; 177:11;
183:7, 10; 184:2;
185:4; 186:3, 5, 10;
187:2, 4; 188:6, 14, 18,
22; 189:13, 18, 20;
190:7

tested [1]
121:13

testing [1]
121:14

tests [9]
64:10; 183:19; 184:10;
185:10, 14; 189:8, 10;
193:17, 18

Texas [1]
75:6

textbook [1]
151:14

textbooks [2]
22:20; 151:14

Thank [26]
4:14; 17:5; 42:21;
48:22; 49:12; 50:18;
52:20, 21, 22; 69:13;
77:5; 78:9; 79:10;
84:12; 103:7; 117:11,
17; 164:20; 169:6, 13;
172:2; 180:21; 190:13;
204:1

thank [23]
4:1, 10; 45:12; 50:15;
52:22; 53:9, 15, 18;
54:5, 6; 69:6, 9, 12;
71:9; 77:6; 79:13;
115:16; 117:19; 169:1,
2; 202:3; 203:20

Thanks [1]
49:13

Theory [1]

122:5

There's [17]
8:11; 30:21; 38:11;
41:17; 43:7; 47:2;
49:22; 76:15; 97:3;
100:12; 112:16; 122:22;
124:15; 128:11; 140:8;
141:11; 158:2

there's [12]
26:21; 34:9; 36:1; 38:8;
47:10; 125:11; 134:7;
141:12; 154:14; 159:22;
195:14; 200:9

They'll [1]
109:10

They're [1]
23:13

they're [6]
43:15; 94:19; 100:16,
17; 102:21; 123:2

thinking [5]
6:1; 87:3; 130:1; 154:3;
168:5

third [7]
8:18; 30:8; 39:3; 73:15;
119:3, 8; 156:5

Thirty-four [1]
12:11

thousand [1]
146:16

thousands [3]
90:22; 153:4

threaded [1]
108:21

Three [1]
25:1

three [21]
7:17; 9:4, 8; 25:21;
33:9; 39:5; 57:4; 73:11,
17; 80:4; 84:16; 85:6;
89:10, 12; 116:2;
135:10; 158:2; 161:11;
163:16; 174:11; 191:22

three-year [2]
180:14, 16

ticket [1]
117:5

tier [1]
46:21

ties [1]
161:12

time-intensive [1]
133:18

timely [1]
106:16

Times [1]
23:13

times [6]
3:8; 11:3; 50:21; 97:16;
132:2; 138:4

timetable [1]
192:22

timing [1]
2:21

tiniest [1]
88:8

Tinkering [1]
19:14

TIROZZI [14]
17:5, 12; 19:1, 16;
28:1; 29:17; 36:9; 38:1,

7, 13; 42:1, 4; 43:1, 20
Tirozzi [3]
 6:10; 16:4; 17:3
Title [2]
 33:14; 54:20
Tomorrow [2]
 171:16; 202:17
tomorrow [6]
 14:13; 48:16; 171:17;
 202:16, 21; 203:22
ton [1]
 155:16
tonight [1]
 148:4
tool [2]
 108:2, 14
Toolbox [4]
 23:10, 19; 24:4; 41:13
toolbox [1]
 46:15
tools [7]
 15:5; 81:15, 16, 17;
 153:19
tops [1]
 110:17
Total [1]
 38:20
total [1]
 74:18
touch [3]
 94:15; 106:6; 136:20
towards [1]
 61:22
track [5]
 96:5; 99:10; 111:7, 8;
 113:11
tracks [2]
 100:8; 111:22
traditional [4]
 89:7; 90:21; 140:14;
 142:7
traditionally [1]
 34:22
tragedy [3]
 23:21; 48:5, 6
tragic [1]
 68:3
trail [1]
 104:14
train [1]
 64:13
trained [5]
 33:5; 89:4; 125:5;
 149:2, 15
training [3]
 32:22; 62:13; 133:14
transcribe [1]
 111:18
transcript [2]
 114:7; 122:8
transition [1]
 23:4
translate [1]
 91:1
travel [1]
 60:22
treasure [2]
 68:21; 69:11
treat [4]
 20:21, 22; 134:14, 16
treated [1]

60:3
treating [1]
 158:12
tremendous [2]
 51:19; 54:3
trial [1]
 160:3
Trig [2]
 11:10; 46:22
trip [1]
 134:14
tripled [1]
 65:20
true [2]
 142:4; 163:19
truly [9]
 10:3; 12:14; 14:11;
 51:2; 60:15; 61:21;
 86:21; 94:22; 202:12
trustees [2]
 73:9, 11
truth [1]
 173:6
Tuesday [1]
 105:19
tuition [1]
 148:22
tuned [1]
 56:1
turning [1]
 58:2
turns [1]
 102:8
tutor [1]
 33:6
tutorial [7]
 33:10; 101:11, 14;
 103:22; 104:5; 105:15;
 106:4
tutorials [7]
 101:15; 103:20; 104:9,
 15; 114:13; 148:16;
 156:14
Twenty [2]
 146:22; 147:1
two-minute [1]
 78:5
two-plus [1]
 28:6
two-thirds [1]
 70:13
two-way [8]
 152:7, 20; 153:7;
 161:14, 22
two-year [1]
 8:16
type [2]
 28:13; 162:3
types [4]
 100:5; 185:6; 187:22;
 193:17
typical [1]
 108:21
typically [3]
 8:22; 93:18; 157:21
tyranny [2]
 20:1; 59:13

- U -

U.S. [10]

4:21; 16:12; 23:8;
 34:10, 14, 18; 51:5;
 91:17; 147:20; 197:2
ultimately [5]
 8:6; 23:1; 41:1; 60:20;
 114:16
Um-hmmm [1]
 136:18
unable [1]
 157:19
uncertain [1]
 60:9
under-represented [2]
 9:17, 19
undergraduate [2]
 89:14; 122:16
underneath [1]
 156:2
underperforming [1]
 74:8
underscore [1]
 132:17
understand [12]
 21:17; 22:8; 31:7; 36:5;
 108:1, 9; 120:11;
 136:17; 138:5; 146:19;
 152:14; 186:17
understanding [6]
 95:19; 106:8; 154:6;
 191:4; 192:4; 200:4
understood [1]
 130:11
undertake [1]
 187:10
underwrite [1]
 31:19
unforgettable [1]
 67:12
unfortunately [3]
 49:3; 86:9; 191:15
unhappy [1]
 115:7
unheard [1]
 123:11
unit [3]
 38:3; 112:15, 16
UNITED [1]
 1:1
United [1]
 126:20
units [1]
 135:9
universal [1]
 155:6
universe [1]
 132:9
universities [5]
 62:19; 76:4; 125:6, 13;
 166:22
University [11]
 19:13; 70:20; 85:7;
 103:18; 120:5; 121:6;
 122:1; 125:19; 126:14;
 141:22; 150:16
university [3]
 124:22; 125:2, 3
university-level [3]
 122:15; 124:18
unlimited [1]
 89:1
unpredictability [1]

167:11
unquote [2]
 37:6; 42:10
unusual [1]
 91:13
updates [2]
 99:4, 6
uplifting [1]
 68:2
upload [1]
 111:14
upstairs [2]
 171:4; 203:19
urban [3]
 20:5; 32:14; 35:3
urge [1]
 139:4
Urgency [1]
 41:6
urgency [3]
 41:5, 7, 12
USA [1]
 23:13
usual [1]
 41:5
utilized [1]
 130:21
Utopia [1]
 19:14

- V -

vacancies [1]
 8:11
validated [1]
 90:22
Valley [1]
 52:12
valuable [3]
 63:9; 98:5; 113:15
value [1]
 90:15
variation [1]
 115:22
varies [1]
 40:12
variety [3]
 91:19; 100:4; 129:2
VASEY [2]
 144:4; 145:3
Vasey [1]
 144:4
vast [1]
 94:16
VAUGHN [2]
 194:22; 196:8
Vaughn [3]
 87:6, 17; 194:22
venture [8]
 79:18; 90:12; 126:6, 9;
 144:8; 145:5; 147:20;
 150:12
venue [1]
 91:1
verbal [1]
 9:2
versions [1]
 149:6
versus [2]
 145:5; 151:20
vertical [2]

74:19; 76:21
Veterinarian [1]
 41:21
veterinarian [2]
 42:10, 14
viable [1]
 37:15
Vice [2]
 63:22; 83:4
video [8]
 88:1; 152:7, 20, 22;
 153:7; 161:13; 162:1, 2
videoing [1]
 171:8
view [2]
 95:12; 141:15
Virgil [1]
 135:20
Virginia [6]
 56:21; 70:7, 8, 11, 14;
 200:22
Virtual [11]
 118:5, 13, 15, 17, 18;
 120:2; 121:2; 126:8;
 145:14, 20; 160:11
virtual [7]
 82:14; 83:13; 93:16;
 139:22; 140:9; 161:21;
 168:16
virtually [1]
 141:9
vision [5]
 4:2, 10; 52:14; 70:2;
 90:8
visionary [1]
 42:11
visited [1]
 2:12
visiting [1]
 67:14
visual [1]
 165:12
vital [1]
 202:17
Voc [1]
 37:1
vocabulary [1]
 80:15
vocational [1]
 37:16
VOICE [4]
 43:3; 101:20; 102:19;
 103:6
voice [1]
 6:2
VOICES [4]
 4:16; 50:17; 201:3, 15
volume [3]
 101:22; 102:3, 7
volumes [4]
 102:13, 20; 104:11;
 150:6
voluntary [1]
 187:19
volunteers [1]
 100:14
vouchers [1]
 47:11

- W -

waited [1] 169:20	Week [1] 99:9	36:4; 39:19; 46:7; 131:10	193:7	14, 15; 180:10, 18; 181:10, 11; 188:9, 10, 13; 192:19
walk [4] 2:20; 76:10; 93:13; 168:5	week [11] 74:1; 94:6; 99:8, 14; 100:22; 105:19; 111:10; 133:21; 158:7; 162:6, 12	winding [1] 49:8	World [5] 127:15; 128:3, 13; 129:4; 140:16	year's [7] 55:16; 92:10; 124:22; 148:16; 171:2; 182:20; 186:13
walking [1] 63:8	weekend [1] 105:18	window [2] 112:20; 117:15	world [9] 56:9; 65:1; 68:22; 84:10; 85:13; 136:17; 138:13; 140:19; 152:19	years [41] 7:19; 17:8; 20:4; 21:11; 25:21; 26:1; 30:19; 31:14; 39:4, 5, 14; 43:8; 53:13; 55:17; 56:8, 17; 57:2; 58:16; 61:14; 65:6, 14; 67:4; 16; 70:17; 77:2; 81:2; 84:16; 85:6; 90:22; 95:5; 107:17; 120:13; 123:12; 126:17; 143:17; 145:15; 172:22; 175:9; 180:15; 185:22
wanted [10] 4:18, 20; 57:9; 73:3, 4; 110:12; 141:16; 153:11; 168:2, 4	weekends [2] 66:10; 182:13	winner [1] 123:16	worried [1] 39:11	worried [1] 39:11
wanting [1] 162:14	weekly [2] 113:10; 161:21	Wisconsin [1] 3:17	worry [1] 160:2	worrying [1] 94:5
wants [1] 145:12	Weeks [1] 99:11	wish [2] 82:17; 186:21	worse [1] 20:22	worship [1] 20:22
warm [1] 4:20	weeks [7] 73:11, 17; 99:12; 116:2; 156:6; 159:21; 161:11	wit [1] 67:21	worth [4] 122:1; 124:22; 148:16; 167:18	worshiping [1] 108:18, 19
warning [1] 78:5	weight [2] 179:22; 180:4	Witchie [1] 6:4	wouldn't [2] 108:18, 19	wound [2] 121:14; 123:14
Washington [6] 1:6, 9; 85:7; 103:18; 141:22; 195:2	weighted [3] 179:10, 21; 180:3	woman [1] 73:18	wouldn't [2] 108:18, 19	wouldn't [2] 108:18, 19
wasted [1] 98:2	welcome [5] 4:11, 21; 52:16; 71:5; 143:6	won [1] 51:16	wouldn't [2] 108:18, 19	wouldn't [2] 108:18, 19
watch [3] 29:4; 104:13; 137:17	welfare [1] 68:12	won't [5] 19:3; 156:7; 175:3; 189:16; 191:20	wound [2] 121:14; 123:14	wound [2] 121:14; 123:14
watching [3] 104:10; 114:12; 137:8	werent [6] 32:3; 55:3; 85:15; 108:20; 136:8, 9	wonder [2] 25:6; 69:8	wrap [2] 144:16; 190:18	wrap [2] 144:16; 190:18
water [1] 7:2	West [5] 6:5; 70:7, 8, 11, 14	wonderful [10] 20:2; 53:14; 56:9; 67:21; 95:3, 7, 22; 115:8; 117:11	Write [1] 56:19	Write [1] 56:19
watered-down [3] 48:12, 17; 60:7	wet [1] 167:1	wondering [2] 43:17; 131:12	write [1] 191:2	write [1] 191:2
ways [9] 11:6; 12:13; 14:19; 18:15; 34:4; 79:21; 82:1; 129:17; 150:12	what's [5] 6:1; 54:16; 138:15; 147:5; 167:10	Word [1] 111:18	writer [1] 60:2	writer [1] 60:2
We'd [1] 155:21	wheelchair [1] 59:9	word [1] 194:3	writers [1] 179:13	writers [1] 179:13
we'd [1] 19:12	whereas [1] 42:10	words [4] 69:15; 99:12; 187:12, 18	Writing [1] 59:17	Writing [1] 59:17
We'll [3] 36:17; 38:14; 197:16	whereby [1] 179:1	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	writing [4] 116:3; 161:14, 15; 171:20	writing [4] 116:3; 161:14, 15; 171:20
we'll [4] 3:5; 82:14; 177:19; 197:18	Whereupon [2] 50:7; 204:3	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	written [2] 23:15; 179:14	written [2] 23:15; 179:14
We're [10] 2:3; 75:13; 90:11; 114:2; 127:4; 160:12; 162:1, 4; 198:7	wherever [1] 16:17	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	wrong [6] 19:6, 7; 38:14; 101:6; 105:3; 132:8	wrong [6] 19:6, 7; 38:14; 101:6; 105:3; 132:8
we're [4] 47:11; 119:3; 149:21; 156:10	White [1] 54:15	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	wrote [2] 19:13; 60:3	wrote [2] 19:13; 60:3
We've [5] 75:6, 21; 144:7, 8; 155:16	whiz [1] 102:12	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	you'll [1] 138:10	you'll [1] 138:10
we've [9] 10:17; 75:22; 76:3, 6, 10; 129:16; 149:9; 158:1; 172:6	Whoever [1] 58:10	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	young [13] 12:15; 17:9; 48:12; 56:4, 12, 13; 57:1; 59:2; 62:3; 71:14; 73:18; 123:2; 148:19	young [13] 12:15; 17:9; 48:12; 56:4, 12, 13; 57:1; 59:2; 62:3; 71:14; 73:18; 123:2; 148:19
wealth [2] 16:19; 45:16	whoever [1] 109:2	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	younger [2] 121:14, 18	younger [2] 121:14, 18
Web [7] 96:19; 119:16; 127:15; 128:3, 13; 129:4; 140:17	wide [5] 127:15; 128:3, 13; 129:4; 140:17	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	youngster [2] 30:5; 48:13	youngster [2] 30:5; 48:13
Web-based [1] 80:15	widely [1] 35:15	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	youngsters [7] 21:7; 27:4, 17; 29:6; 31:19; 33:7, 12	youngsters [7] 21:7; 27:4, 17; 29:6; 31:19; 33:7, 12
wed [1] 33:17	wife [2] 87:16; 173:5	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	yourself [4] 144:3; 151:21; 152:2; 171:12	yourself [4] 144:3; 151:21; 152:2; 171:12
	wild [1] 5:22	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	Youth [2] 120:5; 121:5	Youth [2] 120:5; 121:5
	wind [4]	work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	youth [1] 120:14	youth [1] 120:14
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	ZAP [1] 167:16	ZAP [1] 167:16
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2	zero [2] 108:6, 8	zero [2] 108:6, 8
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2; 79:3; 101:8; 104:4; 114:19; 115:1; 116:13; 118:11; 122:9; 124:5; 127:8; 131:8, 13, 21; 134:4; 136:8, 15; 140:16; 142:14, 16; 147:11; 153:21; 155:17; 158:11; 162:7; 163:7, 22; 165:5; 172:4; 175:15; 182:12, 13; 194:5; 203:2		
		work [41] 8:16; 13:8; 15:13; 31:2; 53:15; 69:18; 72:2		



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").