

1 SUPERIOR COURT OF THE STATE OF CALIFORNIA
2 COUNTY OF SAN FRANCISCO
3 UNLIMITED JURISDICTION

4 - - -

5 ELIEZER WILLIAMS, a minor, by SWEETIE
6 WILLIAMS, his guardian ad litem,
7 et al., each individually and on
8 behalf of all others similarly
9 situated,

Plaintiff,

vs.

No. 312236

10 STATE OF CALIFORNIA, DELAINE
11 EASTIN, State Superintendent of
12 Public Instruction,
13 STATE Department of Education,
14 STATE Board of Education,

Defendants.

15 _____/
16 --oOo--

17 DEPOSITION OF
18 WILLIAM KOSKI, Ph.D.
19 SAN FRANCISCO, CALIFORNIA
20 MARCH 27, 2003
21 VOLUME III

22 ATKINSON-BAKER, INC.
23 COURT REPORTERS
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REPORTED BY: ALICE N. HALBERT, RPR, CSR 7889

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10 STATE OF CALIFORNIA, DELAINE
11 EASTIN, State Superintendent of
Public Instruction,
12 STATE Department of Education,
STATE Board of Education,

13 Defendants.
14

15 _____/

16 Deposition of WILLIAM KOSKI, Ph.D., taken on
17 behalf of the Defendant, at O'MELVENY & MEYERS, LLP,
18 275 Battery Street, Embarcadero Center West, 26th
19 Floor, San Francisco, California at 9:11 a.m.,
20 THURSDAY, MARCH 27, 2003 before ALICE N. HALBERT, CSR
21 No. 7889.
22
23
24
25

1 A P P E A R A N C E

2
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1 I N D E X

2 WITNESS: WILLIAM KOSKI, Ph.D.
3 EXAMINATION PAGE

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5 BY MR. HAJELA 453
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7

8 EXHIBITS
9

10 DEFENDANT'S

11
12
13 LETTER DESCRIPTION PAGE

14
15 35 - One-paged document entitled 473
16 Agenda for July 14 Williams
17 Conference

18
19 36 - One-paged document entitled 596
20 To Do Williams handwritten
21 notes
22
23
24
25

1 EXHIBITS CONTINUED

2
3
4
5 37 - One-paged document entitled 598
6 November 26, 2001 e-mail
7 from Jeannie Oaks to
8 Sophie Fanelli, Catherine
9 Lhaman, Gary Blasi,
10 Hector Villagra

11
12 38 - One-paged document entitled 600
13 February 1, 2002 e-mail
14 from Bill Koski to Jeanie
15 Oaks, Subject Williams:
16 Our standards paper

17
18 39 - Two-paged document entitled 602
19 Williams Case Paper e-mail
20 dated February 10, 2002
21
22
23
24
25

EXHIBITS CONTINUED

- 1
2
3
4
5 40 - Three-paged document entitled 603
6 April 30, 2002 e-mail to
7 Thomas Timar from Jeannie
8 Oaks
9
10 41 - Three-paged document entitled 607
11 February 13, 2002 e-mail
12 to Jeanie Oaks from Bill
13 Koski
14
15 42 - Three-paged document entitled 611
16 Memorandum to Bill Koski
17 from Lynne Echenberg
18 dated October 29, 2002
19
20 43 - Four-paged document entitled 612
21 Summary of Morrison & Foerster
22 Memorandum on California
23 Requirements for Teaching
24 in Public Schools
25

1
2 WILLIAM KOSKI, Ph.D.,
3 having first been duly resworn, was
4 examined and testified as follows:
5

EXAMINATION

BY MR. HAJELA:

- 7
8 Q. Good morning, Dr. Koski.
9 A. Good morning.
10 Q. It is Doctor, am I right?
11 A. As of two days ago, yes.
12 Q. Congratulations!
13 A. Thank you.
14 Q. Is there a celebration coming up?
15 A. I'm probably -- there is a commencement
16 ceremony in the spring. They don't -- if you
17 graduate in the middle of the year, they lump it all
18 together at the end. But they actually confirmed it
19 this week because Stanford is quarterly.
20 Q. Okay. That's great!
21 A. Yeah. It's much less a celebration than a
22 relief, believe me.
23 Q. All my friends average ten years, so I
24 understand.
25 All right. Can I refer you to Page 8 of

- 1 your report, please?
2 A. Okay.
3 Q. The first full paragraph, regarding
4 promotion and retention, among other things -- I'll
5 just read part of it to you.
6 There's an excerpt that starts with the word
7 "second"?
8 A. Yes.
9 Q. "Second, school districts
10 may choose to use these results,
11 together with a student's
12 in-class performance, to
13 determine grade promotion and
14 retention for students in grades
15 two through nine. Because the
16 standards-based achievement
17 test, as well as in-class
18 instructions, is directly
19 aligned with the content
20 standards and curriculum
21 frameworks, promotion and
22 retention can be inextricably
23 bound with student mastery of
24 the content set forth in the
25 standards."

- 1 I just wanted to ask in regard to that,
2 specifically, the promotion and retention
3 consequences of performance on the California
4 Standard Test, are you aware of any School Districts
5 that base promotion or retention results in whole or
6 in part on CST scores?
7 A. No. I am not aware of any school districts
8 that bases promotion or retention results of the CST
9 scores.
10 As this indicates here, it is just
11 permissive -- the legislature is seeking for
12 permission for schools to do that, if they so choose.
13 Q. I agree with that.
14 Do you have -- are you aware of typically
15 what time during the year these test results come
16 out?
17 A. Um, my understanding is that it comes out in
18 August, usually. So I'm not sure whether or not or
19 how they -- they would use them for promotion
20 retention decisions, unless they have factored it in,
21 or if they get some pre-results. I don't know.
22 But my understanding is they do come out in
23 August. I don't know for sure.
24 Q. Okay. All right. Thanks.
25 Can I refer you to Page 10, please?

1 A. Actually, may I just add quickly --
 2 Q. Sure.
 3 A. -- to the last response?
 4 My understanding is that the Star results
 5 didn't come out until August when the CST resumes. I
 6 don't know if any of this is going to change. That's
 7 my understanding of it in the past.
 8 Q. Okay.
 9 A. Okay.
 10 Q. On the top of the page, there's a sentence
 11 starting "in other words." I'll just read that.
 12 "In other words, although
 13 the state requires schools to
 14 provide assistance to students
 15 who are struggling with the high
 16 school exit examination, the
 17 state does not specify the type
 18 or level of assistance nor does
 19 it provide any funds to assist
 20 schools in supporting their
 21 students. Left unclear is how
 22 already cash-strapped districts
 23 will be able to afford adequate
 24 supplemental instruction to
 25 ensure that their students can

1 the pattern that I can glean from my personal
 2 observation and experiences. Yeah.
 3 Q. Okay. And with regard to those districts,
 4 that largely serve low income students, do you have
 5 an opinion regarding whether those districts have
 6 sufficient funds to provide adequate supplemental
 7 instruction for students in danger of failing high
 8 school exit exams?
 9 A. I don't remember if we have to separate
 10 districts that actually need to offer the high school
 11 which either cater to the districts in each school
 12 districts.
 13 I don't have a specific opinion on that
 14 issue. I would have to see what their budgets looks
 15 like and everything else.
 16 But I -- I -- as I indicated here, it's not
 17 clear to me how the state has chosen to deal with
 18 this issue, if at all. Because the districts are
 19 already cash-strapped, adding yet another mandate or
 20 burden on the district.
 21 It doesn't make a lot of sense to me,
 22 specifically in the context where the stakes are
 23 pretty high. So --
 24 Q. Okay. Thank you. It's really what I was
 25 going to -- 10 minutes.

1 pass the exit examination."
 2 Can you -- it's describes as
 3 "cash-strapped." Can you explain why you use that
 4 phrase?
 5 A. The phrase is used in the context of
 6 districts that are cash-strapped. I'm not making --
 7 I'm not identifying any specific district as being
 8 cash-strapped. I'm saying basically saying to the
 9 extent districts are cash-strapped. And being
 10 cash-strapped may be difficult for them to afford
 11 adequate supplemental instruction. So that's the
 12 context in -- does that make sense?
 13 Q. Yes. In the research that you've done,
 14 related to this case, or any reading, perhaps, with
 15 the other expert reports, do you have a sense of
 16 whether there is a pattern or a way to describe
 17 districts that are typically cash-strapped? For
 18 example, with certain demographics or --
 19 A. This is outside the scope of my work that I
 20 was asked to do. And I opine on this case for my
 21 personal experience.
 22 I have seen school districts in low income
 23 communities that are most cash-strapped. And I have
 24 identified them as West Fresno, Oakland, Ravenwood
 25 City School District, and the like. That seems to be

1 Page 19, please, of your expert report. And
 2 I think -- I can't remember what the title --
 3 "Findings."
 4 A. Uh-huh.
 5 Q. Yes. All these headings come under a
 6 general section heading called "Findings," I believe.
 7 A. Uh-huh.
 8 Q. On Page 19, with regard to facilities, you
 9 first discussed schools and classrooms.
 10 A. (Nodding head.)
 11 Q. And the paragraph says:
 12 "Implicit in the content
 13 standards and curriculum
 14 frameworks is the assumption
 15 that students will be taught in
 16 facilities that comply with
 17 local health and safety
 18 regulations, and in settings
 19 that are conducive to learning.
 20 This suggests that, at a
 21 minimum, schools will contain:
 22 Classrooms with adequate heating
 23 and air conditioning, bathrooms
 24 that are accessible and
 25 hygienic, and schools that are

1 free from vermin and other
2 infestations."
3 Can you describe the analysis or
4 methodology, if any, you used to derive these
5 implicit --
6 A. Uh-huh.
7 Q. -- in the content standards?
8 A. This is a global determination that we may
9 add regarding to classrooms in the entire analysis.
10 You see, my recollection is I would be surprised to
11 see one of the standards that does not require a
12 classroom as part of the -- as one of the required
13 resources, basically.
14 And after much discussion, our analysis here
15 was with regard to libraries and media centers and
16 labs, and that sort of thing. We are able to
17 actually identify from the text when that seemed
18 necessary or implied from the text with regard to the
19 classrooms, because we were using this least best
20 practice analysis as the most conservative as
21 possible. We simply couldn't think of how these
22 standards could be taught in any other facility than
23 a clean and safe facility for kids.
24 Again, using the conservative judgments that
25 we used, there was, you know, no other way.

1 I mean, one could, I think, make an argument
2 that you could teach a kid outdoor all the time. I
3 think that would be absurd, obviously. And that was
4 our collective analysis on this.
5 Actually, the alternative is one could take
6 children to Lawrence Livermore Lab to teach a lesson
7 or to, you know, Berkeley to teach some other kind of
8 lessons on humanities. We made a conservative
9 judgment on classrooms that's safe and conducive to
10 learning. So that was -- that was a group decision
11 that we made as a team pretty early on, actually.
12 Q. And I actually understand the decision to
13 imply classroom.
14 A. Uh-huh.
15 Q. That makes perfect sense to me --
16 A. Yeah.
17 Q. -- of a learning environment, however you
18 want to describe it.
19 I'm more interested in did you really use
20 the content standards to derive things like, adequate
21 heating and air conditioning or bathrooms have
22 accessibility and hygienic, or is this just your
23 sense of what classrooms ought to be?
24 A. If you're asking whether or not the content
25 standards say any of those things, the answer is no.

1 The content standards don't say those things.
2 There is -- it is based on our understanding
3 and our collective decision this is what a classroom
4 should look like --
5 Q. Okay.
6 A. -- basically.
7 Q. I can't --
8 A. Yeah.
9 Q. I -- I think that's fair. All right.
10 A. Uh-huh.
11 Q. I have similar types of questions on the
12 next page, Page 20, of your report.
13 A. Uh-huh.
14 Q. And I may just not completely understand the
15 section on teachers.
16 You describe earlier in your report a little
17 bit, not to any great detail, credential standards
18 that come through the CTC. And in those standards to
19 mastering the content knowledge contained within
20 those standards, subject matter, competence and
21 mastery of fundamental strategies, that may be a
22 simplification for those terms, the standards are
23 suggesting in this section that the California
24 Content Standards require qualifications above and
25 beyond or in addition to what is currently required

1 by the CTC?
2 A. Yeah. Let's describe our teacher analysis.
3 I did a little bit of that at the last session. But
4 I think to provide context for the question --
5 As you'll note, we did not -- when we --
6 when we did the teacher section team, the -- for the
7 appendices, we did not break down those sections,
8 sort of subqualities or subresources, what we did
9 with instructional materials or technology or
10 facilities.
11 We did not bunch together characteristics of
12 teachers, and then, put a check next to the
13 standards, basically, in that same fashion.
14 What we did, instead, when we saw where
15 the -- where a standard was aligned with some other
16 aspect of the requirements for becoming a teacher in
17 California, whether it's something off the subject
18 matter examinations or something from the other
19 credential processes, the goal was to show how there
20 is a link between what it takes to become a teacher
21 in California and the specific content standards in a
22 number of different places.
23 So the analysis you probably saw was
24 different in that regard. And we didn't do the
25 summation of the content standards in the same kind

1 of way in which standards imply with teacher
2 resources, because that's not how we analyze
3 teachers.

4 Does that make sense?

5 Q. Yeah.

6 A. Okay.

7 Q. So I have a better idea, would your
8 testimony -- I'm still not sure about the answer to
9 my question, which is, then, some requirements for
10 teacher qualifications come from California -- from
11 the CTC?

12 A. Right.

13 Q. Are you suggesting that those requirements
14 really aren't the minimum requirements, because other
15 things are required or may be applied by the
16 California Content Standards?

17 A. The entire analysis in the entire report is
18 all based on what the State of California says is
19 necessary. We did not go beyond the -- any -- the
20 four corners, in our view, of any document or
21 publication or requirements set forth by the State of
22 California itself.

23 And in regard to teachers specifically, we
24 looked at the various requirements for becoming a
25 teacher in California that California CTC did -- has

1 standards, even though legislation suggests that
2 teachers should have those qualities. That's a
3 question of implementation and enforcement that I
4 don't have any specific opinion on --

5 Q. Okay.

6 A. -- one way or the other.

7 Q. All right. There's nothing I have next. I
8 think that's it.

9
10 (Whereupon there was a
11 discussion off record.)

12
13 MR. HAJELA: Can we go off the record for a
14 minute?

15 MR. EGAN: I have one follow-up question
16 on -- that may relate to one of the questions you
17 asked.

18 MR. HAJELA: Okay.

19 MR. EGAN: You may want to hang around for
20 just a minute --

21 MR. HAJELA: Yeah.

22 MR. EGAN: So what I think I'll do -- we're
23 off the record.

24

25 (Whereupon there was a

1 published and linked those to the content standards.

2 So I think, in the answer to your question,
3 is that we didn't -- we didn't go beyond anything
4 that the CTC or the legislature has already said is
5 required of California teachers. But we stayed
6 within those corners --

7 Q. Okay.

8 A. -- basically.

9 Q. I think I understand.

10 A. Yeah.

11 Q. So what we're talking here about the link
12 between what's in the standards and what teachers
13 ought to know?

14 A. Right.

15 Q. But you're saying that somebody could be
16 credentialed, but yet, perhaps, not -- has not
17 mastered all the content standards and are not really
18 qualified?

19 A. I'm not saying that one way or the other.
20 Because I don't know whether these credential
21 requirement are actually implemented or enforced,
22 which is one of the big difficulties here.

23 It is entirely possible that a teacher may
24 get credentialed and not have mastered the subject
25 matter content knowledge as necessary to teach to the

1 discussion off record.)

2

3 EXAMINATION BY MR. EGAN

4

5 MR. EGAN:

6 Q. Good morning, Dr. Koski. And
7 congratulations on your --

8 A. Thanks.

9 Q. -- new degree.

10 On the our last deposition, I asked you to
11 look to, I think, two different types of records.
12 One was a copy of the agenda from the meeting you
13 attended at UCLA. And your counsel has produced
14 that.

15 I also requested that -- you will recall in
16 your testimony, you indicated that you thought you
17 might have some documents regarding district policies
18 with respect to social promotion. Did you look for
19 those documents?

20 A. I did.

21 Q. Okay. Were you able to find any such
22 documents?

23 A. No.

24 Q. Okay. Thank you.

25 MR. EGAN: Off the record.

1
2 (Whereupon there was a
3 discussion off record.
4 Mr. Hajela left the room.)
5

6 MR. EGAN:

7 Q. Dr. Koski, have you consumed any substances
8 that would keep you from giving your best testimony
9 this morning?

10 A. No.

11 Q. Okay. Do you have any other reason that
12 you're not able to give your best testimony today?

13 A. No.

14 Q. Okay. Have you discussed your deposition
15 with anyone since we last met?

16 A. I had one telephone call with Ms. Welch.

17 Q. Okay.

18 A. And in that telephone call, we -- she asked
19 me if I had looked for the documents that we had
20 talked about. I said I had looked for the document.
21 I didn't find the document. I asked her what time we
22 had to start. She said 9:00.

23 Q. Okay.

24 A. And let's see if there's anything else from
25 that conversation?

1 A. No.

2 Q. Okay. Any discussions regarding the
3 Williams case since we last met with anyone?

4 A. (Pausing.) Not -- no. Not specifically the
5 Williams case. No.

6 Q. Generally topics were involved in the
7 Williams --

8 A. Well, I've talked to a lot with people about
9 issues regarding quality education in California
10 since then. It's part of my job.

11 Q. Okay. Did you review any documents in
12 connection with your deposition today?

13 A. No.

14 Q. Okay. Did you review a report?

15 A. No.

16 Q. When was the last time you read your report?

17 A. (Laughter.) Probably in September of last
18 year. That's the last time I reviewed my report.

19 You mean other than the expert --

20 Q. That we've discussed.

21 A. -- that we've been going along -- yeah.

22 Q. Let me ask you. Other than the fact that
23 you've now received your doctorate -- in what is your
24 doctorate in?

25 A. It's in administration and policy analysis

1 Ms. Welch also told me she was going to be
2 providing a copy of the agenda from the July 2002
3 meeting at UCLA.

4 Q. Okay. Did you also look for any notes that
5 you might have related to the UCLA conference?

6 A. Yes.

7 Q. Did you find any?

8 A. I didn't find anything, other than to the
9 extent any such related materials would be produced
10 that I provided to counsel. I did not find anything
11 additional to that.

12 I don't know whether or not there was
13 anything in the document I gave to counsel in the
14 first place. So I couldn't -- don't -- I couldn't
15 find anything else.

16 Q. Okay. Did you discuss your deposition with
17 anyone besides Ms. Welch?

18 A. Um, only my students and my wife to tell
19 them that it's still going on.

20 Q. Okay. Anything that you discussed with your
21 students beyond the fact that it was still
22 continuing?

23 A. No.

24 Q. Okay. Did you discuss your expert report
25 exhibit with anyone since we last met?

1 from the school of education at Stanford.

2 Q. Did you prepare a doctorate thesis?

3 A. I did.

4 Q. What was the subject of the thesis?

5 A. The subject was the politics of judicial
6 decision making in educational reform litigation.

7 Q. Other than that, are there any other changes
8 in the resume that is attached to your report
9 currently?

10 A. There's one additional publication, I
11 believe.

12 Q. Okay.

13 A. That um, is forthcoming. It's a forward
14 essay to a symposia issues of juvenile justice
15 policy. And it's titled "The Political Construction
16 of Youth Crimes and its Policy Consequences."

17 Q. Okay. Is there anything else in your
18 experience or education that you think qualifies you
19 to render the opinions set forth in your expert
20 report that are not identified in your resume?

21 A. I'm -- I will say that, you know, to the
22 extent this is calling for a legal opinion, I'm not
23 going to render a legal opinion on my expert
24 qualifications.

25 The methodology we used in the report was

1 one that I -- I'm -- I and my team are imminently
2 qualified to utilize and to make the conclusions that
3 we made in the context of the report.

4 Q. Okay. My question was: Was there anything
5 in your -- anything else in terms of personal
6 experience or education or training?

7 A. Beyond having -- you know, I teach students
8 on a daily basis. And, I mean, just for the
9 record --

10 MS. WELCH: Objection. That calls for a
11 legal conclusion.

12 THE WITNESS: Yeah. I'm not rendering a
13 legal opinion.

14 MR. EGAN: Okay.

15 THE WITNESS: I want to make that clear.

16 MR. EGAN:

17 Q. I understand that.

18 A. Yeah.

19 Q. That's -- the question is, again: Is there
20 anything else that I should be aware of that relates
21 to your qualifications to render opinions that are
22 not set forth in your resume? That's all I'm asking
23 you.

24 A. The -- the difficulty I have with the
25 question -- I'm not sure what it means to be related

1 Q. What response did Mr. or Dr. Mintrop provide
2 to your presentation?

3 A. He provided a couple of brief comments on
4 the text of the paper. He did not provide any
5 substantive critique of either the methodology of the
6 content. I would regard his critique as mostly
7 stylistic, frankly.

8 Q. Can you give me an additional specificity as
9 to what the critique --

10 A. The only critique that I remember was he
11 mentioned that it -- at one point, I characterized --
12 I used an adjective describing California's content
13 standards in the systemic course reform efforts
14 around the standards. That was not -- I was outside
15 the scope opinion and may have been misleading. And
16 I don't remember what the adjective was,
17 specifically.

18 Q. Do you remember if you changed your paper in
19 response --

20 A. I did. I deleted the adjective because I
21 agreed with the analysis -- with his comment. It was
22 outside the scope my analysis --

23 Q. Okay.

24 A. -- to making that kind of judgment.

25 Q. Was the deletion -- what was the basis for

1 to the opinions that I have here.

2 Because as I said, as I have stated to the
3 fact that this was a methodology that was very
4 deliberately set forth and very clear and
5 transparent, and the fact that we consulted with
6 Dr. Darling-Hammond all along. And that I, myself,
7 was both a doctoral student in education and members
8 of our team were teachers, and all were very good
9 readers. This is -- I'm not sure what more to say
10 about that question.

11 MR. EGAN: Okay. Let me have our next
12 exhibit marked.

13
14 (WHEREUPON EXHIBIT 35 WAS
15 MARKED FOR IDENTIFICATION)

16
17 MR. EGAN:

18 Q. Can you identify Exhibit 35?

19 A. It appears to be the agenda for the July
20 14th, 2002 conference that we had at UCLA.

21 Q. Okay. And under the agenda 9:50, it
22 indicates:

23 "Bill Koski standards;
24 response by Rick Mintrop."

25 A. Yes.

1 the deletion?

2 MS. WELCH: Objection. Vague.

3 THE WITNESS: It was -- again, it was
4 outside the scope of my analysis to be drawing, what
5 appeared to be, an opinion drawn. And he -- it --
6 his comment was that it appeared -- it was something
7 that I didn't take a look at. So I ought not render
8 a judgment on that. And I agreed.

9 MR. EGAN:

10 Q. Did he provide any -- did you receive
11 anything in writing from Dr. Mintrop?

12 A. No.

13 Q. Okay. Under the agenda 2:45, there's a --
14 it indicates:

15 "Mike Russell (via
16 conference call):
17 Accountability; response by
18 Bill Koski."

19 Did you provide a response to a
20 presentation by Mr. Russell?

21 A. Yes.

22 Q. And what was the subject of Mr. Russell's
23 presentation?

24 A. My recollection is that he presented and
25 described his project regarding his analysis of the

1 California's Academic Performance Index.
 2 Q. Okay. And did you provide him with a
 3 response, if any? Did you provide to Mr. Russell --
 4 A. I provided some, both positive feedback, on
 5 many of things that I thought were interesting that I
 6 learned about from his paper, and also some
 7 suggestions for him, as well.
 8 Q. Did you provide anything in writing?
 9 A. Not to him. No.
 10 Q. Did you make any written notes of your
 11 suggestions or comments?
 12 A. I did have some written notes. Yes.
 13 Q. Did you still have those?
 14 A. I do not have those anymore.
 15 Q. Do you know what happened to them?
 16 A. At some point, I provided them to um,
 17 Morrison & Foerster, if they were contained in my
 18 materials. Let me just reflect.
 19 I gave -- I handed it to Morrison & Foerster
 20 if they existed. Still, they would have been
 21 contained in there.
 22 Q. Okay. But your recollection is that you did
 23 have some notes of your response to Mr. Russell?
 24 A. Yes.
 25 Q. Okay. What response, other than the

1 positive responses, what responses did you provide to
 2 Mr. Russell's presentation?
 3 A. I -- the only specific thing I remember was
 4 I suggested that it was a very good critique of the
 5 API. But what would be -- I thought that he -- it
 6 might be helpful for him to discuss alternatives or
 7 ways of improving the system.
 8 There was, as I recall, a very cogent
 9 critique of the system. But not so much of the way
 10 of talking about how this is supposed to be improved
 11 at that time.
 12 There was also -- let me think. Contract --
 13 MS. WELCH: Just for the record, I have a
 14 problem with Professor Koski providing what he, you
 15 know, remembers of his review of the Russell paper.
 16 But this is outside of the scope of what he's been
 17 asked to do for purposes of our case, rendering an
 18 expert opinion.
 19 MR. EGAN: His report does discuss the
 20 accountability system. That's a subject that I'm
 21 asking him. But I think it is certainly appropriate.
 22 THE WITNESS: I want to make it clear that
 23 what I did, in response to Mr. Russell's paper, was
 24 far outside of the work that I did in connection with
 25 this -- with my report for the case. And that's my

1 view of it.
 2 And I certainly wasn't asked to provide any
 3 expert opinion on the academic performance index,
 4 which, is my understanding of Mr. Russell's paper. I
 5 don't know how to answer that question.
 6 MR. EGAN: Okay. Okay.
 7 THE WITNESS: Not his work, but work that he
 8 relied upon in the paper. And I -- I can't remember
 9 whose work it was.
 10 But I suggested that he might want to follow
 11 up with the person whose work it was and verify it,
 12 basically. And I can't remember whose work --
 13 MR. EGAN:
 14 Q. Do you remember what the question --
 15 A. No. I don't. I don't -- I'm -- I can't
 16 remember.
 17 Q. Okay. Was there any discussion of the Lou
 18 Harris poll of California teachers at this July 14th,
 19 conference?
 20 A. I don't have an independent recollection of
 21 that -- the discussion of that right now. I mean, if
 22 you showed me something, it could refresh my
 23 recollection. But I don't remember that
 24 specifically. I don't remember even when the poll
 25 came out.

1 Q. Okay. Is the paper that you presented at
 2 the conference going to be published in an academic
 3 journal?
 4 MS. WELCH: Objection. Calls for
 5 speculation.
 6 THE WITNESS: I don't know whether or not it
 7 will. Yeah. It may be.
 8 MR. EGAN:
 9 Q. Is there a plan to have it published in an
 10 academic journal to your --
 11 A. There is no current plan. No. (Shrugging.)
 12 My own opinion is I would like to see a lot
 13 of work that's been done in connection with this
 14 published, but that's my own opinion.
 15 Q. Have you had any discussions with Dr. Oaks
 16 regarding publication of various papers that were
 17 presented at this July 14th conference in an academic
 18 journal?
 19 A. Yes. That was months ago. I don't know
 20 what has happened to that. I don't know if there are
 21 current plans to make that happen.
 22 Q. What was the discussion with Dr. Oaks that
 23 you had some months ago?
 24 A. She suggested that there might be an
 25 academic journal that was interested in publishing

1 the papers. And I said, "Wow! That's great. I'd be
2 interested in participating."

3 Q. All right. How long ago was that,
4 approximately?

5 A. Whew! Oh! I would say as much as four
6 months ago.

7 Q. Okay.

8 A. Quite some time.

9 Q. And at present, you have no knowledge of
10 whether your paper will be published in some form in
11 an academic journal?

12 MS. WELCH: Objection. Asked and answered.

13 THE WITNESS: Yeah. I have no knowledge. I
14 mean, that I haven't heard anything, I would surmise
15 no, at this time. But it may. I don't know.

16 MR. EGAN:

17 Q. Okay. Are you familiar with Dr. Oaks's idea
18 that is the institute for --

19 A. I don't recall.

20 Q. Are you familiar with the Ideas Online
21 Newsletter, TCLA? Teaching --

22 A. No. I'm not, actually.

23 Q. All right. You've never visited that web
24 site?

25 A. No. I haven't.

1 MR. EGAN: You -- so you have -- again,
2 you've testified that -- as to what your state of
3 knowledge is with regard to publications of your
4 paper.

5 A. Yeah.

6 Q. Okay. Have you -- is the paper that you
7 submitted to Dr. Oaks for publication -- for possible
8 publication materially different than your expert
9 report?

10 A. No.

11 Q. Okay. Is it identical?

12 A. In its current form, it's identical.

13 Q. Okay.

14 A. My view is it will need to be shortened for
15 academic publication. But it substantially won't
16 change.

17 Q. Okay. The title of the -- of your report
18 is -- I believe it refers to textual analysis.

19 A. Correct.

20 Q. What did you mean "textual analysis"?

21 MS. WELCH: Objection. Asked and answered.

22 THE WITNESS: We did discuss this last week.

23 And again, my view is that this was strictly an
24 analysis of the text of California State Content
25 Standards and related materials.

1 Q. Okay. Do you know who is Marshall Smith?

2 A. Yes.

3 Q. Who is Mr. Smith?

4 A. He's the former dean of Stanford School of
5 Education under the Secretary of Education in the
6 Clinton Administration. And currently, I think the
7 program officer for the Hewlett foundation.

8 Q. Have you had any discussions with Mr. Smith
9 regarding the standards paper that you presented at
10 the July 14 conference?

11 A. No.

12 Q. Do you have any knowledge of whether he will
13 be reviewing your article prior to the publication in
14 the academic journal?

15 A. No. But you should know the review process
16 is confidential. You usually don't know who your
17 peer reviewers are in the academic journal that's
18 interested -- that you suggested that to me just now.

19 Q. Okay. I'll submit it's not confidential.
20 I'll submit -- I'll submit it's been publicly on the
21 Williams web site.

22 A. Oh! Well --

23 MS. WELCH: His expert report has been --

24 THE WITNESS: You asked published in the
25 journal. And I said --

1 And as I mentioned earlier, we -- we
2 attempted to not go beyond the four squares of
3 those -- four corners of those documents in doing the
4 analysis.

5 MR. EGAN:

6 Q. Okay. I think you also testified that you
7 had various -- you had discussions with various
8 faculty members at Stanford School of Education
9 regarding standards. Is that correct?

10 A. We had discussions with Linda
11 Darling-Hammond, definitely, and with a couple of
12 other people. Whether or not they were faculty of
13 standards, I don't recall.

14 Q. Okay. Did those discussions relate to your
15 report -- strike that.

16 Did those discussions in any way influence
17 what you included in the report?

18 MS. WELCH: Objection. Vague.

19 THE WITNESS: The -- we did discuss with --
20 as I testified already -- a person in the science
21 education, the issue of instructional materials for
22 early elementary grades.

23 And as I mentioned before, the outcome of
24 that discussion was that there was no general rule as
25 to instructional materials that we could apply

1 uniformly, and that we needed to make more ad hoc
2 conservative determination on a standard-by-standard
3 base.

4 Q. Would a person who had read the standards
5 and frameworks, and other materials that you cite in
6 your report, be as capable as you for providing an
7 opinion as to which of the resources were required or
8 implied by the standards?

9 MS. WELCH: Objection. Calls for
10 speculation. And it's definitely an incomplete
11 hypothetical.

12 THE WITNESS: The work that we undertook was
13 based on the methodology of having three people reach
14 an agreement on the decision.

15 MR. EGAN: Okay.

16 THE WITNESS: This -- it's -- this work is
17 about the methodology. It's not -- it's about making
18 sure that there was a consistent determination as to
19 what the standards said and implied and what the
20 related documents said and implied. That's the
21 strength of the work. And that's the conclusions
22 that were drawn.

23 Whether or not anybody could have read these
24 things and come to the same conclusions, I have no
25 idea. It depends on the individual.

1 conditions.

2 What the paper does, it identifies what the
3 State of California itself says in terms of resources
4 that are necessary to teach to and to learn the
5 standards.

6 So I would, at minimum, say that those are
7 the basic educational conditions. There may be other
8 basic educational -- basic conditions that one could
9 say ought to be provided to kids in California.

10 What this exercise was that -- determining
11 was the State of California says would be at minimum
12 basic educational conditions and resources.

13 Q. Okay. My question was on basic educational
14 conditions. And I think your answer referred to
15 basic educational conditions and resources.

16 Do you differentiate between basic
17 conditions and basic resources?

18 A. Oh! Okay. Conditions and resources we put
19 together because conditions might be the qualities of
20 teachers.

21 The conditions might be the temperature in a
22 classroom. These kinds of things. They could also
23 be characteristics as resources. We wanted to have
24 something that encompassed both conditions, and
25 others -- or some people might consider a resource.

1 All I know is that the strength of the work
2 is that there were three of us that reached a
3 consensus.

4 MR. EGAN:

5 Q. Okay. But based upon -- so that there's
6 nothing in the nature of the standards regarding the
7 frameworks themselves that would keep an individual
8 from reading them and making a conclusion as to
9 whether a particular resource was required or
10 suggested, as you have done?

11 MS. WELCH: Same objection. Also asked and
12 answered.

13 THE WITNESS: A person could individually
14 read the standards. And depending upon their
15 knowledge and their reading ability, among other
16 things, could make determinations as to the
17 resources. Whether or not those determinations would
18 be appropriate to make those determinations is
19 something I can't speak to.

20 MR. EGAN:

21 Q. Your title also refers to basic educational
22 conditions. How do you define basic educational
23 conditions?

24 A. I don't have a specific definition for basic
25 educational -- encompassing basic educational

1 Q. Okay.

2 A. Yeah.

3 Q. Does your report in any way attempt to
4 define what resources are required for basic
5 education?

6 A. My report, once again, only identified those
7 resources and conditions that the State of California
8 itself has identified as necessary or recommended to
9 teach to and learn the state's content standards.
10 It's pretty clearly indicated in my report. It is
11 not an attempt to create an entire educational system
12 that would provide an adequate or basic education.
13 There would be many, many, many, many more components
14 to that system, including instructional and
15 administration --

16 Q. Okay.

17 A. -- facilities, and on and on.

18 Q. Okay. On Page 1, Paragraph One of your
19 report --

20 A. Uh-huh.

21 Q. -- you indicate the premise in the third
22 sentence, under "standards movement" is: "All
23 children can achieve high levels."

24 A. Uh-huh.

25 Q. And what is the basis for that statement?

1 A. Wow! I will -- the best I can answer that
2 statement is that um, there is a history behind the
3 standards bases reform movement that is grounded,
4 both in politics and academic research. And the
5 standards-based reform movement was a response to the
6 idea that, basically, a psychological idea that
7 people fall in a continuum on a bell curve in the
8 ability to achieve and not achieve. That was an
9 accepted dogma for many, many years.

10 Q. Okay.

11 A. Later on, there was cognitive research
12 demonstrated that people fall within a pretty narrow
13 range of potential abilities. The result of that was
14 people don't need to fall along a bell curve. In
15 fact, all people have a potential of learning at a
16 very high level.

17 Similarly, there was a social psychological
18 research that demonstrated that expectations of
19 schools and teachers might have an impact on
20 children's -- an impact on children's own learning
21 and achievement.

22 And the out -- the flip side to that
23 research would suggest that if you set higher
24 expectations and standards, kids might be able to
25 achieve at higher levels.

1 The United States Congress agreed with that
2 when it passed things like Gold 2000 legislature and
3 re-authorized ESA in the 1990's.

4 And so, the political side of this is that
5 Congress also agreed with that research, that all
6 children can achieve at higher levels.

7 Q. Okay. Page 1, Paragraph One, the very end,
8 discusses the provision of necessary education
9 conditions and resources.

10 A. (Nodding head.)

11 Q. Do you -- I'm reading --

12 A. Yes.

13 Q. Are all of the educational conditions and
14 resources that you're talking about of equal
15 importance?

16 MS. WELCH: Objection. Vague.

17 THE WITNESS: That was outside the scope of
18 our analysis.

19 Again, I really want to characterize our
20 analysis as being what the State of California itself
21 has to say about what's the necessary condition or
22 resource or recommended condition or resource for
23 children. We did not undertake any analysis as to
24 what the relative importance of the conditions and
25 resources are.

1 MR. EGAN:

2 Q. Do you have an opinion as to whether any of
3 these resources are of relatively higher importance?

4 MS. WELCH: Objection. Asked and answered.

5 THE WITNESS: As I sit down and really think
6 about it, I don't have an opinion right now on that.

7 No. And again, that would be a personal opinion.

8 MR. EGAN:

9 Q. And Page 1, Paragraph Two of your report:

10 "As California established

11 definitions that define the
12 degree to which students have
13 met the content standards."

14 MS. WELCH: Objection. Vague.

15 THE WITNESS: California has adopted um, the
16 California Standard Test which reflects -- is
17 intended to reflect the knowledge and skills that are
18 contained in the state's content standards.

19 Whether or not the California Standard Test
20 reflects all of those things, whether or not it -- it
21 is a valid test, and actually does reflect those
22 things that we -- that the standards want all
23 children to know and be able to do, I don't know. I
24 don't have -- I have never checked the evaluation of
25 the test before.

1 MR. EGAN:

2 Q. Okay. And Page 1, Paragraph Two, you say --
3 you state the performance standards, close quote.

4 What do you mean by performance standards?

5 A. Performance standards -- and, again, this is
6 not my terminology. It's pretty common terminology,
7 the standards. Performance standards.

8 I have identified, basically, a benchmark
9 for kids that would indicate that the children have,
10 in fact, learned and are able to do the things set
11 forth in the content standards.

12 Q. Okay.

13 A. The only effort that I'm aware of in
14 California is of the California Standards Test.
15 There may be other efforts to benchmark and make that
16 determination. But the California Standard Test is
17 the only effort that I'm aware of. And I'm not -- I
18 have no opinion whether or not they're successful in
19 it.

20 Q. Do you know whether the state has
21 established specific levels of performance with
22 respect to the test that you've identified?

23 A. I'm not sure I understand the question. Can
24 you say it again? I don't know what that means.
25 Where state identified specific levels of

1 performance --

2 Q. Does the state identify those who are
3 successful, unsuccessful, who achieve in the 90
4 percentile, 20 percentile? Some other standard?

5 A. If you're asking whether or not there's a
6 cut score out there that identifies whether or not
7 kids have learned -- been able to do the things in
8 the content standards, I'm not aware of any specific
9 cut score, although the high school exit exam, I
10 imagine, does have cut scores that have been
11 determined. I have not looked at any specific
12 determinations there.

13 Also, to the extent that kids are supposed
14 to know and be able to do all the things in the state
15 standard, one could argue that all of the things need
16 to be achieved by kids. That's the expectation.

17 Q. Okay. With regard to your report, your
18 discussion at the bottom of Page 1 of the
19 standards-based reform or movement --

20 A. Uh-huh.

21 Q. -- what was the objective of the
22 standards-based reform, as you described it here?

23 A. The --

24 MS. WELCH: Objection. Calls for
25 speculation.

1 less than equitable view.

2 It's just the standards are higher, and
3 then, creates one side fits all policy irrespective
4 of the needs of kids in order to achieve those
5 standards. So we may have -- there may be many
6 different kinds of objectives out there.

7 Now, all of this is outside the scope of the
8 work that we did in my report, I might say. But that
9 there are some possible speculations as to what
10 various actors in the system may have had as an
11 objective in the movement.

12 Q. Okay.

13 THE WITNESS: Could I go off the record?

14
15 (Whereupon there was a
16 discussion off record.)

17
18 (Whereupon a recess was taken.
19 Off the record at 10:02 and back
20 on the record at 10:06.)

21
22 MR. EGAN:

23 Q. Dr. Koski, referring to your report, the
24 last sentence on Page 1, the paragraph continues on
25 to Page 2. It refers to:

1 THE WITNESS: A lot of players in the system
2 had a lot of different objectives. And I can't
3 speculate as to which player has which objective in
4 doing this. And I'm not sure that everybody would
5 agree as to what are the objectives of
6 standards-based reform movement.

7 MR. EGAN:

8 Q. Can you give me the two or three, you know,
9 prime --

10 A. Sure.

11 Q. -- examples of the objective --

12 A. Sure.

13 Q. -- as you understand it?

14 A. One of my creative coherence in the system,
15 by linking state policies to various state
16 educational policies to the standard themselves,
17 because there was a lot of variation in terms of what
18 kids were doing in various school districts and what
19 various schools expected of kids.

20 There was a goal some people may be in
21 coherence in the system. That's systematic analysis
22 of the standards basic reform.

23 Other people may have the view that this was
24 equitable, that expects all kids to have the same
25 level. And it's -- there may be others that have a

1 "As most jurisdictions
2 failed to make any attempt to
3 define such OTL ..."

4 Which, I think, refers to the
5 opportunity to learn or school delivery standards.
6 What do you mean by "school district delivery
7 standards"?

8 A. The school delivery standards are very akin
9 to deliver the opportunity to learn standards. And
10 most people would probably lump them together.

11 It's just a nomenclature that is used for
12 standards that would indicate the processes the
13 resources and the structures within schools that
14 would allow teachers to teach to and kids to learn
15 the standards.

16 Q. Okay. So is it fair, then, to say that the
17 terms are interchangeable?

18 A. I would hesitate to say they're
19 interchangeable. All people define stuff. They
20 actually feel like they've created a different
21 definition. And whoever defined school delivery
22 standards may have been thinking slightly OTL
23 standards.

24 What I'm saying is that they're pretty akin
25 to each other. And that I think for a layperson's --

1 from a layperson's perspective, this looks like the
2 same.

3 Q. Okay. So --

4 A. I can't really answer that question, whether
5 or not they're identical.

6 Q. When you say that jurisdictions have failed
7 to make any attempt to define OTL or school delivery
8 standards, what do you mean? Specifically, are you
9 saying that the standards have not specifically
10 defined the opportunity to learn, or is it some
11 broader statement?

12 A. I am unaware of any systemic and
13 comprehensive effort to identify all of the
14 conditions, resources processes structures, and the
15 like, that would allow all children to achieve the
16 high -- achieve the content standards and know -- be
17 able to do the things in the condition standard which
18 is established by the various state jurisdictions.

19 Q. So then, is it fair to say what you're
20 referring to here is this concerted systematic effort
21 to define, as opposed to some unsystematic effort to
22 provide resources that would allow students to learn?

23 MS. WELCH: Objection. Vague.

24 THE WITNESS: I am saying that the -- I'm
25 aware of an effort to systematically link these

1 to learn?

2 MS. WELCH: Objection. Vague.

3 THE WITNESS: If the goal is to ensure and
4 provide a system of education that allows children to
5 achieve the state's content standards, this is a step
6 toward creating the coherence and creating that
7 system.

8 MR. EGAN:

9 Q. Okay. On Page 2, Paragraph One:

10 "... the state has begun to
11 hold schools accountable for
12 student performance with a
13 system of rewards for those
14 schools that meet their academic
15 goals and graduated punishments
16 for those that fail."

17 Do you see where I'm reading?

18 A. Yes.

19 Q. Okay. What are these systems that you're
20 referring to?

21 A. It's basically the Public School
22 Accountability Act and its various provisions for
23 both providing rewards and incentives to teachers and
24 schools and potential intervention for the
25 under-performing schools, and potentially negative

1 opportunities to learn to state content standards in
2 any meaningful way, including providing compensatory
3 remedial support where that's necessary for kids.

4 There may be many efforts out there to say
5 what kids need in the abstract --

6 MR. EGAN: Okay.

7 THE WITNESS: -- apart from the standards.
8 But that's not what I'm saying.

9 MR. EGAN:

10 Q. Okay. Are you aware of any effort by the
11 State of California to link the various resources
12 that you've identified anywhere of the various
13 resorts you've identified to the content standards?

14 A. I am aware of what legislature and
15 regulations have to say about California's efforts to
16 link its resource provision to the standards. And I
17 think that's basically what the first part of this
18 paper describes, linking teachers' qualifications and
19 requirements to the standards, linking textbooks and
20 instructional materials to the standards and the
21 like. Those are the efforts that I'm aware -- there
22 may be others out there.

23 Q. Okay. And I take it that you -- that is a
24 step in the right direction in the -- within the
25 contents of setting the conditions for opportunities

1 sanctions if there isn't improvement over some period
2 of time.

3 Q. Are there comparable Federal systems that
4 you're aware of?

5 A. There is legislature called No Child Is Left
6 Behind Act, which aims to raise student achieve --
7 demographic achievement. And if that doesn't happen,
8 there are opportunities -- there are opportunities
9 made for the children to either leave a failing
10 school or receive compensation or receive some type
11 of remedial tutoring services or the like to help
12 them achieve better.

13 Q. Okay.

14 A. There may be others out there, by the way.
15 I'm just -- that's the major one that comes to mind.

16 Q. Are you familiar with the High Priority
17 School Grant Program?

18 A. Not in any great detail. I've heard that
19 before.

20 Q. Do you have a general understanding of what
21 the High Priority School Grant Program does?

22 A. Hmm! No. I can't say I have a very good
23 general understanding. No.

24 Q. Okay. On Page 2, second full paragraph, you
25 make the statement regarding, to the effect:

1 "It's not fair to hold
2 teachers and students
3 accountable when they are
4 hamstrung by resource
5 deficiencies."

6 What do you mean by "resource
7 deficiencies"?

8 A. If teachers did not have the resources
9 necessary to teach to the standards, and children
10 don't have resources necessary to learn the
11 standards, it's a very -- it's not fair to hold
12 teachers and students accountable for not achieving
13 the standards if they don't have the resources.

14 Q. Do you have any specific standards for
15 resources in this contents?

16 MS. WELCH: Objection. Vague.

17 THE WITNESS: What we have done here is we
18 have identified resources that the state itself
19 suggests are necessary or recommended for kids to
20 achieve at these standards. And to the extent those
21 resources are the -- certainly the necessary
22 resources are required, I would think it is not fair
23 to hold kids accountable.

24 MR. EGAN:

25 Q. Okay. On Page 2, Paragraph Two, you state:

1 contents?

2 MS. WELCH: Objection. Asked and answered.

3 THE WITNESS: The inequity that is -- that
4 some identifiable groups of kids perform in what we
5 would regard as a -- or strike that.

6 I don't -- that's not what I wanted to say.

7 The inequity is that some students, for
8 instance, perform well in terms of standards
9 achievement test and the like, and others do not
10 perform well.

11 And this is outside of the scope of my
12 opinion in this case. But I know there has been
13 research that has been generated that -- a lot of --
14 performances are correlated with race, ethnicity,
15 social, economic status in terms of the local school.

16 Q. Well, are you saying that it's outside of
17 the scope of your report, and that you really are not
18 able to opine upon the extent to which there are
19 existing educational inequities?

20 A. It is outside -- yes. That is definitely
21 outside the scope of my report.

22 I have read many other things that
23 demonstrate quite clearly that kids in lower income
24 schools and school districts don't have access to
25 certified teachers at the same rate as kids in higher

1 "That section describes the
2 state's legislative scheme for
3 standards-based reform and how
4 that scheme has the potential
5 for raising the bar for all
6 students on the one hand, but
7 also carries with it the risk of
8 further exacerbating the
9 existing educational
10 inequalities on the other."

11 What are you referring to?

12 A. Certainly, among those educational equities,
13 is student performance. Standardized --
14 standards-based assume we have the criterion is a
15 huge, major inequity in terms of student outcome in
16 that regard.

17 There's a huge amount of inequity in terms
18 of graduation rates in the state. There is an
19 inequity in terms of drop -- similar drop-out rates.
20 There is an inequity in rates A through G course
21 taking. There is an inequity in terms of advance
22 placement course taking. There is an inequity in
23 terms of college attendant rates among populations of
24 students and so on and so forth.

25 Q. So in what sense is the inequity in those

1 S E School Districts.

2 Kids in primarily -- or largely
3 African-American who are at them don't have access
4 to -- Latino that -- as I said before, that's not
5 part of my opinion here.

6 Q. How does standards-based reform carry a risk
7 of exacerbating the inequities that you've referenced
8 in the --

9 A. Depends on the policy response to a
10 demonstration that some kids are not achieving at
11 high levels, and other kids are achieving at high
12 levels.

13 If the policy response is to provide
14 sufficient resources and conditions to allow the kids
15 who are meeting the standards, that we expect them to
16 meet, that would be an inequitable result. If we do
17 not -- if the policy response is to not provide those
18 resources, that would be inequitable and pose similar
19 results because it identified the low-performing
20 school kids as somehow incapable of achieving high
21 standards, even though the same opportunities they
22 didn't have of kids who may have achieved at the high
23 standards.

24 Q. Okay. The bottom of Page 2, you refer to:
25 "... children to reach

1 proficiency ..."

2 What do you mean by "proficiency"?

3 A. Can you point out --

4 Q. It's the --

5 A. I see.

6 Q. -- first sentence from the bottom.

7 A. For kids to have acquired the knowledge or

8 developed the skill that the standards encompass.

9 That's proficiency.

10 Q. Okay. Are there other levels that can be --

11 that have been defined by the state with respect to

12 the extent to which content standards have been

13 learned?

14 MS. WELCH: Objection. Vague.

15 THE WITNESS: I don't know what you mean.

16 Are there levels -- I mean --

17 MR. EGAN:

18 Q. Beside proficiency.

19 A. Oh! Well, when I look at it -- when I look

20 at a -- and not proficiency. I'm not quite sure

21 what --

22 Q. That's okay. I -- fine. If -- I was

23 discussing if you are aware if the state has defined

24 specific levels --

25 A. It's -- maybe we're not talking about the

1 same thing here.

2 Q. Okay.

3 A. I'm talking with regard to any specific

4 standard. I am unaware of the state having to find

5 various levels of research to any specific standards.

6 So I can't.

7 Q. Okay. With regard to Page 3,

8 standards-based reform in California, do you know

9 whether California's standards-based reform includes

10 funding to school districts to purchase instructional

11 materials aligned with the content standards?

12 A. I'm familiar with legislature that provides

13 that the instructional materials are supposed to be

14 aligned with the content standards. And I'm familiar

15 with that legislature.

16 I am also familiar with legislature that

17 provides funding for school districts to purchase

18 materials. I don't know whether or not that's

19 funding or not.

20 Q. Okay.

21 A. But I'm familiar --

22 Q. Okay.

23 A. -- with that.

24 Q. Do you consider that part of California's

25 standards-based reform of the program?

1 A. To the extent that the instructional -- that

2 the standard -- California requires its instructional

3 materials to be aligned with textbook to the --

4 aligned with the state standards, I would call that

5 part of the standard reform effort.

6 Q. I think you previously referenced some of

7 the mechanisms in place to the effect that teachers

8 are taught consistent with the content standards. Is

9 that correct?

10 MS. WELCH: Objection. I think that

11 mischaracterize past testimony.

12 THE WITNESS: The report itself identifies

13 legislature that would seem to require that the

14 teachers be taught materials in alignment with the

15 state standard.

16 MR. EGAN:

17 Q. Again, in your opinion, is that, you know,

18 part of California's standards-based reform effort in

19 that --

20 A. Any effort by California that's actually

21 legislated and implemented and enforced, that would

22 align with what teachers should know and be able to

23 do with -- California Content Standards would be a

24 part of the systemic standards-base reform effort.

25 Yeah.

1 Q. I'd like to refer you to Page 4 of your

2 report. The paragraph under "Development of Content

3 Standards."

4 A. (Nodding head.)

5 Q. And I've got a question about the last

6 couple of sentences. But if you want to read the

7 whole paragraph to put it in context --

8 A. Sure.

9 Q. -- that's fine.

10 A. Sure. Okay.

11 Q. The second to the last sentence, you refer

12 to curriculum frameworks as "blueprints." What do

13 you mean by "blueprints"?

14 A. We discussed at length, I think, on day one

15 of the deposition what the difference was between

16 content standards and the curriculum frameworks.

17 And the curriculum frameworks are

18 blueprints, guidelines and specific lesson plans.

19 And otherwise, it -- that teachers can use what are

20 geared towards helping students learn the material

21 content standards.

22 Q. Okay. The reason I ask specifically about

23 "blueprints" is because you talk about blueprints and

24 suggested guidelines. And I infer that you are

25 trying to make a distinction between the two. And if

1 I understand your answer, that's not necessarily
2 true?
3 A. No. I'm not trying to make a distinction.
4 No.
5 Q. Okay. As you said, they are suggested, that
6 they are guidelines; is that correct?
7 A. This standard, in my view, are, you know,
8 blueprints, guidelines, lesson plans, suggestions,
9 however you want to call them.
10 I mean a lot of people may have many
11 different views on that -- on what they are. But
12 those might be words that they are using in
13 connection with them. I'm not trying to be exclusive
14 with the list. The standard -- the curriculum
15 frameworks, these say what they are in their -- into
16 the preambles. The difficulty is I don't have that
17 memory right now.
18 Q. Okay. I don't think any one of these ever
19 will.
20 A. Yeah.
21 Q. In that same sentence, you indicate that the
22 frameworks teachers use in developing standards
23 focuses on curricula. What are you referring to in
24 terms of standard focused curricula?
25 A. Teachers have the opportunity to develop

1 curriculum and lesson plans around -- that are geared
2 towards letting students obtain the knowledge and
3 skills that are set forth in the standards.
4 Q. In terms of developing identified, as I
5 understand it, that the framework will facilitate
6 curricula based upon and related to the content
7 standards?
8 A. The -- um, yeah. Is there a question there?
9 I'm not sure what to say.
10 Q. Well, I think you've answered it.
11 A. Yeah.
12 Q. On Page 5, under the "Mathematics," second
13 paragraph --
14 A. Okay.
15 Q. -- you refer to skills for the study of
16 advanced mathematics. And you stated in the content
17 of these disciplines "must be covered."
18 Does that mean they must -- these
19 disciplines must be covered with all students, or
20 just students who are taking these advanced courses?
21 MS. WELCH: Objection. Calls for
22 speculation.
23 THE WITNESS: I have to read the standards
24 and the curriculum frameworks to see what the states
25 own expectations are regarding these things to the

1 extent they don't put any limitations on whether or
2 not students ought to be learning the materia. They
3 would expect all students to be able to do and know
4 the things that are contained in these math content
5 standards.
6 MR. EGAN:
7 Q. So if I understand correctly, then, you
8 would expect all students to be exposed to or to take
9 algebra I, algebra II, geometry and precalculus?
10 MS. WELCH: Objection. Mischaracterizes his
11 testimony.
12 THE WITNESS: To the extent that it has the
13 expectation to the standards themselves by not
14 limiting them to any groups of students, then I would
15 expect all students to be able to do all of those
16 things.
17 I'm not making any determination as to what
18 students should know and be able to do. It's the
19 state itself that has set the expectations here.
20 MR. EGAN:
21 Q. Okay. Do you know whether algebra II,
22 trigonometry, precalculus are included as part of
23 what you've defined as California's high states
24 testing?
25 MS. WELCH: Objection. Compound.

1 THE WITNESS: I don't know, actually. Um,
2 and the term "high stakes testing" is pretty broad
3 and might concern whether it's standards test or high
4 school exit and on -- or on the, obviously,
5 California Standards Test for third graders is not --
6 could be trigonometry.
7 MR. EGAN:
8 Q. Not yet?
9 A. Not yet.
10 Q. Well, let me just break it down.
11 Do you know whether any of the subjects that
12 I have referenced are covered by the high school exit
13 exam?
14 A. I do not know. We did not do an analysis of
15 the -- I would have loved to, but --
16 Q. How about for the California Standards Test?
17 A. Same answer.
18 Q. Okay.
19 A. I do not know specifically.
20 Q. Okay.
21 A. Yeah.
22 Q. Let me refer you to Page 6, the first
23 paragraph.
24 There's a reference to the high school
25 standards. And I believe this refers to science.

1 It's defined into groups.
 2 A. Yeah.
 3 Q. "Standards all students are
 4 expected to achieve and
 5 standards that all students
 6 should have the opportunity to
 7 learn."
 8 See where I'm --
 9 A. Yes.
 10 Q. Okay. Is this an example of -- of the state
 11 indicating that not all students are expected to meet
 12 certain standards?
 13 A. The state in the science content standards
 14 has been divided into two categories. One -- that's
 15 one category is the standards -- is the students'
 16 requirement expected to achieve, and the second is
 17 that all student should have the opportunity to
 18 learn.
 19 I believe this implies the opportunity to
 20 learn is that this be sufficient resources for all
 21 students -- give them the opportunity to learn those
 22 things. But the state said, in terms of our
 23 expectations in achievement, it's limited to that
 24 first category.
 25 Q. Okay. Fine. On page -- again, on Page 6,

1 the heading line in "California policy with
 2 standards" --
 3 A. Uh-huh.
 4 Q. -- you reference a -- you state that the
 5 state adopt the curriculum frameworks instructional
 6 terms and others are intended to be aligned to the
 7 standards.
 8 Again, is this what -- you consider this to
 9 be, again, part of California's standards-based
 10 reform program?
 11 A. To the extent that California has adopted
 12 curriculum frameworks that are aligned with the
 13 standards, I would consider that part of the
 14 standards-reform effort.
 15 Q. Okay. On Page 6, Note 7, there's a
 16 reference to California Department of Education
 17 2000-C, Page 43.
 18 I could not find that document identified in
 19 your references.
 20 A. Really!
 21 Q. Yeah. I mean, I -- I found 2000-A and B on
 22 Pages 22 and 23. Starting on page -- the bottom of
 23 Page 2 --
 24 A. Uh-huh.
 25 Q. And I could have missed it, but I don't

1 think so. But do you recall what this document is?
 2 A. Bear with me for a second.
 3 Q. Sure.
 4 A. Let me read this.
 5 Q. Sure. Take your time.
 6 A. It's been three years since I've read it, I
 7 would bet.
 8 My best -- based on my reading of footnote
 9 7, my best supposition here is that this is a
 10 reference to the draft science curriculum frameworks.
 11 Q. Okay. Which I believe we have it?
 12 A. It could be reference to the state standards
 13 themselves. I can't be sure. Do we have those?
 14 Q. I think we do.
 15 A. Do you mind if I take a look?
 16 Q. Those are the standards framework?
 17 A. The standards.
 18 Q. I have -- those are the final standards, if
 19 you're referring to Exhibit 34. And I thought you
 20 referenced the draft. But if you want to take a
 21 minute to look, that would be fine. No problem.
 22 A. My difficulty here is the way it's written.
 23 It seems to -- it's written in the same way that the
 24 standards are written.
 25 Q. Okay.

1 A. The quotations in the parentheticals.
 2 Q. Let me ask this, rather than trying to do it
 3 now.
 4 A. Yeah.
 5 Q. Could you take a look and see if you can
 6 identify and just --
 7 A. Absolutely. I'll take a look and see if I
 8 can find it.
 9 Q. That's fine.
 10 MS. WELCH: No problem.
 11 THE WITNESS: That's fine.
 12 MR. EGAN:
 13 Q. Okay.
 14 A. Thank you.
 15 Q. Referring to Page 8 in the high school exit
 16 exam, is it correct that the high school exit exam
 17 only covers English language arts and mathematics?
 18 A. I don't know what the current exit
 19 examines -- my recollection, as discussed in this
 20 paragraph on Page 8, was that it only talked about
 21 English language arts and mathematics. There may --
 22 the legislature may have changed since then -- that
 23 time. I don't know for sure.
 24 Q. Okay.
 25 A. This discussion with the legislature says --

1 so --

2 Q. Okay.

3 A. I would add, by the way, that if you have
4 the California Education Code, you could read through
5 for yourself --

6 Q. Right.

7 A. -- what the legislature required.

8 Q. With regard to Page 10, Mr. Hajela asked you
9 some questions about reference to cash-strapped
10 districts.

11 A. Yes.

12 Q. And I believe you testified that your
13 knowledge -- you had personal knowledge and
14 experience with regard to certain school districts.

15 And you referenced West Fresno. What's your
16 knowledge of the cash situation at West Fresno?

17 MS. WELCH: Objection. The testimony will
18 speak for itself.

19 THE WITNESS: My understanding of the
20 knowledge of the West Fresno Districts are what I
21 read in various press accounts.

22 And that the district -- my understanding is
23 that the district is insolvent. And at some point,
24 the district became insolvent. And there was some
25 suggestion that the state might need to exercise --

1 future teachers."

2 What specifically did you mean by that?

3 A. As I go on to describe, in this section of
4 the paper, there are a number of legislative
5 regulatory requirements for teachers who want to
6 obtain or credential in California that are linked to
7 the standards themselves.

8 Q. Okay. Is there anything other than what you
9 set forth in your report that comes to mind in terms
10 of further implications for future teachers?

11 A. No. Again, the scope of the report really
12 is limited to what the State of California has
13 promulgated in terms of its own requirements for
14 teachers.

15 Q. On the top of Page 12, you indicate -- or
16 you state:

17 "There are no similar
18 requirements that will ensure
19 such familiarity and proficiency
20 among teachers already holding
21 state credentials."

22 Are you aware of any efforts by the
23 state to familiarize teachers -- current teachers
24 with the state content standards?

25 A. I'm not. But I'd be interested in knowing.

1 or that the district might need to obtain an
2 emergency loan from -- the state may have to exercise
3 its authority as receiver for the school district.

4 MR. EGAN: Okay.

5 THE WITNESS: I don't know whether that
6 happened or not.

7 MR. EGAN:

8 Q. Is your knowledge with regard to the Oakland
9 Unified School, based upon the same source, that
10 press release?

11 A. And the legislature and the like. Yes.

12 Q. Okay.

13 A. Yes.

14 Q. How about Ravenwood?

15 A. My knowledge with Ravenwood is somewhat
16 different. And the same thing -- I have a great
17 amount of knowledge in connection with the Embassy
18 against Delaine regarding Ravenwood's physical
19 condition.

20 Q. Okay. On Page 11 under the "Teacher
21 Credentialing Standards," the first sentence, you
22 indicate:

23 "California's
24 standards-based reform scheme
25 has further implications for its

1 Q. Okay. Are you familiar with any efforts by
2 the local School Districts to familiarize teachers
3 with state content standards?

4 A. I do -- I do know that. At least, this is
5 based on personal knowledge, at least, one school
6 district I'm familiar with, I know that there has
7 been discussions in in-service training regarding
8 standards and curriculum that would be tightened to
9 the extent that current teachers attended those
10 in-service training, they would have been exposed to
11 the school district's efforts in that regard.

12 Q. What district?

13 A. Those in Ravenwood.

14 Q. In Ravenwood?

15 A. Uh-huh.

16 Q. Okay. Are you aware of anything in any of
17 the frameworks which suggest teachers should
18 emphasize particular standards?

19 A. What do you mean by "frameworks"?

20 Q. Either the English language arts, math, the
21 state English, arts, mathematics, science or history,
22 social science?

23 A. Curriculum frameworks?

24 Q. Yes. Curriculum frameworks.

25 A. Um, no. I'm not aware of any specific

1 suggestion to emphasize some standards at the expense
2 of other standards, I guess.

3 Q. Okay. On Page 12 under the "Content and
4 Consequences" heading, I think the third sentence:

5 "This is a far cry from the
6 input and process-oriented
7 accountability and monitoring
8 systems that most states,
9 including California, have
10 relied upon for years."

11 What do you mean by input and
12 process-oriented accountability and monitoring
13 system?

14 A. Beginning with the federal government, at
15 least, of the level of federal monitoring of Title
16 One in the 1960s, the typical monitoring scheme has
17 been identifying the educational resources and inputs
18 in the system to make determinations as to whether or
19 not kids are getting what they're supposed to get,
20 based on the cite set by the monitoring agency.

21 And there was little or no effort to
22 determine to monitor -- I should say -- monitor the
23 school districts on student outcomes, such as
24 achievement or graduation rates or anything in that
25 regard.

1 And so, the gist there is that
2 standards-based reform, with its focus on achievement
3 on the content standards, does shift this monitoring
4 programs toward potentially to a more outcome driven
5 system.

6 Q. Okay. Do you have knowledge of California's
7 accountability and monitoring systems?

8 MS. WELCH: Objection. Vague.

9 THE WITNESS: I am aware of the Public
10 School Accountability Act and its accountability
11 monitoring system. I'm also aware of the monitoring
12 system employed by the Department of Education
13 regarding special education services.

14 MR. EGAN:

15 Q. Okay. Is that the extent of your knowledge?
16 Any other -- any other systems, programs, related to
17 California accountability and monitoring systems that
18 you're aware of?

19 A. Let me -- there have been, in the past --
20 I'm aware of -- I'm -- very broadly, I don't have
21 knowledge necessarily of any one of these things.

22 Q. Okay.

23 A. But I'm aware of the coordinating compliance
24 reviews that had been used -- may still be used, for
25 all I know. I'm also aware of the QAP, Quality

1 Assurance Program.

2 But beyond that, one of the monitoring
3 systems, accountability systems, those are the ones
4 that come to mind right now.

5 Q. Okay. If content standards did not impact
6 promotion and retention, would mastery be less of the
7 content -- be less important?

8 MS. WELCH: Objection. Incomplete
9 hypothetical. Calls for speculation. Vague.

10 THE WITNESS: The state has developed
11 content standards with the expectation -- the clear
12 expectation that all kids should know and be able to
13 do these things, regarding very important public
14 policy statement by California, that all kids should
15 know and be able to do content standards. So
16 beginning with that premise, that is very, very
17 important.

18 Does the additional high stakes consequences
19 as to whether or not kids have learned the content
20 standards add to the importance? Is it a different
21 requirement? I'm not sure.

22 I would say it addresses a different
23 requirement and addresses the potential of students
24 being negatively affected quite directly by not
25 knowing and being able to do the things in the

1 content standards.

2 But I think the most important aspect of
3 this is that California itself expects all children
4 to know and be able to do these things in the content
5 standards. And that's not diminished by anything.

6 MR. EGAN:

7 Q. You attach in your report -- you attach some
8 great significance or some significance to the fact
9 that student promotion and retention may be related
10 to mastery of the content standards; is that correct?

11 MS. WELCH: Objection. Vague.

12 THE WITNESS: I have -- we -- and I should
13 say I view the high stakes consequences for kids in
14 relation to the standards as an additional aspect of
15 California policy that makes the fact that California
16 already expects all kids to know and be able to do
17 the things in the standards. It attached a different
18 potential consequence to it.

19 I believe that great consequence -- if any
20 child is not able to do the things that the state
21 says it should, the child should know -- to ask to be
22 able to do, irrespective of the stakes -- the stakes
23 to this is a different consequence for the kids that
24 we all need to be aware of.

25 MR. EGAN:

1 Q. Would you -- again, I think your report's
2 attention to promotion and retention -- those
3 standards are tested and therefore impact promotion
4 and retention are more important than standards that
5 are not --

6 A. Absolutely not.

7 MS. WELCH: I'm going to object to the
8 extent it mischaracterizes the report and past
9 testimony and is vague.

10 THE WITNESS: I think we were very clear
11 here that California expects all students to know and
12 be able to do everything in the content standards,
13 unless it -- it has specifically limited the
14 standards in any way.

15 And whether or not California chooses to
16 test on things, this is an additional consequence
17 that we need to be aware of.

18 But I think the message of California's
19 policy here is that all kids should know -- be able
20 to do in the message of the report is there are
21 additional resources and conditions that are
22 necessary or suggested to help kids meet those
23 standards that the state itself expects them to
24 achieve.

25 MR. EGAN:

1 Q. Okay. There's nothing else, other than what
2 you specifically reference? No other documents?

3 A. No. The fact -- the goal of the appendices
4 was to provide maximum transparency. Everything that
5 we referenced is contained in the appendices.

6 Q. And that's part of the sentence which refers
7 to the standards, including the standards for
8 teaching in California. What does that refer to?
9 Standards for teaching? Are those the --

10 A. We were speaking to things in the
11 specifications for subject matter knowledge or the
12 RICA or the M-SAT, whatever it is.

13 Q. So this --

14 A. That's a generic term.

15 Q. Those things would be referenced in the
16 appendices section that refer to teachers and under
17 the heading of state-imposed knowledge requirements?

18 A. Yes.

19 Q. Anything other than the documents that would
20 be referenced there that you're referring to?

21 A. No. Again --

22 Q. Okay.

23 A. -- the effort here was to, you know, make
24 this maximally transparent in terms of what -- where
25 we relied upon in making the determination.

1 Q. On Page 13, the first paragraph --

2 A. Yes.

3 Q. -- you indicate this study -- this is the
4 second sentence:

5 "This study systematically
6 reviews the state's content and
7 curriculum standards."

8 Should curriculum standard -- when you
9 refer to the curriculum standard, is that the
10 curriculum frameworks, or are you designating
11 something -- or some curriculum standards something
12 different?

13 A. The use of curriculum standards -- this is
14 generic. When you talk if standards-based reform
15 scheme, some people -- content standards curriculum
16 standards, performance standards and the like, they
17 use the standards repeatedly. I think to be clearer
18 here, what we're talking about is the curriculum
19 frameworks. They're not something different here.

20 Q. Okay. And continuing that sentence, you
21 also refer to "other documents promulgated by the
22 state."

23 Are all of those documents you're referring
24 to identified in the appendices?

25 A. Yes.

1 Q. Okay. Page 14, Paragraph Two, under the
2 "Findings" --

3 A. Uh-huh.

4 Q. -- the second paragraph, first sentence from
5 "Summary":

6 "Several finding are
7 noteworthy."

8 Are the findings that you're -- that
9 the document states as noteworthy include the
10 findings that are summarized in that paragraph or to
11 other findings throughout your report?

12 MS. WELCH: Objection. Vague. The report
13 speaks for itself.

14 THE WITNESS: The findings that -- where we
15 made are contained throughout the appendices. That's
16 the first thing that should be recognized here.

17 In terms of what we chose to emphasize in
18 the findings section, we just selected some things
19 that we thought were good exemplars of what the
20 findings were that were contained in the appendices.
21 The real meat in the real world in the appendices.

22 MR. EGAN:

23 Q. What I construe from this summary -- and
24 again, are you referring to the summary table?

25 A. Oh! I'm sorry. Yes. Summary table. Yes.

1 That particular sentence refers to the summary table.
 2 Q. Okay.
 3 A. Right.
 4 Q. So the findings that you follow in, based
 5 upon the summary table, again, that's where I'm
 6 confused. I'm trying to clarify --
 7 A. Based upon the summary table, directly in
 8 the appendices -- so that's -- yeah.
 9 Q. So it's --
 10 A. So I don't know. I can't separate them.
 11 Q. Okay.
 12 A. We talked about the summary table already in
 13 relation to the appendices.
 14 Q. Okay. On Page 14, and, again, under
 15 Findings, second paragraph, you indicate that there's
 16 a statement about:
 17 "Perhaps more surprising is
 18 the extensive requirement of
 19 technology."
 20 What sense is, quote, technology?
 21 A. Again, when I went to school before
 22 computers existed in schools, it was surprising to me
 23 how extensive California has viewed -- how
 24 extensively California has required technology as
 25 part of the things that all kids should know and be

1 able to do in.
 2 Q. Okay.
 3 A. That's strictly based on my own memory of
 4 these things.
 5 Q. Okay. You go on to -- the next sentence
 6 refers to:
 7 "Thirteen of the English
 8 language arts standards
 9 specifically require computers."
 10 Do you know -- do you have any general
 11 recollection of -- you know, in what context the
 12 standards require computers?
 13 A. My general recollection is that a lot of it
 14 is for research purposes and/or word processing
 15 keyboarding purposes --
 16 Q. Okay.
 17 A. -- and the like.
 18 MR. EGAN: Can we take a two-minute break?
 19 MS. WELCH: Sure.
 20
 21 (Whereupon a recess was taken.
 22 Off the record at 10:59 and back
 23 on the record at 11:06.)
 24
 25 MR. EGAN:

1 Q. Dr. Koski, I'd like to refer you to the
 2 History Social Science Instructional Materials
 3 Appendix, Page 2.
 4 A. Okay.
 5 Q. And specifically, to the content standards
 6 K-2.
 7 A. Uh-huh.
 8 Q. And under the textbook workbook column, can
 9 you explain why standard K-2 suggests textbooks or
 10 workbooks?
 11 A. I don't recall. Using the principal that we
 12 took the least resource intensive or least best
 13 practice -- as I've been saying -- methodology in
 14 delivery of this particular content standards, our
 15 view here was although you could help students obtain
 16 that knowledge by bringing in the symbols or icons
 17 themselves, like the United States flag and a bald
 18 eagle stuff, we have workbooks or some other
 19 instructional material, it would be necessary.
 20 Remember, our definition of textbooks and
 21 workbooks include just hard copy materials that can
 22 be handed to students to have them obtain the
 23 knowledge or the skill.
 24 Q. Okay. Again, I should have made this on the
 25 record. But the language quoted in the textbook

1 workbook column is:
 2 "Students should recognize
 3 national and state symbols and
 4 icons."
 5 That's the specific standards that is
 6 referenced as supporting the textbook workbook
 7 requirement?
 8 A. Uh-huh.
 9 Q. Isn't it possible that a teacher could use
 10 other means to impart this knowledge besides
 11 textbooks or workbooks?
 12 MS. WELCH: Objection. Calls for
 13 speculation.
 14 THE WITNESS: A teacher could use other
 15 means. And our view is that this was the least
 16 resource intensive means, as I mentioned before.
 17 She could bring in, you know, a statue of a
 18 bald eagle to indicate this is our national bird or
 19 something like that, which we thought was the least
 20 intensive. Give materials to look at, things, be it
 21 flash cards, textbooks, workbooks, whatever.
 22 MR. EGAN:
 23 Q. I believe, in your methodology, you refer to
 24 identification resources that are necessarily
 25 implied. Again, are you saying that for this

1 particular standard, the textbook or workbook is
2 necessarily implied?

3 A. Yes. Because, you know, you don't see the
4 textbook or workbook in there. It's necessarily
5 implied from this standard.

6 Q. Okay. Then again, would you consider a
7 picture of an American -- the American eagle to be
8 a -- tacked or posted on the bulletin board or in the
9 textbook or workbook?

10 MS. WELCH: Objection. Vague. Also, object
11 to the extent that this mischaracterizes the extent
12 of the standard.

13 THE WITNESS: We would consider, again,
14 taking what would be a broad definition of textbook
15 or workbook. Any hard copy material provided to
16 students to help them learn this standard to the
17 extent that the teacher provided photographs of a
18 bald eagle or Statue of Liberty to help the students
19 identify those things in the photographs that would
20 fall under that category in instances.

21 MR. EGAN:

22 Q. How about pictures of national and state
23 symbols? Would they fall within that?

24 A. It would be the same answer.

25 Q. Those would be -- those would be --

1 cost; is that correct?

2 MS. WELCH: Objection. Mischaracterize his
3 testimony.

4 THE WITNESS: The judgment we were making is
5 the least resource intensive judgments. And
6 sometimes, the least best practice from a number of
7 different potential ways of -- of conveying the
8 information of material.

9 MR. EGAN:

10 Q. What do you mean by "the least best
11 practice"? It sounds like the worst practice, which
12 is not what -- I don't think you're saying.

13 A. Well, that's -- that's exactly what we're
14 not saying, it's the worst practice. Because you
15 could come up with a lot of terrible ways to teach
16 those things.

17 But at least, in our view, the viable method
18 of conveying the information, the least source of
19 resource intensive methods conveying the information,
20 is what we're trying to say here.

21 Q. Okay. Looking at history social science
22 instructional materials and, again, Page 2 --

23 A. Uh-huh.

24 Q. -- what would be the most intensive resource
25 to convey the content standard K-2?

1 A. Textbook workbooks under this --

2 Q. Okay. How about --

3 A. -- for this particular standard.

4 Q. How about a flag in the classroom?

5 A. This is -- okay. The flag would be
6 different, because we said what -- I'm saying here
7 is -- that it would cost more and be more resource
8 intensive to bring students to New York to show them
9 the Statue of Liberty. To buy a state flag and an
10 American flag to do all these other things and bring
11 them into the classroom, rather than given a handout
12 with all of these various symbols on them and show it
13 to them.

14 I'm not making a judgment as to what the
15 best way to teach this is. We are making a judgment
16 as to what the least best practice would be, the
17 least resource intensive way of doing it is.

18 Q. Your methodology -- I think you referred to,
19 quote, making the, quote, most conservative judgment
20 possible --

21 A. Yes.

22 Q. -- close quote.

23 A. Yes.

24 Q. What I hear you saying is that when
25 you're -- the judgment you are making are based upon

1 A. A field trip to Manhattan to look at the
2 Statue of Liberty. Bringing in the state flag into
3 the classroom. All the various state flags that you
4 might want to -- state flags that you might want to
5 teach the other kinds of symbols of our government to
6 actually bring them physically to the student or
7 bring them to the Statue of Liberty. It would
8 probably be about as expensive as you could get.

9 Q. Is there a category for history social
10 science instructional materials that it would come
11 under other than textbooks workbooks?

12 A. I'm not sure I understand the question.

13 Q. Well, you indicated that textbooks,
14 workbooks was the least -- you know, the least best.
15 And you gave an example of what would be, you know, a
16 more intensive or better way to do it.

17 A. Uh-huh.

18 Q. My question is: Where would you -- where
19 would that better way, what you described as a field
20 trip to Manhattan, you know, where would that fit in
21 terms of the categories of resources that you've
22 identified with respect to history instructional
23 materials?

24 MS. WELCH: I'm going to object to the
25 extent that that mischaracterizes his testimony.

1 His testimony was in response to the
2 specific question that you asked about, what are the
3 other ways -- you can have the question read back.
4 But I mean, I'm -- to the extent that he did not say
5 this would be the better way, to take all the kids on
6 a field trip to Manhattan.

7 MR. EGAN: You can answer the question.

8 THE WITNESS: In the context of this
9 standard, one of the ways we -- because we made the
10 determination that this was the resource that was
11 implied here, the textbook, workbook category.

12 There may be other standards which call more
13 directly for reliance on the original sources and
14 primary materials, in which case, would have to
15 provide -- we -- the State of California, the
16 schools, would have to provide the children with the
17 primary sources if that came up.

18 Now, I understand -- you asked the question
19 about, specifically, the field trip to Manhattan.
20 There are instances where we would have to get
21 students to primary resources. Field trips were
22 tricky for us. We've discussed this already.

23 Q. Right?

24 A. Okay.

25 Q. Was the -- you indicated there are instances

1 media centers but separated them
2 here for purposes of analysis."

3 So it is entirely possible that the
4 library media center could be the same thing in any
5 given school.

6 Alternatively, you could separate the
7 library from the media center where the library would
8 be kind of matrix sources of books and other hard
9 copy material, and the media center may be more of an
10 audiovisual type center for students too. And I've
11 seen it both ways.

12 Q. Referring to footnote 34, 42, which is on
13 Page 20 of your report, does -- I think that footnote
14 falls under the general heading of facilities in
15 which you include library and media center.

16 A. Uh-huh.

17 Q. So when you say that you separated in the
18 footnote 42 that you separated them for your
19 analysis, did you separate them throughout
20 consistently through all the content standards
21 verses --

22 A. The effort was made to do that. And again,
23 the distinction between the two was -- and again,
24 they could be combined. But we're not saying they
25 can't be combined here.

1 where you do have to get students to primary
2 resources.

3 A. There may be instances in that regard. I'm
4 speaking hypothetically.

5 Q. Do you have any examples that come to mind?

6 A. None that come to the -- come to mind. No.

7 Q. Looking -- going back to your report, on
8 Page 14, under "Findings," I believe it's Paragraph
9 Two, it's the second to the last sentence.

10 "Moreover, as demonstrated
11 by the English-Language Arts
12 standards, a well-stocked
13 library or media center is
14 essential, or at least
15 recommended, for elementary,
16 middle, and high schools."

17 What is the difference between a
18 library and media center?

19 A. You'll recall that we had this specific
20 conversation. And I believe the footnote addresses
21 this specifically somewhere in my report.

22 It may -- let me check if that's true.

23 Yeah. Footnote 42 said:

24 "We note that many schools
25 will combine their library and

1 But the distinction made between the two was
2 sort of a traditional hard copy place where -- a
3 place where hard copy books can be found in a
4 library. And you can have reference material
5 versions more of an audiovisual center where kids
6 could go to access other kinds of information.

7 Q. Okay.

8 A. Another media of information.

9 Q. Let me ask you to take a look at the summary
10 tables --

11 A. Yes.

12 Q. -- as part of the appendix.

13 A. Okay.

14 Q. And under the mathematics standards, the
15 facilities column, there's a media center, but no
16 library.

17 A. (Nodding head.)

18 Q. Why is there a media center but not a
19 library?

20 A. Without looking specifically at the
21 appendices, my immediate -- I don't know. It depends
22 what the standard called for, is, I guess, how I
23 would respond to that. And maybe that the analytic
24 category of libraries just didn't pop up in any of
25 those standards.

1 Q. Okay.
 2 A. I do know that there's a note, eleven
 3 standards that identify media center, though.
 4 Q. Okay. So is it fair to say, then, that if
 5 the answer to the question of okay, media center or
 6 no library depends on the sake of the standards that
 7 you identified?
 8 A. The standard drives our determinations here.
 9 Q. Okay. Looking at the summary table, the
 10 Science Standard Summary, again, facilities, there's
 11 a reference to a library, but no reference to a media
 12 center. Can you explain why that would --
 13 A. It would have --
 14 Q. It would --
 15 A. -- depended on the specific standards,
 16 again, to what the standard calls for.
 17 Q. Okay. So would it be fair, then, to say
 18 that you would not expect any of the science
 19 standards to require -- suggest a media center for
 20 science?
 21 A. We did not find that any of the standards
 22 called specifically for an independent media center.
 23 Correct.
 24 Q. Okay.
 25 A. We -- okay.

1 Q. Okay. When you say "independent media
 2 center," I mean, are you saying that "library" under
 3 "science" could include a media center?
 4 A. This whole category -- I'm saying you could
 5 combine media center and library together. And many,
 6 many, many schools do precisely that.
 7 So I'm -- you know, we could have done the
 8 analysis by merging the two categories. We didn't
 9 put footnote 42. We're suggesting schools are
 10 welcome to -- or maybe it would be good to combine
 11 these categories. So I'm not sure.
 12 Q. What I'm trying to understand is the reason
 13 why some of the standards areas of media not library
 14 or where some of the library not media center, if
 15 there's, you know -- what is the basis -- why is
 16 that?
 17 A. It's dependant upon the standards, it seems.
 18 Q. Okay.
 19 A. That's all I can say.
 20 Q. Okay.
 21 A. The standard suggestion that you're looking
 22 for is a multi-media based information to help
 23 facilitate that standard, that would be kind of a
 24 media center thing. If it would be the traditional
 25 book or reference book, it probably would be a

1 library sort of thing.
 2 Q. Okay.
 3 A. That's my best memory.
 4 Q. Okay. And again, based upon footnote 42,
 5 you did not, for purposes of the summary tables or
 6 any appendices, combine library and media center as a
 7 category?
 8 A. No. We couldn't.
 9 MS. WELCH: Objection. Asked and answered.
 10 THE WITNESS: We could have. Yes. But we
 11 did not.
 12 MR. EGAN:
 13 Q. Okay.
 14 A. We're being agnostic as to whether or not
 15 schools combine them.
 16 Q. In your sentence on Page 14, Paragraph 2, it
 17 says:
 18 "A well-stocked library is
 19 essential or, at least,
 20 recommended."
 21 Can you tell me which is true for
 22 elementary schools?
 23 A. I would have to look at the standards
 24 themselves, the specific standards.
 25 Q. Okay. So from this, you can't tell which is

1 essential for elementary schools?
 2 A. On that basis -- that sentence alone, I
 3 can't tell you. You would need to look at the
 4 standards and appendices themselves.
 5 Q. Okay. Why -- take a look at English
 6 Language Arts Facilities Summary Table --
 7 A. Okay.
 8 Q. -- for Grades K Through 5.
 9 A. I see another recommendation.
 10 Q. Let's see. For grades -- as I read the
 11 summary table, out of 47 standards for grades K
 12 through 5, you have four suggesting library and four
 13 suggesting a media center.
 14 A. Yes.
 15 Q. Okay.
 16 A. In those instances, we marked both down
 17 because --
 18 Q. Okay.
 19 A. -- they suggested both library center,
 20 media center in the same breath, basically.
 21 Q. Again, for -- if you look at the
 22 mathematics, K through 5 media center, there's none
 23 of the standards that requires or suggest a library;
 24 is that correct?
 25 A. Based --

1 Q. The summary --
 2 A. -- summary table itself --
 3 Q. Right.
 4 A. -- that's correct.
 5 Q. And for history social science, summary
 6 table for grades K through 5, 6 of 36 standards
 7 suggest a library and two of 36 suggest a media
 8 center; is that correct?
 9 A. Yes. According to the summary table.
 10 Q. Okay. Based on the summary table, would you
 11 say that a library or media center is recommended for
 12 elementary schools rather than essential?
 13 MS. WELCH: Objection. I think the report
 14 speaks for itself.
 15 THE WITNESS: I didn't make a distinction
 16 between recommended and essential. My personal
 17 feeling is it's recommended. It's essential.
 18 MR. EGAN:
 19 Q. Well, your report says that library or media
 20 center essential or at least recommended. That
 21 seemed to make a distinction, doesn't it?
 22 A. I just gave you my personal opinion. I
 23 didn't --
 24 Q. Well, I'm --
 25 A. The report says --

1 Q. I'm relying on what you said in your report.
 2 I'm trying to understand that. So is a library
 3 essential or recommended?
 4 A. It depends on what one's view of the word.
 5 I think it's essential to have a library if it's
 6 recommended. You may not think it's essential
 7 because you don't want to follow the recommendations.
 8 I think it's essential.
 9 Q. Well, but I thought what you were basing
 10 your report on was based upon the analysis of the
 11 content standards. Are you telling me it was your
 12 opinion?
 13 A. My report --
 14 MS. WELCH: Objection. Argumentative.
 15 THE WITNESS: My report states whether or
 16 not our view was that it's required or suggested. It
 17 doesn't say whether or not it's essential or
 18 suggested.
 19 I've -- my personal opinion is that if it's
 20 recommended, it's essential for kids. But this is
 21 required or suggested. That's our analysis and
 22 doesn't do anything other than that.
 23 MR. EGAN:
 24 Q. Well, your report, the text of it that I've
 25 quoted, talks about essential or recommended.

1 A. The word "essential" is not part of our
 2 analysis. And one could say that anything is --
 3 anything recommended is essential. I'm -- we're not
 4 getting anywhere in this conversation.
 5 Q. Well, the point -- why did you put
 6 "essential" in your report if it's not germane to
 7 your analysis?
 8 MS. WELCH: Objection. Mischaracterizes the
 9 testimony.
 10 THE WITNESS: It is --
 11 MR. EGAN:
 12 Q. Can you --
 13 A. I can't answer the question. Was the
 14 question -- can you --
 15 MS. WELCH: Objection. Argumentative.
 16 And --
 17 MR. EGAN:
 18 Q. It's not argumentative. I'm not being
 19 argumentative. I'm trying to understand, you know,
 20 what it is -- what's the difference between the text
 21 of your report and what --
 22 A. Our report made an analysis to determine
 23 whether or not a specific resource was required or
 24 recommended. The text of the -- of the report had a
 25 sentence in it that says that a resource is essential

1 or at least recommended. And that depends on one's
 2 own view what's essential.
 3 We were conservative with the sentence in
 4 the document. In other words, I could have said they
 5 were all essential if they were recommended or
 6 required. Instead, I said it's essential or at least
 7 recommended. It depends on what your view of
 8 "recommended" is.
 9 Q. Okay. That's what I was looking for, an
 10 explanation of why that was there. Thank you.
 11 I'd like you to take a look at the appendix
 12 for English language arts under "Facilities," Page 4.
 13 A. Okay.
 14 Q. And specifically, in the library column, I'm
 15 looking at the very bottom, grade 4, there's a --
 16 looks like a reference to standard or substandard
 17 2.2-C.
 18 How does that imply -- how does that
 19 standard imply a library as a resource?
 20 A. The standard calls for an information
 21 presentation based on more than one source of
 22 information. Examples are given. Books and
 23 newspapers. Things that we would normally see in a
 24 library.
 25 Q. Okay. Are there other sources of

1 information besides the library, such as a teacher --
2 for example, could a teacher provide this information
3 to students?

4 MS. WELCH: Objection. Calls for
5 speculation.

6 THE WITNESS: I would first of all say that
7 no. Because it calls for more than one source of
8 information.

9 MR. EGAN:

10 Q. When you say "calls for the standards," it
11 gives examples; is that correct?

12 A. That's correct.

13 Q. Okay. Do you read a standard that gives
14 examples as requiring -- or strike that.

15 Let me refer you back to Page 14 of your
16 report, the -- under the "Findings" heading.

17 A. Yes.

18 Q. The second to the last sentence:

19 "Computer technology
20 Internet access and well-stocked
21 libraries/media centers are
22 highlighted here because not all
23 children in California enjoy
24 these resources."

25 When you refer to "all children in

1 libraries or media center was -- it went without one
2 for at least a year, it was my recollection. Those
3 kids in a school consist of a library or media center
4 for instance.

5 There are clients of mine and kids with whom
6 I work told me they don't have computers and Internet
7 access in their schools or in their classrooms.

8 I will make it clear those -- that whether
9 or not kids have these things was not part of the
10 analysis that we conducted. The statement was simply
11 based on the fact that we know that not all kids have
12 these things.

13 Q. And again, the basis is your personal
14 knowledge?

15 A. My personal knowledge.

16 Q. Okay. What school were you referencing?

17 A. I can't remember specifically. I think it
18 was the Green Oaks School.

19 Q. In which --

20 A. In the Ravenwood School District. They
21 didn't have a library for a while.

22 Q. And did they eventually or did they --

23 A. I don't know.

24 Q. -- have --

25 A. I don't know if they have it now. I don't

1 California," you're referring to the fact that
2 schools -- not all schools had these resources, or do
3 you mean that not all children enjoy these resources
4 outside of school?

5 A. The analysis here was child centered,
6 because the standards are child centered. And that
7 means the resource needs to be delivered to the child
8 in order for the child to obtain the knowledge or the
9 skills in the standard.

10 And the analysis here was that the -- I'm
11 unaware of any requirement on parents to provide
12 Internet access computer technology, well-stocked
13 libraries, other resources to kids.

14 So the -- the logical extension is that the
15 schools itself must provide these things --

16 Q. Okay. What is it --

17 A. -- themselves.

18 Q. Okay. What is the basis for your statement
19 that not all children in California enjoy these
20 resources?

21 A. I have personal knowledge of schools that
22 don't have these resources delivered to the
23 individual child.

24 Q. Okay. Can you describe --

25 A. There are schools in East Palo Alto whose

1 know the answer.

2 Q. Okay.

3 A. You said -- yeah. I'm sorry. You need to
4 ask the question.

5 Q. Okay.

6 A. I need to -- I was anticipating.

7 Q. Is this your own personal knowledge you have
8 to support that statement, that not all children
9 enjoy these resources?

10 A. I told -- but I've been told. Depends on
11 what you mean by "personal knowledge."

12 Q. Other than what you've been told, this one,
13 Green Oaks School, Ravenwood is the only case where
14 you have personal knowledge?

15 MS. WELCH: Objection. Mischaracterizes his
16 testimony --

17 THE WITNESS: Well, I mean, depends on what
18 you mean by --

19 MS. WELCH: -- and vague.

20 THE WITNESS: -- "personal knowledge."

21 I have personal knowledge in the sense that
22 people who go to these schools have told me about it.
23 I mean, it's pretty --

24 MR. EGAN: Okay.

25 A. I have --

1 Q. What other schools you can identify where
2 people have told you about these absence of these
3 types of resources?
4 A. I can't think of any right now.
5 Q. Okay.
6 A. And I only emphasize that it wasn't part of
7 my task here.
8 Q. Well, I'm at a little bit of a loss. Why
9 did you make -- include this statement in your report
10 if it was not part of your task?
11 A. It is an observation.
12 Q. Well, is -- you know, is there some way that
13 I can determine, you know, what statements in your
14 report really are not part of your --
15 A. The best way for you to determine the parts
16 of my task is to listen when I tell you what the task
17 was.
18 Q. Okay.
19 A. I've said that task about a million times in
20 this deposition.
21 Q. And I could disregard all the other
22 statements in your -- you know, in your report, such
23 as the one that we just talked about? I mean --
24 MS. WELCH: Objection. Argumentative.
25 THE WITNESS: I'm not sure you can disregard

1 those statements at all. I mean, I don't -- I have
2 been asked to provide expert witness testimony on
3 what the State of California itself says that all
4 kids need in order to achieve the high -- or in order
5 to achieve the state's content standards. That's
6 what I've been asked to opine on.
7 MR. EGAN:
8 Q. Okay. On paragraph -- or Page 14 -- excuse
9 me -- the paragraph or heading "Technology," you --
10 the last sentence starts on the bottom on Page 14:
11 "From web-driven
12 applications and graphing
13 calculators to word-
14 processing, technology has
15 become an indispensable learning
16 tool for students in the 21st
17 century."
18 Am I to read that as graphic calculator
19 is an indispensable learning tool?
20 A. Yes.
21 Q. Is that based upon the standards in your
22 analysis of the standards?
23 A. It's based upon what we found in our
24 analysis here and somewhere in one of these
25 appendices.

1 Q. There's a -- and there is -- are discussions
2 of calculators?
3 A. Oh, yes.
4 Q. And that's -- again, that's the basis for
5 this statement?
6 A. Yes.
7 Q. Okay. Do you have any information regarding
8 the extent to which schools -- any school -- or do
9 you have -- do you know of any schools that provides
10 students with graphing calculators?
11 A. I don't have any knowledge one way or the
12 other another on that.
13 Q. Are you aware of anything in the state's
14 mathematics framework which suggest that it is
15 undesirable to be allowing students to use
16 calculators?
17 MS. WELCH: Objection. Vague.
18 THE WITNESS: I can't recall at this time.
19 I'd have to look at the frameworks again.
20 MR. EGAN:
21 Q. All right. On Page 15, the software
22 heading --
23 A. (Nodding head.)
24 Q. -- there's a -- at the end of the first
25 paragraph, there's a reference to "adopt the

1 programs," Pages 14, 16, 19, et cetera.
2 A. Yes.
3 Q. Then there's a footnote 41.
4 How do -- did -- do you know which -- what
5 the page references -- refer to? Which -- there
6 are -- which adopted program?
7 A. (Pausing.)
8 Q. My question is: The footnote indicates that
9 there were six programs adopted --
10 A. Yes.
11 Q. -- and the page references in the adopted
12 program do not identify which one. Six programs.
13 And I'm wondering if I'm misconstruing them or how do
14 I --
15 A. It's been a long time. Hold on a second.
16 Q. Sure. Just to identify -- indicate, there's
17 a similar problem in, you know, in other spaces -- in
18 other parts of the report where there's a reference
19 to adopted programs and page numbers, but no specific
20 program.
21 A. Well, one thing that is true, and I do
22 recall, is that each one of these adopted programs
23 here, McGraw-Hill, et cetera, have CD ROMs attached
24 to -- if this is a fact, whether or not those --
25 there are new adopted program since March 9, 2000, I

1 don't know.

2 In terms of what the page reference is --
3 are to, my best understanding of this right now is
4 that there was a document that indicated which
5 programs were adopted here and somehow through the
6 editing program process.

7 I'm not -- it may have been dropped. That
8 document reference may have dropped out.

9 Q. Can you advise me of what that document is
10 in a way such that I can reference the relevant
11 program?

12 A. It might -- I don't know what you mean so
13 that you can reference the "relevant program."

14 Q. Well, on Page 15, there's a reference to
15 Page 14.

16 A. Uh-huh. That's reference to a document.

17 Q. Okay.

18 A. That -- it's -- I'm not really seeing what
19 that document is.

20 Q. Right. And I'm asking if you can, if you
21 will, go back through the report and give me the
22 means to identify what documents are referenced by
23 these page references.

24 A. I will look and see what this -- what this
25 document is.

1 A. Okay. My best memory is, just so you know,
2 that it was adopted, because I remember looking at a
3 document which talked about instructional materials
4 and the adopted programs.

5 Q. Okay. On Page 16, under the "Internet"
6 heading, the second sentence from that says:

7 "To that end, the content
8 standards in every subject area,
9 both explicitly and implicitly
10 mandate Internet access."

11 What does that mean? Is it --

12 MS. WELCH: I think the report speaks for
13 itself.

14 MR. EGAN:

15 Q. Is that -- if I reference the appendices,
16 will I find under the Internet category that it's
17 required?

18 A. Not necessarily. No.

19 Q. Okay. Then I have a question as to what
20 that sentence means to determine whether or not a
21 particular standard calls for access to the Internet,
22 either recommended or required.

23 A. The best way to do that is to look at the
24 appendices and go on a standard-by-standard basis.

25 Q. Well, let me refer to the summary table for

1 I'm seeing that, you know, in the many
2 iterations, it may be one of the references that are
3 in here, or it may be a reference that inadvertently
4 was dropped in the editing version of this.

5 Q. Just a note that I have. Same question with
6 regard to the reference to "adopted programs" on Page
7 16 under the second paragraph under Internet.
8 There's a reference to Pages 22 and 26. I'm not
9 looking -- I can't see --

10 MS. WELCH: (Indicating.)

11 THE WITNESS: Yeah. Okay.

12 MR. EGAN:

13 Q. Okay.

14 A. I see.

15 Q. And just -- there's the same -- same issue
16 and request with regard to Page 18, the reference
17 under "films and videotapes."

18 A. Uh-huh. Yes.

19 Q. And I think --

20 A. It appears to be a document that was dropped
21 from the reference list somehow. And I will try to
22 find that document.

23 Q. Okay. And I think those are the only
24 references to the adopted programs. But if there are
25 others, I would make the same request.

1 the Mathematics Standards Technology Internet.

2 A. Uh-huh.

3 Q. That indicates that for none of the
4 standards requires -- suggests the Internet that
5 category; is that correct?

6 A. I see that.

7 Q. Okay. And the summary sheet -- summary
8 table for History Social Science under "Technology"
9 of -- there is one suggested Internet. Is that
10 correct?

11 A. I see that.

12 Q. Okay. So is the best way to interpret your
13 statement that content standards in every subject
14 area both explicitly and implicitly mandate Internet
15 access by reference to the summary?

16 A. No. The best way to interpret is by
17 reference to each of the standards.

18 Q. Okay.

19 A. That's -- again, the analysis is located
20 with regard to -- located in the analyses with each
21 of the standards.

22 Q. Okay. Well, is it fair to say that based
23 upon the summary table, that the analyses -- in the
24 analyses, with respect to mathematics, do not
25 indicate that the Internet is required or suggested

1 for any of the standards?
 2 MS. WELCH: Objection. The report speaks
 3 for itself.
 4 THE WITNESS: What is the question?
 5 MR. EGAN: Do you want to read that back?
 6
 7 (Whereupon, the record was read
 8 by the court reporter.)
 9
 10 THE WITNESS: "Mathematics is
 11 suggested in addition to student
 12 can exchange ideas and test
 13 hypotheses through a higher,
 14 wider audience through the
 15 Internet."
 16 It just doesn't appear in the summary
 17 table. This is why we need to look at the appendices
 18 specifically.
 19 MR. EGAN:
 20 Q. Okay. Can you give me the specific
 21 reference?
 22 A. I'm looking at Page 1 of the mathematics
 23 kindergarten through grade 12 generally.
 24 Q. Looking through the appendix for mathematics
 25 technology for Internet access, the page that you

1 cite identifies -- this is Page 1, kindergarten
 2 generally; am I correct?
 3 A. Uh-huh.
 4 Q. That is the only context -- or, at least,
 5 the only point in the content standard that either
 6 identifies Internet access as suggested or required?
 7 In other words, no other points in the math
 8 technology appendices that either have a check, dot
 9 or an X for Internet access?
 10 MS. WELCH: Objection. The report speaks
 11 for itself.
 12 THE WITNESS: With regard to Internet
 13 access, our appendices indicate that there is one
 14 reference to Internet access. And that is in grade K
 15 through 12 generally.
 16 MR. EGAN:
 17 Q. Okay. And that is the only reference you've
 18 got?
 19 A. That's the only one I've found --
 20 Q. Okay.
 21 A. -- in flipping through the documents.
 22 Q. Right. And the reference that's cited in
 23 the report, mathematics technology Internet, grade
 24 kindergarten through grade 12 is generally through
 25 the introduction to the standard; is that correct?

1 A. That's the citation.
 2 Q. Okay.
 3 A. Yes.
 4 Q. It does not apply to any specific standard;
 5 is that correct?
 6 A. Or applies at standards --
 7 MS. WELCH: Objection. Vague.
 8 THE WITNESS: I'm not sure.
 9 MR. EGAN: Okay.
 10 THE WITNESS: You will -- I note:
 11 "In addition to students
 12 can exchange ideas and test
 13 hypotheses with the higher,
 14 wider audience through the
 15 Internet. Technology may also
 16 be used to reinforce basic
 17 schools through computer access
 18 the instruction student tutoring
 19 system and drill and practice
 20 software."
 21 MR. EGAN:
 22 Q. Looking at Page 17 of your report, dealing
 23 with instructional materials and, specifically, the
 24 heading "Literature Books," you indicate that
 25 students in the first sentence:

1 "As early as kindergarten
 2 are expected to identify the
 3 front cover, back cover, and
 4 title page of a book."
 5 There's reference to the English
 6 language arts standards, Page 1.
 7 Do you know if that standard requires that
 8 each student have a book or is sufficient if the
 9 teacher has a book?
 10 A. Our analysis was child centered. It appears
 11 the standards indicate what each -- all the children
 12 need.
 13 We made no determination as to how
 14 specifically the book -- the -- in this instance, the
 15 book be provided to the student for them to identify
 16 the front cover, back cover, and title page.
 17 Q. Okay.
 18 A. It wasn't part of the analysis.
 19 Q. So is it, then, again, as I understand the
 20 analysis, really does not include whether resources,
 21 with respect to this particular reference to the
 22 English standards that required kindergartners to
 23 identify the front, back cover and title page of the
 24 book, you're analysis did not cover whether the
 25 standard required that the resource be made available

1 to every student or simply to the teacher?

2 MS. WELCH: Objection. Vague. Asked and
3 answered.

4 THE WITNESS: The question you asked is sort
5 of a false dichotomy with regard -- it could be
6 provided to each student or to the teacher. It could
7 be provided to every student and the teacher and
8 the -- or the teacher could provide it to every
9 student. I'm not sure I understand the distinction
10 you make.

11 MR. EGAN:

12 Q. I'm trying to understand the scope of your
13 analysis. And in other words, does this standard
14 require that every child have a book?

15 A. I'm fairly certain we've already discussed
16 this in the deposition. And our analysis indicates
17 that this opportunity needs to be made available to
18 the student. We did not make a specific
19 determination, with regard to your question. I have
20 a personal opinion in that regard, but --

21 Q. Okay.

22 A. -- we didn't have -- it wasn't part of this
23 analysis.

24 Q. Okay.

25 A. I mean, when you refer to this analysis,

1 Q. Okay.

2 A. -- having written this three years ago.

3 Q. With regard to Page 18 of your report,
4 "measuring instruments" --

5 A. Uh-huh.

6 Q. -- you state that mathematics students are
7 expected to use non-standard units to measure and
8 compare the length, weight and volume of objects. Do
9 you know what a "non-standard unit" --

10 A. I would have to take a look at the reference
11 to that to see if that could help me out. I -- I
12 don't know what it means specifically without
13 reference to the materials. I don't know what it
14 means, specifically, in the contents of this
15 statement.

16 Q. I'll come back to that.

17 I'd like to refer you to Page 19 to
18 "Facilities" and "Libraries" in the second paragraph
19 where you indicate:

20 "For instance, in order to
21 develop social science research
22 skills, the History Social
23 Science Standards emphasize
24 access to historical documents,
25 eye witness accounts, oral

1 again, you're -- it's not just to this particular
2 standard throughout the analysis that -- the analysis
3 here is the students be given the opportunity to
4 enjoy the resource.

5 Q. Okay. On Page 18, at the paragraph at the
6 top of the page, there's reference to:

7 "Students should read in
8 meeting their annual reading
9 comprehension benchmarks."

10 What are the "annual reading
11 comprehension benchmarks"?

12 A. I think you've -- you will probably want to
13 reference the English language arts standards. I
14 can't recall what that specific reference --

15 Q. Do you know whether they refer to reading
16 that is in addition to the regular school reading?

17 MS. WELCH: Objection. Calls for
18 speculation.

19 THE WITNESS: I can't recall. I can't
20 remember. I remember that there was some
21 recommendations that children read so much by a
22 certain period of time. And there are also some
23 specific standards regarding reading comprehension
24 and the like. I can't remember right now --

25 MR. EGAN:

1 histories, letters, diaries,
2 artifacts, photographs, and
3 maps."

4 Do you interpret the standards as
5 either requiring or suggesting access to historical
6 documents?

7 A. I would have to make that determination in
8 the contents of the specific standard.

9 MS. WELCH: Objection. Vague as to
10 "historical documents."

11 MR. EGAN:

12 Q. Let me ask you to look at the History Social
13 Science Appendix for "Facilities," Page 5.

14 A. History Social Science. Page 5. Okay.

15 Q. Standard 3.3 under the library column --

16 A. Uh-huh.

17 Q. -- cites:

18 "Substandard 3.3.3. Trace
19 why their community was
20 established. Drawing on maps,
21 photographs, oral histories,
22 letters, newspapers and other
23 primary sources."

24 A. Uh-huh.

25 Q. Do you interpret that substandard as

1 suggesting that a school library have the specific
 2 resources identified in 3.3.3?
 3 MS. WELCH: Objection. Vague.
 4 THE WITNESS: We identified that resource as
 5 something that kids should have access to and be
 6 provided. A library that contains those things.
 7 MR. EGAN:
 8 Q. And again, this is a school library that
 9 you're referring to?
 10 A. (Pausing.)
 11 Q. Is that --
 12 A. It is a library.
 13 Q. Oh! For purposes of your analysis, you
 14 didn't -- you know, you didn't consider the extent to
 15 which a public library -- or you didn't consider a
 16 public library as opposed to school libraries?
 17 A. We didn't consider that question one way or
 18 the other. We just know that library is implied by
 19 this resource. And libraries need to be provided to
 20 the child.
 21 Q. Okay.
 22 A. Yeah.
 23 Q. So it could be provided by a public library
 24 or school library?
 25 A. Theoretically, if the public library is

1 close enough to the school, the children are provided
 2 access to it, that they have time to get there, and
 3 the parents aren't required to take them there. A
 4 lot of things.
 5 But theoretically, a public library could --
 6 might be able to address that, or it might not,
 7 depending on the circumstances.
 8 All I know is that a library is something
 9 that is suggested by the state's own standard.
 10 Q. Okay. On Page 21, under your conclusion,
 11 you indicate --
 12 A. Sorry.
 13 Q. No problem.
 14 A. Okay.
 15 Q. "California has made great strides
 16 in receiving meaningful and
 17 clear content standards. And a
 18 aligning its assessment and
 19 accountable system to those
 20 standards."
 21 What were the strides that you had in
 22 mind with respect to California's aligning its
 23 assessment in the accountability systems to those
 24 systems?
 25 A. There were -- there -- California has made

1 strides in the direction of aligning its California
 2 standards of test -- high school exit exam and the
 3 various aspects of the public school accountability
 4 that rely on those standards-based instruments.
 5 Those are the strides that I'm referring to.
 6 Q. Okay. Are you aware of any additional steps
 7 that California has taken in this context subsequent
 8 to the time your report was written?
 9 A. In what --
 10 MS. WELCH: Objection. Vague.
 11 THE WITNESS: I don't know what you are
 12 referring to. I'm sorry.
 13 MR. EGAN:
 14 Q. Have there been any additional steps in the
 15 aligning assessment in accountability system to the
 16 standards since you authored your report?
 17 A. The California standards test didn't exist
 18 when we initially authored the report.
 19 Q. Okay.
 20 A. For starters, there was the augmented Star
 21 test at the time that had a few of the standard-based
 22 questions, as is my recollection. So that's one
 23 thing that has changed since we initially authored
 24 the report.
 25 Q. Anything else that you recall?

1 A. In terms of language assessment
 2 accountability? The exam -- again, when I initially
 3 did the report, there was no high school exit exam.
 4 I understand there is no standards-based high school
 5 exit exam in existence.
 6 Q. I'm not sure what you mean when you say --
 7 when you wrote your report there was no high school
 8 exit exams.
 9 A. I don't -- there was no high school exit
 10 exams in the spring of 2000. And the report was
 11 initially written --
 12 Q. I'm talking about -- but you referenced the
 13 high school exit exam in your --
 14 A. That -- we added that to -- I'm not sure.
 15 It's vague as the --
 16 Q. I'm asking since you completed this report.
 17 A. Oh! Since September of 2002, I'm -- I'm
 18 unaware of anything else.
 19 MR. EGAN: Okay. It's a little after 12:00.
 20 Shall we take a break and come back at 1:00 or so?
 21 THE WITNESS: That's fine with me.
 22 MS. WELCH: That's fine.
 23
 24 (Whereupon, a lunch recess was
 25 taken. Off the record at 12:14

1 and back on the record at 1:01.)
 2
 3 MR. EGAN: Shall we?
 4 THE WITNESS: Let's do it.
 5 MS. WELCH: Works for me.
 6 MR. EGAN:
 7 Q. Dr. Koski, I'd like to refer you to the
 8 summary table once again, that part of your appendix.
 9 A. Okay.
 10 Q. And the title is Educational Resources and
 11 Implied by the California Educational Content
 12 Standards. Is that correct?
 13 A. Yes.
 14 Q. Would it be incorrect to call it educational
 15 resources required?
 16 A. Um, it would be only in one sense, because
 17 we identified both required and suggested --
 18 Q. Okay.
 19 A. -- resources in there.
 20 Q. Okay.
 21 A. Okay.
 22 Q. Could you take a look at the English
 23 Language Arts Appendix for Facility, Page 1?
 24 A. Uh-huh.
 25 Q. And under the classroom column, there's a

1 dot, which indicates that this is a suggested
 2 resource?
 3 A. A dot? I have a check in the classroom
 4 column.
 5 Q. For English?
 6 A. I'm sorry.
 7 Q. English arts facility.
 8 A. Excuse me. I'm in the wrong one.
 9 Q. Page 1.
 10 A. Uh-huh. Go ahead.
 11 Q. It has a dot. As I understand the code
 12 indicates, that's suggested?
 13 A. Yes.
 14 Q. Okay. Is that correct?
 15 A. Um, we put dots in all three of the K
 16 through 12 generally resources that you see on this
 17 Page 1. It was our practice for all of the K through
 18 12 generally resources to just put dots or suggested
 19 in there, because it wasn't tied to a specific
 20 standard.
 21 Q. And that's true for all of the different
 22 standards areas, I mean --
 23 A. It's actually not true. For all the
 24 different standards area, we did include it as
 25 necessary or is checkmarked for some of them.

1 The difference here is that the specific
 2 language regarding classroom stuff. And we can't
 3 imply any of this language was necessary. The
 4 language here is all suggested language.
 5 Q. Okay. Let me -- let's see. Let me refer
 6 you to the history. You might want to keep your
 7 finger on the English facilities K through 12.
 8 A. Uh-huh.
 9 Q. Then, let me refer you to the History,
 10 Social Science Facilities, Kindergarten through 12.
 11 MS. WELCH: That's Page 1.
 12 MR. EGAN: That's page 1 also, yes.
 13 THE WITNESS: Okay.
 14 MR. EGAN:
 15 Q. Now, for history, social science facilities,
 16 the classroom, the check indicating it is required?
 17 A. Uh-huh. That's also true for science,
 18 kindergarten through 12.
 19 Q. Okay.
 20 A. And not for mathematics. Kindergarten
 21 through 12.
 22 Q. And nor to English?
 23 A. Correct.
 24 Q. Okay. Can you explain why, again, there's a
 25 check for History, Social Science Facilities, a dot

1 for English?
 2 A. Okay.
 3 Q. Go ahead.
 4 A. The analysis is best looked at the
 5 individual standard level. And you'll notice that
 6 for the individual standards in English language arts
 7 and in mathematics, you will see "necessary" on every
 8 single one of the standards, as my best recollection
 9 right now, without looking at it.
 10 In the K through 12 generally, we did not
 11 put a check mark in the English arts language mark,
 12 nor the mathematics column there, only because we
 13 didn't want the use of this language is what is
 14 required -- what requires a classroom. We wanted to
 15 make it clear that this was suggested by that
 16 language.
 17 There can be no doubt, though, that for
 18 every one of the standards, it's really no
 19 inconsistencies there. We just wanted the reader to
 20 think that some of this language made it required.
 21 Q. Okay.
 22 A. Okay.
 23 Q. Are there other instances where you made any
 24 comparable notations or coding on the -- again,
 25 there's nothing -- well, are there any other

1 instances, other than this one we just talked about,
2 regarding differences between required and suggested
3 facility?

4 A. I mean, I don't recall anything that would
5 be comparable --

6 Q. Okay.

7 A. -- as we're sitting here right now. The
8 thing I would note, though, is that the kindergarten
9 through 12 generally was used as kind of a catchall
10 category beginning to indicate language that was not
11 attached to any specific standard. And so, that's
12 why the kindergarten through 12 language is treated
13 somewhat differently in each of the areas.

14 Q. Okay. Let me refer you to history
15 instructional materials, Page 3.

16 A. Okay.

17 Q. And looking at grade 1 standard 1.3, for
18 textbooks workbooks, there's a reference to
19 substandard 1.3.3 --

20 A. (Nodding head.)

21 Q. -- identifying American symbols, et cetera.

22 A. (Nodding head.)

23 Q. And the same substandard is cited under the
24 column dealing with primary materials historical
25 documents --

1 the primary materials of the documents and reference
2 books contained all, I could imagine that that would
3 cover it.

4 MR. EGAN: Okay.

5 THE WITNESS: Our determination was that we
6 would use both of them because of the breadth of the
7 standards.

8 MR. EGAN:

9 Q. So are you indicating that there was a --
10 the decision was made in this particular instance
11 that it -- with regard to grade one, standard 1.3, to
12 include both resources categories because of the
13 breadth of the standard?

14 A. Because the standard is pretty broad in its
15 coverage. When you're talking about American
16 symbols, that pretty broad. It was difficult for us
17 to imagine one textbook covering that entire thing.
18 So we thought that the teacher could supplement that
19 with other kinds of reference materials.

20 Q. Well, that suggests to me that you engaged
21 in, at least, some analysis of, you know, of the
22 scope of what was required?

23 A. We read the standard and made a
24 determination as to what we thought the standard
25 covered.

1 A. Yes.

2 Q. -- et cetera.

3 A. Yes.

4 Q. Okay. Did you develop any rule that would
5 indicate when you would cite the same standard in
6 different -- for different resources, in this case,
7 the different resources being textbook, workbooks on
8 the one hand and primary materials, et cetera on the
9 other?

10 A. There was no specific rule that applied
11 across the board. It was very much standard
12 dependent.

13 In this particular instance, we felt that it
14 was -- that both of these things were suggested by
15 the standard itself. Both textbook workbook type
16 things and also potential reference, these reference
17 books.

18 Q. Okay. Is it correct that either one would
19 be sufficient to meet the standard as either textbook
20 or primary material?

21 MS. WELCH: Objection. Vague.

22 THE WITNESS: (Pausing.) If the textbook
23 contained all that the standard was going to require,
24 I could imagine that it would be possible. But that
25 would be dependent on the textbook. Similarly, if

1 Q. Okay. Let me refer you to the history
2 facilities appendix Page 15.

3 A. History? Okay.

4 Q. And looking at the content standard 10.7, in
5 the library column, you cite a reference to the
6 framework Page 124 to indicate a library as a
7 suggested resource.

8 A. Yes.

9 Q. Okay. Would the reference to the framework,
10 Page 124, the same language, would that also suggest
11 a resource of literature and books in the
12 instructional materials category?

13 MS. WELCH: Objection. Vague.

14 THE WITNESS: In the instructional
15 materials, Page 19, under history social science
16 under 10.7, we did find that literature books were
17 suggested.

18 MR. EGAN:

19 Q. Okay. And again, there was no rule adopted
20 that would keep you from -- prevent you from citing
21 the same standard or framework provision for multiple
22 resources?

23 A. No.

24 Q. It was all content specific?

25 A. Yes.

1 Q. Okay. Did your analysis in this case
2 make -- did you make any determination of whether
3 having the resource, which, in this case, is -- it's
4 called "Examples of Social Arts," available in the
5 library, would be sufficient to meet the standard
6 without providing it in the instructional materials
7 category?

8 MS. WELCH: Objection. It mischaracterizes
9 the standard in the report.

10 THE WITNESS: We um, again, made -- we
11 didn't specifically determine what the precise method
12 of the deliver which would be -- this is akin to the
13 conversation we had on several standards at this
14 point right now.

15 We did feel that the standards suggested
16 that a library should be available to kids, because
17 there are a number of things that could be attained
18 from the library.

19 Examples of which are social science, art,
20 actually, the novels that are discussed in here, the
21 literature that's discussed in that particular
22 framework is -- well, similarly, in terms of
23 literature books, necessity could be made --
24 suggested that the literature books be made available
25 to the students as well. Yeah.

1 A. That's interesting.

2 Q. Actually, on the history social science
3 instructional materials, Page 2, under the textbook
4 workbook column, the standards K-2, K-3, K-4 --

5 A. Uh-huh.

6 Q. -- and K-6 --

7 A. Yes.

8 Q. -- all indicate a dot.

9 A. Suggested. But the summary table doesn't
10 reflect that.

11 Q. Right.

12 A. I see what you're saying. Yeah.

13 My response -- so that is -- I don't know
14 why that indicates that. But I think it is a perfect
15 example of where the analysis is located in the
16 appendices themselves. And to the extent that that
17 needs to be corrected on the summary tables, I'll
18 correct it. I'll need to take another look at that.

19 Q. Okay. Will you give -- if you're going to
20 do that, would you give me notice of what the
21 corrections are --

22 A. Yes. Absolutely.

23 Q. -- so I can --

24 A. Absolutely.

25 Q. Okay.

1 MR. EGAN:

2 Q. Okay. I'd like to refer you to the summary
3 table --

4 A. Okay.

5 Q. -- for "History, Social Science,
6 Instructional Materials" --

7 A. Okay.

8 Q. -- specifically, textbooks --

9 A. Yes.

10 Q. -- that indicate that the appendices show 90
11 of the standards require text and zero suggest text.
12 Is that correct?

13 A. That's -- that's according to the summary.

14 Q. Okay.

15 A. Yes.

16 Q. If you refer to the sort of the coordinating
17 section of the appendix, if you look at "History
18 Social Science Instructional Materials," the
19 appendix, Page 2, in the textbook workbook column --

20 A. Yes.

21 Q. -- there's a dot in that column; is that
22 correct?

23 A. Yes.

24 Q. Okay. So that indicates that it was
25 suggested and not required?

1 A. (Nodding head.)

2 Q. I'd like to refer you to Reading English
3 Language Arts Technology appendix, Page 3.

4 A. Okay.

5 Q. And specifically, to standard R 2.0. I'd
6 like you to read that, if you would.

7 A. Reading comprehension students read.

8 Q. Yeah. You don't have to read it out loud.

9 A. Oh! All right.

10 Q. I'm sorry.

11 A. Okay.

12 Q. "The standard provides
13 that students will work toward
14 grade 4 goal of reading one half
15 million words annually."

16 Is it your understanding that this is
17 reading that should be done outside of school? Is
18 that the way you read that standard?

19 A. I don't have an interpretation one way or
20 the other, either reading outside of the school or
21 combined inside the school.

22 Q. Okay.

23 A. I don't have an understanding one way or the
24 other, just looking at that right now, as I sit here.

25 Q. Okay.

1 A. I have to see the further contents of it.
 2 Q. And in the computer printer software
 3 Internet columns, there are four dots in each.
 4 A. Yes.
 5 Q. And as I understand it, from your prior
 6 testimony, that would indicate a dot for each of the
 7 grades 1 through 4?
 8 A. Correct.
 9 Q. Okay. So that -- looking at that in the
 10 column when it refers to the specific citation is
 11 2.0, it refers to online information Page 7 --
 12 A. Yes.
 13 Q. -- is that the online information that's
 14 referenced in standard R-2.0 at the very end?
 15 A. Yes.
 16 Q. Okay.
 17 A. Again, it is suggested, as you'll note
 18 there.
 19 Q. Right. And again, and this particular
 20 standard --
 21 A. Yeah.
 22 Q. -- from that context, "Students will work
 23 toward grade 4 goal."
 24 But as you -- as I understand it, you
 25 interpreted it to apply to suggest a resource for

1 A. Yes.
 2 Q. What is the relationship between the C-BEST
 3 requirements and the standards?
 4 A. I have to answer the contents of specific
 5 standards.
 6 Q. Okay.
 7 A. There are several parts.
 8 Q. Okay.
 9 A. Of the C-BEST that may be related to
 10 specific standards, and we have indicated as such.
 11 The C-BEST is, as its name indicates, a basic
 12 educational skills test for teachers. And in some
 13 instance, it may have skills and knowledge of
 14 teachers that would line up with standards. And we
 15 try to identify that as best we could.
 16 Q. Okay. Do you know whether the C-BEST is a
 17 measure teaching skills or teaching abilities?
 18 A. Let's put it this way. There's a whole lot
 19 of litigation on that question. And I'm not
 20 comfortable answering that as to whether or not it
 21 measures basic skills or teaching abilities or
 22 qualifications. I don't know that enough.
 23 Q. Okay.
 24 A. Let me clarify. Nor have I done a specific
 25 analysis of it or what it's supposed to measure.

1 grades 1, 2, and 3 in this context.
 2 A. If you're working toward a goal in 4, you're
 3 going to want to start reading that material early
 4 on. Read half a million words in kindergarten or, I
 5 should say, first or second or third grade. But if
 6 you're working toward that goal, that material should
 7 be available to students.
 8 Q. Okay.
 9 A. Yes.
 10 Q. Referring to the English Language Arts
 11 Teachers appendix --
 12 A. Okay.
 13 Q. -- at the bottom is another reference to
 14 RICA. R-I-C-A. Why? What? When? How?
 15 A. Uh-huh.
 16 Q. What is RICA? Do you know what it --
 17 A. Whew! Um, RICA -- I forgot what the acronym
 18 stands for.
 19 Q. Okay. If it -- I don't recall.
 20 A. It's an assessment for teachers or would be
 21 teachers. That's all I remember. I can't remember
 22 what the acronym is for.
 23 Q. Regarding the -- looking at English arts
 24 teachers Page 1, kindergarten through grade 12,
 25 generally, there's a reference to the C-BEST.

1 Q. Looking at History, Social Science
 2 Facilities Appendix --
 3 A. Uh-huh.
 4 Q. -- Page 16 --
 5 A. Yes. 16? Okay.
 6 Q. Standard 11.5. Actually, 11.5.5 is
 7 referenced under the Media Center column.
 8 How does this substandard suggest a media
 9 center? This describe --
 10 A. Yes. The determination here was that as
 11 part of this, you might want to actually listen to
 12 music from the Harlem renaissance, for instance. And
 13 I think that's -- that's why the media center part
 14 was there.
 15 In addition to that, you're going from --
 16 the art that could be done by slides and the various
 17 things that depict the artists' work.
 18 Again, I just want to emphasize media center
 19 could be combined with the library.
 20 Q. Okay. Is it possible to describe the Harlem
 21 renaissance in new trends without looking at art or
 22 listening to music?
 23 MS. WELCH: Objection. Incomplete
 24 hypothetical.
 25 THE WITNESS: The analysis we did here was

1 where the curriculum frameworks suggested this as a
 2 way of doing it. And it was our belief the
 3 curriculum frameworks suggested reference to the
 4 various media.
 5 MR. EGAN: Okay.
 6 THE WITNESS: We didn't know -- we didn't --
 7 MR. EGAN:
 8 Q. I think as I understand it, you're saying
 9 that the way you interpreted this reference quoted
 10 was that it suggested media such --
 11 A. Yes.
 12 Q. -- as records and --
 13 A. Potentially slides or anything that you can
 14 do --
 15 Q. Okay.
 16 A. -- to depict --
 17 Q. Okay.
 18 A. -- the art and the work of that time period.
 19 Q. Referring to the History Instructional
 20 Materials Appendix, Page 16 --
 21 A. History Instructional Materials, Page 16?
 22 Q. Right.
 23 A. Yes.
 24 Q. The content standard 8.9, there's another --
 25 the literature of books, category, there's a

1 reference to the framework, Page 101, which provides
 2 excerpts from Frederick Douglas's, "What the Black
 3 Man Wants," as well as excerpts from "Slave
 4 Narratives," which will bring these people on the
 5 bench alive for the students.
 6 A. Yes.
 7 Q. Does the reference -- let me see. How did
 8 you experience that to suggest literature in books as
 9 a resource for this standard 8.9?
 10 A. It specifically calls for excerpts from
 11 literature books, or suggestion, I should say,
 12 excerpts from literature books as means to
 13 standards -- teaching to standard 8.9.
 14 Q. This is in reference from the framework?
 15 A. Correct.
 16 Q. Okay. Do you recall is the framework a
 17 document that the publishers refer to in seeking
 18 state approval for textbooks?
 19 A. I don't know.
 20 MS. WELCH: Calls for speculation.
 21 THE WITNESS: I don't know what they refer
 22 to. They may. They may not. I don't know.
 23 MR. EGAN:
 24 Q. Okay. Do you know whether have you reviewed
 25 any of the History Social Science adopted texts?

1 A. I have seen --
 2 Q. Okay.
 3 A. -- History Social Science adopted text. I
 4 have not reviewed them --
 5 Q. Okay.
 6 A. -- for purposes of the content of the
 7 analysis.
 8 Q. Do you know whether any of the adopted
 9 History Social Science text include excerpts from any
 10 of the sources cited on Page 16 of the history
 11 instructional materials?
 12 MS. WELCH: Objection. Vague. Calling for
 13 speculation.
 14 THE WITNESS: I do not know for sure. But
 15 it would require that they have not on the --
 16 specifically identified things here. But also
 17 excerpts from "Slave Images," and "Abolitionist." So
 18 I don't know.
 19 MR. EGAN:
 20 Q. Okay. So you're reading of the framework is
 21 all of the things that are required, all that is
 22 excerpts from "Slave Images" or "Abolitionist"?
 23 A. My referring that is suggested.
 24 Q. Suggested. I'm sorry. Okay. Referring you
 25 to the Science Instructional Materials Appendix Page

1 76 --
 2 A. Okay.
 3 Q. -- looking specifically at the Graphing
 4 Charting Drawing Materials Resource column --
 5 A. Yes.
 6 Q. -- do you know the check -- there's a check
 7 indicating that these resources are required.
 8 A. Yes.
 9 Q. Do you know if the requirement is based on,
 10 I presume, both 4-D is, I presume, framework, page
 11 40, and 4-E also references the -- it's unclear, I
 12 think.
 13 A. 4-E is the reference to the standards.
 14 Right. And also, framework sometimes repeats the
 15 standard.
 16 Q. Okay. So 4-D is reference to the standard?
 17 A. And 4-E is the reference to the standard as
 18 well.
 19 Q. And also, 4-E also references framework?
 20 A. Yeah.
 21 Q. And again, that is because the framework
 22 reiterates the standard?
 23 A. Yes.
 24 Q. Okay. So am I correct, then, that both of
 25 these, 4-D and 4-E, independently indicate that

1 graphing and charting materials are required to meet
2 this standard?
3 A. Not necessarily. 4-E certainly requires
4 that graphing and charting materials be necessary.
5 That may have been our determination that 4-D implied
6 it. But you'll recall that if they were required and
7 implied, we would use required over implied --
8 Q. Okay.
9 A. -- column.
10 Q. But it's your interpretation that 4-E
11 requires these materials?
12 A. Yes.
13 Q. Okay. What is the definition of charting
14 graphing drawing? Tell us. Does it include just
15 plain paper?
16 A. It would include paper that can be used for
17 these purposes, but also potentially, equipment that
18 would help with that kind of drawing. Rulers --
19 Q. Okay.
20 A. -- and the like.
21 Q. I guess my question is: What are the --
22 what specifically are the materials that are required
23 to meet standard 4-E?
24 MS. WELCH: Objection. Asked and answered.
25 THE WITNESS: Our reading of the standards

1 card says that graph charting, drawing materials are
2 necessary and --
3 For example -- by way of example only, when
4 you want to teach students to construct bar graphs,
5 precision should be part of that lesson. And to do
6 precise graphing, you would need some kind of
7 instruments, graph paper, that is laid out in grids,
8 as you probably know, and/or on the use of rulers to
9 make sure that the graphing are meaningful.
10 MR. EGAN: Okay.
11 THE WITNESS: Yeah.
12 MR. EGAN:
13 Q. Anything else you can think of besides graph
14 paper and ruler with regard to 4-E?
15 A. Um, those would be the ones that come
16 immediately to mind.
17 Q. Okay.
18 A. Yeah.
19 Q. Looking at Science Instructional Materials,
20 let me start with Page 21 --
21 A. Okay.
22 Q. -- under the LS, which is Life Signs
23 Standard Textbook Workbook column --
24 A. Uh-huh.
25 Q. -- there's a check.

1 A. Yes.
2 Q. But there is nothing -- no reference,
3 specifically, in the column.
4 A. Uh-huh.
5 Q. I think the same is true on Page 22 of the
6 Science Instructional Materials appendix with regards
7 to --
8 A. That's correct.
9 Q. -- earth science. And it's true for a
10 number of -- of standards.
11 A. Yup.
12 Q. Why is that?
13 A. There's two principals at work in our -- in
14 that, from our determination.
15 The first principal is um, ways -- for
16 instance, the life signs standard of all organisms
17 need energy and matter to live and grow.
18 One of the ways it could be taught, they
19 could have terrariums and the like, gardens in the
20 classroom and do a lot of various hands-on work.
21 The least resource intensive, least best
22 practice, as I've been using the term, would be to
23 provide students with hard copy materials where they
24 read about this process and learn the process.
25 So either the least resource intensive

1 thing, that's principal one. Principal two, this
2 goes back to the conversation that we were having the
3 last time regarding when it is that instructional
4 materials and textbooks would be the method of
5 instructional delivery.
6 And we had found out it could be -- it could
7 be from a very young age or it could not be. And so,
8 we chose fourth grade as the age to start -- to start
9 it.
10 We could have chosen an earlier age, based
11 on our consultations, as I described the last time.
12 But we actually chose a more conservative route to
13 begin in the fourth grade.
14 Q. So in that case, looking at the science
15 instructional materials, Page 18, grade 4 --
16 A. Yes.
17 Q. -- again, there's no check indicating that's
18 required.
19 A. Page 18? That's in grade 3.
20 Q. Let's see. Page 19. There's nothing on --
21 A. Yeah. That's not a standard there. It just
22 says grade 4.
23 Q. Okay.
24 A. The first time standards mentions under
25 physical science, and there is a check there.

1 Q. Okay. Now, what's the basis for the check
2 there?
3 A. The two principals that I just described to
4 you. We could have started the use of instructional
5 materials, as we defined, at a younger age. I think
6 that would be very, very well grounded, in terms of
7 practice. But instead, we chose to be resource
8 conservative and not start it until the fourth grade.
9 Q. It started in the fourth grade?
10 A. Right.
11 Q. So again, so it looks -- again, it probably
12 should have -- I probably should have -- to
13 illustrate, if I look at Science Instructional
14 Materials, Page 15, text book, workbooks, again
15 there's no check there.
16 A. That's correct.
17 Q. Okay. And that's consistent with the
18 principal that you just articulated --
19 A. Yeah.
20 Q. -- that you started in grade 4?
21 A. Right.
22
23 (WHEREUPON EXHIBIT 36 WAS
24 MARKED FOR IDENTIFICATION)
25

1 MR. EGAN:
2 Q. All right. Do you recognize this exhibit,
3 36?
4 A. I don't recognize the exhibit, but I
5 recognize my handwriting.
6 Q. Okay. Can you tell me approximately when
7 these notes were taken?
8 A. Um, my -- based on our conversations on
9 Thursday and Friday of last week, and some of the
10 other things that you showed me, I would put this
11 around November or December of 2000.
12 Q. Okay.
13 A. But I could be off by a little bit.
14 Q. Okay.
15 A. Yeah.
16 Q. Could you read the -- the first line under
17 "To Do"?
18 A. E-mail all my students re large meeting and
19 MoFo."
20 Q. Okay. Do you recall what the large meeting
21 was?
22 A. No. I don't. I don't know what the
23 reference to --
24 Q. The line that indicates:
25 "E-mail standards group re

1 science ed."
2 A. Correct.
3 Q. Okay. And then, "at Stanford"?
4 A. Yes.
5 Q. Okay. Do you know what the reference to "at
6 Stanford" is?
7 A. Not specifically.
8 Q. Do you have a "why"?
9 A. May have something to do with others who
10 were consulted on the project.
11 Q. All right. How about -- can you read the
12 next line?
13 A. "Back check on stuff."
14 Q. Okay. How about the --
15 A. "E-mail Lynn re task and lit review."
16 Q. Okay.
17
18 (WHEREUPON EXHIBIT 37 WAS
19 MARKED FOR IDENTIFICATION)
20
21 THE WITNESS: Okay.
22 MR. EGAN:
23 Q. Exhibit 37 appears to be an e-mail from
24 Jeanie Oaks sent on November 26, 2001 to a number of
25 people, including you.

1 A. Yes.
2 Q. What does the subject refer to?
3 A. It says:
4 "More from the teacher
5 quality wars."
6 Q. Okay. What does that mean?
7 A. Oh! I didn't write it.
8 MS. WELCH: Objection. Calls for
9 speculation.
10 THE WITNESS: So I'm not sure what Dr. Oaks
11 meant by that.
12 MR. EGAN:
13 Q. What was your understanding?
14 A. Um --
15 MS. WELCH: Same objection.
16 THE WITNESS: I had no -- I have no -- I
17 don't know what the -- what that means, because I
18 didn't write it. I don't know how to answer that
19 question, other than -- yeah.
20 MR. EGAN:
21 Q. The note says:
22 "See the latest on
23 Hanushek."
24 A. Yes.
25 Q. Who is Hanushek?

1 A. I assume it refers to Eric Hanushek.
 2 Q. Who is he?
 3 A. He's the current scholar at the Higher
 4 Institute at Stanford. A fellow there.
 5 Q. Okay. And the reference is to -- looks like
 6 to a web site.
 7 A. Yes. It does.
 8 Q. Okay.
 9 A. Looks like that.
 10 Q. Did you visit the web site and review the
 11 document?
 12 A. If I did, I have no memory of it. I'm --
 13 Q. Okay.
 14 A. This is just one of many e-mails, I'm sure.
 15 I may have checked it or not. I don't remember.
 16 Q. Do you know why Dr. Oaks sent this to you?
 17 A. No. I don't.
 18 Q. Okay. Did you ever discussed any of the
 19 Hanushek papers with Dr. Oaks?
 20 A. No. I haven't.
 21 Q. Okay.
 22 A. Not to my recollection, anyway.
 23
 24 (WHEREUPON EXHIBIT 38 WAS
 25 MARKED FOR IDENTIFICATION)

1
 2 THE WITNESS: Okay.
 3 MR. EGAN:
 4 Q. Do you recall writing this, referring to
 5 this Exhibit 38?
 6 A. Yes.
 7 Q. Do you recognize Exhibit 38?
 8 A. It looks like an e-mail from me to Jeanie
 9 Oaks.
 10 Q. Okay. Do you recall writing this and
 11 sending it to Jeanie Oaks?
 12 A. I don't recall specifically writing it and
 13 sending it. I do remember um, the content of what's
 14 written in here, though.
 15 Q. Okay. You refer to the note that she's
 16 intending to include among the papers for the expert
 17 report.
 18 A. (Nodding head.)
 19 Q. What is -- what is the expert report that
 20 you're talking about there?
 21 A. Um, my understanding at the time was that
 22 she was going to use some of the material from my
 23 paper in her report.
 24 Q. And what was her report going to cover? Do
 25 you know?

1 A. Um, I think at that time, my recollection is
 2 instructional materials textbooks and the like, was
 3 what I'm best remembering.
 4 Q. Okay. And what does:
 5 "The paper that I wrote
 6 with my students on California's
 7 educational content standards."
 8 What does that refer to?
 9 A. It was the um, great, great grandfather of
 10 the expert report --
 11 Q. Okay.
 12 A. -- that I have here.
 13
 14 (WHEREUPON EXHIBIT 39 WAS
 15 MARKED FOR IDENTIFICATION)
 16
 17 THE WITNESS: Okay.
 18 MR. EGAN:
 19 Q. Do you recognize 39?
 20 A. It looks like an e-mail that I sent to
 21 Marisa Saunders in response to an e-mail she sent to
 22 me.
 23 Q. Okay. Did you have any discussions with
 24 Marisa Saunders related to the topics referenced in
 25 the e-mail?

1 A. My recollection is this was the only
 2 communication we had on the subject.
 3 Q. Okay.
 4 A. Let me clear -- on the subject of um, her
 5 question --
 6 Q. Okay.
 7 A. -- here.
 8 Q. In your e-mail to Ms. Sanders, you indicate
 9 that the summary of the goals was taken from the text
 10 of the history social science curriculum framework.
 11 Do you recall was it taken verbatim or incorporated
 12 into your paper?
 13 A. I don't recall whether it was verbatim.
 14 Q. Okay.
 15
 16 (WHEREUPON EXHIBIT 40 WAS
 17 MARKED FOR IDENTIFICATION)
 18
 19 MR. EGAN:
 20 Q. Okay?
 21 A. Okay.
 22 Q. Can you identify Exhibit 40?
 23 A. It looks like it is a -- um, first of all,
 24 working from the first e-mail on here, it looks like
 25 an e-mail from Jeanie Oaks to a group of people,

1 myself included.
 2 Q. That is Page 2 of 3 that you're referring
 3 to?
 4 A. Yes.
 5 Q. Okay.
 6 A. And then, it looks as though Jeanie then did
 7 a follow up e-mail to the same group. And then, it
 8 looks like Tom Demar did an e-mail to the same group,
 9 and then, it looks like Jeanie sent an e-mail to the
 10 same group again.
 11 Q. Okay. Referring to the e-mail from Dr. Oaks
 12 that's addressed to "hello all" --
 13 A. Yes.
 14 Q. -- you were a recipient of that e-mail?
 15 A. Yes.
 16 Q. Okay. The paragraph begins:
 17 "April we read and respond
 18 to one another papers and
 19 provide comments."
 20 Did you have a paper, a Williams paper
 21 that was -- a Williams paper that was the subject of
 22 this e-mail message?
 23 MS. WELCH: Objection. Asked and answered.
 24 THE WITNESS: I did at some point. And I
 25 don't know whether it was the subject of this e-mail

1 or not.
 2 At some point, I was asked to send my paper
 3 to be reviewed. And I sent it to Jeanie or one of
 4 her research assistants to be reviewed.
 5 MR. EGAN:
 6 Q. Okay. Was it reviewed?
 7 A. Yes. That was what I had mentioned earlier
 8 in the July meeting. It was reviewed by Rick
 9 Mintrop.
 10 Q. Okay. But there was no other review, other
 11 than Dr. Mintrop's review as provided and described
 12 at the UCLA conference?
 13 A. Yes. To my knowledge, I can't think of
 14 anywhere -- another time it was reviewed, although
 15 you mentioned something here that was a surprise to
 16 me.
 17 Q. Okay. The paragraph that begins:
 18 "May. We should use this
 19 time to share our work with one
 20 another and the litigation
 21 team."
 22 Did you share any of your work with the
 23 litigation team subsequent --
 24 A. I don't recall at this time doing it. I
 25 think -- yeah.

1 Q. Okay.
 2 A. Yeah.
 3 Q. Let me refer you to Page 1.
 4 A. Uh-huh.
 5 Q. And specifically, the e-mail from Dr. Oaks
 6 sent April 30th, 2002 regarding the Lou Harris poll
 7 on Williams.
 8 A. Yes.
 9 Q. Okay. You're a recipient of that e-mail?
 10 A. Yes. I am.
 11 Q. Had you -- at this time, were you aware of
 12 the Lou Harris poll -- or prior to this time, were
 13 you aware of the Lou Harris poll that's referenced in
 14 the e-mail?
 15 A. I recall. And I think it's reflected in the
 16 some notes, talking about doing a survey with Linda
 17 Darling-Hammond. Then I did not work directly with
 18 Linda anymore on the matter, basically.
 19 And then, this would have been the next time
 20 that I heard about any kind of poll or survey. And
 21 that is the first time that I recall understanding
 22 that there was a Lou Harris poll, specifically. I
 23 can't remember a time before this that I knew there
 24 was a Lou Harris poll.
 25 Q. Okay.

1 A. It's entirely possible, but I can't
 2 remember.
 3 Q. Okay. Prior to this time, do you recall
 4 seeing any of the poll surveyed documents?
 5 A. No.
 6 MS. WELCH: Objection. Asked and answered.
 7 THE WITNESS: I don't recall that. No.
 8 MR. EGAN:
 9 Q. All right. Did you check out the poll
 10 results?
 11 A. I remember looking at this, actually. Yes.
 12 I -- this -- I had described that the last time we
 13 talked. And this must -- this refreshed my
 14 recollection. This was probably the time that
 15 prompted me to take a look at it.
 16 Q. Okay.
 17
 18 (WHEREUPON EXHIBIT 41 WAS
 19 MARKED FOR IDENTIFICATION)
 20
 21 MR. EGAN: Okay.
 22 A. Okay. I'm sorry. There's -- I can read it
 23 here.
 24 Q. Actually --
 25 A. I just started -- wait a minute. Okay.

1 Q. Do you recognize Exhibit 41?
 2 A. It appears to be an e-mail from me to
 3 Jeannie Oaks.
 4 Q. Okay. Exhibit 41, Page 2 of 3?
 5 A. Yes. This is a message sent February 1st,
 6 2002 to Jeanie. Yes.
 7 Q. Okay.
 8 A. We saw this e-mail already.
 9 Q. Okay. So there was -- of the first occasion
 10 when you learned -- that you learned that Dr. Oaks
 11 intended to include your papers or include your paper
 12 among the papers, this refreshed your recollection?
 13 MS. WELCH: Objection. Vague.
 14 THE WITNESS: That's what
 15 Dr. Darling-Hammond said to me, that Jeanie was going
 16 to rely on my work. And I didn't know she was going
 17 to do that. At least, not that, specifically.
 18 And so, I wrote to her to confirm that was
 19 true and asked her is there anything else I could do
 20 to support -- to complete my work so that she could
 21 use it, if she wanted to.
 22 MR. EGAN:
 23 Q. Okay. Referring to Page 1 of Exhibit 41 --
 24 A. Yes.
 25 Q. -- the paragraph that begins:

1 "Although the analysis is
 2 not complete, there are a couple
 3 of very clear trends."
 4 Does that refer back to the science
 5 standards and frameworks, or does this refer more to
 6 some broader reference?
 7 A. Science standards and frameworks, I'm
 8 certain, refers specifically to that.
 9 Q. Okay. You've testified with respect to
 10 designation of textbooks. And I believe that you
 11 made a determination to make a distinction between
 12 beginning at grade four with respect to when
 13 textbooks would be required or suggested.
 14 A. The -- I -- I don't remember what I -- my
 15 testimony was specifically. It is what it is.
 16 But --
 17 Q. Right.
 18 A. But we did make a determination, at some
 19 point, that we would consider textbooks as the least
 20 best practice for the science standards beginning at
 21 grade 4.
 22 Q. Okay. Looking at Paragraph 2-C:
 23 "As early as the second
 24 grade, children begin to use
 25 laboratory supplies."

1 Did you make a comparable determination
 2 with respect to laboratory supplies? That is, did
 3 you --
 4 A. The determination with regard to the
 5 laboratory supplies for second grade children is in
 6 reference to a specific standard.
 7 I'm fairly confident we didn't make any
 8 global determination the way that we did with the
 9 textbooks --
 10 Q. Okay.
 11 A. -- in the science area.
 12 Q. Okay. Were there any other global
 13 determinations?
 14 A. Again --
 15 Q. Okay.
 16 A. -- you asked me this before. I don't recall
 17 any other subject matter, except for science, where
 18 this came up. It is possible it came up in another
 19 area, but I don't recall.
 20 Q. Okay.
 21 A. Okay.
 22 THE WITNESS: Can we go off the record and
 23 take a break?
 24
 25 (Whereupon a recess was taken.)

1 Off the record at 2:08 and back
 2 on the record at 2:13.)
 3
 4 (WHEREUPON EXHIBIT 42 WAS
 5 MARKED FOR IDENTIFICATION)
 6
 7 MR. EGAN: Ready?
 8 Q. Dr. Koski, can you identify Exhibit 42?
 9 A. It appears to be a memorandum from Lynn
 10 Echenberg dated 10-29-02.
 11 Q. Okay.
 12 A. Hmm!
 13 Q. The memo refers to a bibliography of
 14 articles that Linda Darling-Hammond asked her to
 15 supply at the meeting at 11-7-2000.
 16 A. Right.
 17 Q. Do you recall is the date on the memo
 18 correct?
 19 A. My best guess it's wildly wrong. It would
 20 have been a lot -- Lynn was -- graduated from law
 21 school from 10-29-02.
 22 Q. Okay. The memo refers to her portion of the
 23 project.
 24 A. Yes.
 25 Q. Which project?

1 A. As I recall, I had broken up my teams, that
2 was sort of overseeing, into, you know, teacher
3 quality team, the instructional team and the
4 standards team. And she was part of teacher quality
5 team. And her portion of the project was to do this
6 literature review. And there may have been other
7 parts.

8 Q. Okay.

9
10 (WHEREUPON EXHIBIT 43 WAS
11 MARKED FOR IDENTIFICATION)

12
13 THE WITNESS: Okay.

14 MR. EGAN:

15 Q. Can you identify Exhibit 43?

16 A. Um, it's a document that I -- I have a
17 recollection that I've seen before. Um, I'm not
18 entirely sure who the author is, though, unless it's
19 indicated on here.

20 Q. Okay.

21 A. My best guess would be that it was something
22 that was prepared by somebody on our teacher quality
23 team. But I don't know for sure.

24 Q. Okay. On Page 1, which is Bates stamp
25 Number Plaintiff XP-LDH 6520, is that your

1 handwriting?

2 A. No.

3 Q. Do you know whose handwriting it is?

4 A. I don't know.

5 Q. All right. How about on the next page,
6 which is Bates number 6521? Is any of that your
7 handwriting?

8 A. It's not my handwriting.

9 Q. Do you know whose handwriting that is?

10 A. I don't.

11 Q. How about the last page, 6523? Is that your
12 handwriting?

13 A. It's not.

14 Q. Do you recognize whose it is?

15 A. No.

16 MR. EGAN: Okay. Dr. Koski, I am finished.
17 I will reserve my right to continue the deposition
18 if -- depending upon what additional materials are
19 produced or corrections are made to the report.

20 Based upon what I understand, I doubt that
21 that's likely. But I would prefer to make that
22 formal reservation. So thank you very much.

23 THE WITNESS: Thank you.

24 MS. WELCH: Thank you.

25 (Ending time: 2:21 p.m.)

1 STATE OF { _____ }
2) ss.
3 COUNTY OF { _____ }
4
5
6

7 I, the undersigned, declare under
8 penalty of perjury that I have read the foregoing
9 transcript, and I have made any corrections,
10 additions, or deletions that I was desirous of
11 making; that the foregoing is a true and correct
12 transcript of my testimony contained therein.
13 Executed this ____ day of _____,
14 20__, at

15
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20 _____
21 WILLIAM KOSKI, Ph.D.
22
23
24
25

1 REPORTER'S CERTIFICATE

2
3
4 I, ALICE N. HALBERT, CSR No. 7889,
5 Certified Shorthand Reporter, certify:

6 That the foregoing proceedings were taken
7 before me at the time and place therein set forth, at
8 which time the witness was put under oath by me;

9 That the testimony of the witness, the
10 questions propounded, and all objections and
11 statements made at the time of the examination were
12 recorded stenographically by me and were thereafter
13 transcribed;

14 That the foregoing is a true and correct
15 transcript of my shorthand notes so taken.

16 I further certify that I am not a relative or
17 employee of any attorney of the parties, nor
18 financially interested in the action.

19 I declare under penalty of perjury under the
20 laws of California that the foregoing is true and
21 correct.

22 Dated this 1st day of April, 2003.
23
24

25 _____
ALICE N. HALBERT, C.S.R. No. 7889

1 REPORTER'S CERTIFICATION OF CERTIFIED COPY

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I, ALICE N. HALBERT, CSR No. 7889, a
Certified Shorthand Reporter in the State of
California, certify that the foregoing pages 1
through 615, constitute a true and correct copy of
the original deposition of WILLIAM KOSKI, Ph.D. taken
on March 27, 2003.

I declare under penalty of perjury under the
laws of the State of California that the foregoing is
true and correct.

Dated this 1st day of April, 2003.

ALICE N. HALBERT, C.S.R. No. 7889