

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF SAN FRANCISCO
UNLIMITED JURISDICTION

ELIEZER WILLIAMS, et al.,)

)

Plaintiffs,)

)

vs.)

No. 312236

)

STATE OF CALIFORNIA, DELAINE)

EASTIN, State Superintendent)

of Public Instruction, STATE)

DEPARTMENT OF EDUCATION,)

STATE BOARD OF EDUCATION,)

)

Defendants.)

)

DEPOSITION OF ERIC A. HANUSHEK

San Francisco, California

Tuesday, September 9, 2003

Volume 2

Reported by:

KATHY NELSON

CSR No. 9796

JOB No. 45608

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

4 ELIEZER WILLIAMS, et al.,)
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6 Plaintiffs,)
7 vs.) No. 312236
8)
9 STATE OF CALIFORNIA, DELAINE)
10 EASTIN, State Superintendent)
11 of Public Instruction, STATE)
12 DEPARTMENT OF EDUCATION,)
13 STATE BOARD OF EDUCATION,)
14)
15 Defendants.)

16 Deposition of ERIC A. HANUSHEK, Volume 2,
17 taken on behalf of the Plaintiffs, at 425 Market
18 Street, 33rd Floor, San Francisco, California,
19 beginning at 9:05 a.m. and ending at 11:06 a.m.,
20 on Tuesday, September 9, 2003, before KATHY NELSON,
21 Certified Shorthand Reporter No. 9796.
22
23
24
25

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1 APPEARANCES:

2 For Plaintiffs:
3 MORRISON & FOERSTER, LLP
4 BY: MICHAEL A. JACOBS
5 BY: J. GREGORY GROSSMAN
6 Attorneys at Law
7 425 Market Street, 33rd Floor
8 San Francisco, California 94105-2482
9 (415) 268-7455

10 For Defendant State of California:
11 O'MELVENY & MYERS, LLP
12 BY: LYNNE M. DAVIS
13 Attorney at Law
14 400 South Hope Street
15 Los Angeles, California 90071-2899
16 (213) 430-6000

17 For Los Angeles Unified School District:
18 PILLSBURY WINTHROP, LLP
19 BY: JEFFREY STEVEN ROSS
20 Attorney at Law
21 50 Fremont Street
22 San Francisco, California 94105-2228
23 (415) 983-1000

24 For California School Boards Association:
25 CALIFORNIA SCHOOL BOARDS ASSOCIATION
BY: ABE HAJELA
Special Counsel
555 Capitol Mall, Suite 1425
Sacramento, California 95814
(916) 442-1280

1 San Francisco, California, Tuesday, September 9, 2003
2 9:05 a.m. - 11:06 a.m.
3

4 (Plaintiffs' Exhibit 5 was marked for
5 identification by the court reporter.)
6
7

8 ERIC A. HANUSHEK,
9 having been first duly sworn, was examined and testified
10 further as follows:
11

12 EXAMINATION

13 BY MR. JACOBS:

14 Q Dr. Hanushek, welcome. Good morning.

15 A Thank you.

16 Q I have marked as Exhibit 5 a paper that you
17 were a co-author on, "Teachers, Schools and Academic
18 Achievement," by Steven Rivkin, Eric Hanushek, and John
19 Kain, from July 2002.

20 Do you see that in front of you?

21 A Yes.

22 Q We talked some about this study yesterday. I'm
23 not sure I asked you the following question. If I did,
24 I apologize for repeating myself. I didn't have a copy
25 of the transcript.

1 Did you analyze -- I think we talked yesterday
2 about the fact that you found higher teacher turnover in
3 schools with low-income students?

4 A Yes.

5 Q And you found that that teacher turnover led to
6 more inexperienced teachers teaching low-income
7 students?

8 A Yes.

9 Q Did you find, using your value-added measure of
10 teacher quality, a concentration of low-quality teachers
11 in schools with higher proportions of low-income
12 students?

13 MS. DAVIS: Vague and ambiguous.

14 THE WITNESS: We did not look at that question.

15 BY MR. JACOBS:

16 Q Is it examinable?

17 MS. DAVIS: Same objection.

18 THE WITNESS: It may be. We have not figured
19 out a way to do it. The paper that you referenced here
20 describes why it's not possible to do that in any
21 straightforward manner.

22 BY MR. JACOBS:

23 Q Where is that?

24 A I'm not sure that I can find a particular
25 sentence that will capture this. I can give you the

1 average teacher quality, particularly a reduction
2 concentrated in lower income schools." Do you see that?

3 A Yes, I do.

4 Q And then you cited several pieces: "Hanushek
5 and Rivkin 1997; Hanushek 1999a; and Jepsen and Rivkin
6 2001."

7 What is the -- what were you drawing on from
8 those citations?

9 A The reference to "Hanushek and Rivkin 1997"
10 refers to the implications of class size reduction for
11 overall costs in schools, and the cost growth in
12 schools.

13 "Hanushek 1999a" -- if I can make sure that I
14 have the right citation. "Hanushek 1999a" is a review
15 of evidence on class size reduction, which notes that,
16 according to the WestEd study, and maybe something
17 else -- I can't remember precisely -- the Class Size
18 Reduction Policies Institute of the State of California
19 led to suburban schools trying to hire new teachers and
20 hire inexperienced teachers from innercity schools, and
21 suggested that innercity schools were subject to having
22 more inexperienced teachers because of that.

23 The Jepsen and Rivkin study of 2001 attempted
24 to look at the implications of class size reduction for
25 students' achievement in California. And it looked at

1 idea behind it.

2 We are, in this paper, concerned about
3 separating out teacher quality from other factors that
4 might influence student performance and that might be
5 correlated with teacher quality, so that we know, both,
6 parents choose what schools they attend in large part
7 through their residential choices, and we know that
8 school administrators and parents interact to assure
9 classroom placement of their students -- of their
10 children or students.

11 What we wanted to do was get a pure measure of
12 the quality of teachers, although probably not a current
13 estimate of it, and we did that by looking at only
14 variations of teachers within individual schools.

15 The question you just asked was one that looks
16 at teacher quality across different schools. And we
17 have not looked at that question.

18 Q The data set that you relied on assigns
19 teachers to schools -- or shows the assignment of
20 teachers to schools?

21 A Yes, it does.

22 Q On page 32, you stated a hypothesis, or a
23 possibility on this issue: "Moreover, policies to
24 reduce class size are not only very costly but may even
25 have adverse consequences if they lead to a reduction in

1 the speed of adoption of class size reduction and
2 interactions of class size reduction with, I believe,
3 race, race of students, and found that it appeared that
4 class size reduction policies harmed black children,
5 which they interpreted as being a statement that schools
6 serving black students were left with poor teachers or
7 more inexperienced teachers or some combination which
8 they did not identify.

9 Q Did you have a view, when you wrote this, as to
10 whether the Jepsen and Rivkin piece was reliable?

11 MS. DAVIS: Vague and ambiguous.

12 THE WITNESS: I think it's suggestive. It's
13 not conclusive. And so I'm not sure what "reliable"
14 means. "Reliable" is a term we would use in a different
15 way statistically.

16 BY MR. JACOBS:

17 Q So the term you would use is "suggestive"?

18 A Yes. I believe that it's suggestive of what
19 happened.

20 Q And what was -- if "suggestive" is "B," what's
21 an "A" --

22 MS. DAVIS: Vague and ambiguous.

23 BY MR. JACOBS:

24 Q -- in your world?

25 A Oh, conclusive. I meant "suggestive" and "not

1 conclusive" as one term.

2 Q So what was -- in that piece, what was the gap
3 in the analysis that rendered it not conclusive? What
4 would have had to have been done to take that to
5 conclusive?

6 A The problem with analyzing a classroom size
7 reduction policy is it was a policy that was put in
8 place for all of the schools in the state at the same
9 time. So it is hard to know precisely what the control
10 group is to compare achievement differences to what they
11 did. This was to try to use information about the speed
12 of adoption and to try to then look at the growth and
13 the achievement for schools and late adopters versus
14 early adopters.

15 The inconclusive part is that late adopters, by
16 the financial incentives involved, probably have
17 peculiar characteristics, the districts that adopt late.
18 And so there becomes a question of whether you've
19 adequately controlled for differences in the districts,
20 when you look at these effects.

21 Q Is that another misspecification issue, that
22 late adoption may be correlated with some other unstated
23 characteristic?

24 A Yes.

25 Q You had an earlier version of this. I'm not

1 it's "work in progress," but it may have some other
2 title. But by the fact that it has no citation, it was
3 a publication, means that it is in progress.

4 Q So take a look at the paragraph that I
5 highlighted there. I'll read it into the record. The
6 paragraph I highlighted reads as follows -- the first
7 sentence is not highlighted:

8 "These estimates suggest special caution in the
9 case of large, across the board class size reductions
10 such as the 10 student per class average reduction
11 undertaken by California in the mid-1990s. Not only do
12 reduced class sizes have much smaller effects on non-low
13 income students, but changes in average teacher quality
14 and the distribution of teacher quality may offset the
15 gains for many students, particularly if the increased
16 hiring reduces average quality. This concern has very
17 definite distributional implications if higher income
18 districts or those with fewer minority students hire
19 away the better teachers from other districts, leaving
20 lower income districts large numbers of new teachers (as
21 Stecher," S-t-e-c-h-e-r, "and Bohrnstedt,"
22 B-o-h-r-n-s-t-e-d-t, "(1999) suggest was the case in
23 California). The benefits to some will be offset by
24 losses to others."

25 First question: Stecher and Bohrnstedt (1999),

1 sure how the two relate. I haven't made copies of this.
2 It's "Teachers, Schools and Academic Achievement," by
3 Steven Rivkin, Eric Hanushek, and John Kain, from April
4 2001. There was a paragraph there on page 31 that I
5 don't believe appears in the 2002 version. I've
6 highlighted it in this.

7 A I should note that the last thing I did before
8 driving up here was to send the latest draft of this
9 paper to my co-author for his comments. The fact that
10 there were several different versions, we can look at,
11 but you do not have the final version.

12 Q So this is still a draft?

13 A Yes, it is.

14 Q Exhibit 5 is not a final version?

15 A Yes, it is.

16 Q And it has -- so I assume we have -- we got
17 this because you produced it. Is it available publicly
18 anywhere?

19 A It's available on my Web site, which I guess I
20 view as a public.

21 Q I do too.

22 A It's available.

23 Q Do you happen to know if it marks it as a draft
24 or a work in progress?

25 A It's in a section called, I think -- I think

1 do you remember what that study showed?

2 A That was the first report of the consortium
3 that was analyzing class size reduction in the state of
4 California. And they highlighted what I was talking
5 about before, that I referenced as a WestEd study, but I
6 think they have the same findings; that it appeared
7 class size reduction led to fewer experienced teachers
8 in innercity schools.

9 I do believe that their second report somewhat
10 went back on that conclusion, but I'm a little bit
11 uncertain on that.

12 Q And this is a report since -- the second report
13 is a report since 1999?

14 A Yes.

15 Q Was there a deliberation among the three of you
16 about whether to include in subsequent -- this paragraph
17 in subsequent drafts?

18 A Yes.

19 Q What was the nature of that discussion?

20 A The estimates had changed from the ones that
21 are included in that paper, so the paragraph was no
22 longer relevant.

23 Q The estimates of what?

24 A The effects of class size and student
25 achievement and the differentiation by economic status.

1 Q And the data that led to that change in
2 estimation is which data, or was it a calculation
3 difference?

4 A It was a combination of things. There were
5 some cleaning of the basic data used to estimate it and
6 our subsequent work. I'm not sure which draft we're
7 talking about, but our current work adds different
8 grades and more students to the estimation, so that we
9 increased the samples that we used.

10 Q And so your current view of the effects of
11 class size reduction across the student body has changed
12 or --

13 A Yes.

14 Q And that view is what?

15 A That, in our estimates, there appears to be
16 small differences by economic status in the effects of
17 these factors.

18 Q But across the student body -- let's
19 distinguish two issues. One is the aggregate effects
20 across the entire student body of class size reduction;
21 and the second is disparate effects among income groups?

22 A I was speaking to the disparate effects. You
23 want to know the magnitude of the coefficient
24 cross-drafts? That would take some analysis.

25 Q Well, did that change from the --

1 but I don't know.

2 Q So to summarize, it remains your view that
3 the -- that, as stated in the 2002 draft, at page 32,
4 class size reduction may have adverse consequences if
5 the policies lead to a reduction in average teacher
6 quality, particularly a reduction concentrated in
7 lower-income schools?

8 A Sure. That's a general statement that I do
9 believe.

10 Q And do you have any data, in addition to the
11 data -- or do you have any data or studies, in addition
12 to the ones cited on page 32, that support or counter
13 that general statement?

14 A I don't believe so.

15 MR. JACOBS: Let me mark as the next exhibit a
16 paper, the research behind which I think we discussed
17 yesterday.

18 (Plaintiffs' Exhibit 6 was marked for
19 identification by the court reporter.)

20 BY MR. JACOBS:

21 Q We've marked as Exhibit 6, "Improving
22 Educational Quality: How Best to Evaluate Our Schools?"
23 by you and Margaret Raymond, prepared for a program June
24 19th to 21st, 2002. And this one is labeled as
25 "Publication Version." Do you see that?

1 A Not materially. We've used different
2 estimation techniques, but it suggests that there are
3 statistically significant positive effects from class
4 size reduction in fourth grade -- smaller -- and fifth
5 grade, and are none in sixth grade. We characterize
6 those effects as small but significant.

7 Q And then now to, in that context, looking at
8 your latest view of the data on disparate effects across
9 income groups.

10 A There are what we think are minimal differences
11 in the fourth grade. There are slightly larger effects
12 estimated for low-income groups, but that changes in
13 other grades and isn't there in other grades. So we
14 currently believe that our estimates suggest that the
15 impacts are roughly the same across income groups.

16 Q And what is your -- maybe I should ask it this
17 way: What does the current draft say about the effect
18 of class size reduction on the issue you were focusing
19 on in the paragraph in the 2001 draft, that is the
20 distributional implications from the hiring-away
21 phenomenon? This paragraph.

22 A I think that we have a statement surrounding
23 the discussion of the impacts of having rookie teachers
24 on achievement. That is similar, but I'm not sure I'm
25 precise there, the context there. I think it's similar,

1 A Yes.

2 Q Is there a published version of this paper?

3 A Yes.

4 Q Where does it appear? Is that on your
5 references on your C.V.?

6 A Yes.

7 Q Is that a 2002 publication?

8 A 2003.

9 Q Oh, this is the one that's forthcoming, I
10 think.

11 A Well, if it's listed as forthcoming, the
12 volume has been produced and it is physically available.

13 Q I think you mentioned that yesterday. Okay.

14 Let's turn to page 33 of this report under your
15 "Some Conclusions."

16 A Uh-huh.

17 Q "One of the major conclusions to be drawn from
18 this discussion," you write, "is that the existing body
19 of evidence about accountability systems is fairly
20 sparse." Do you see that?

21 A Yes.

22 Q Is that still true today?

23 A It is less sparse today, but there are still
24 relatively few studies of accountability systems.

25 Q Is the major difference, between today and when

1 you wrote this sentence, the research you have done on
2 accountability or are there other studies you're
3 thinking of in saying that it's less sparse?

4 A Well, other studies have at least been refined
5 and continued in this area in some of the work that I've
6 done since this date.

7 Q Is there anything in particular you would point
8 to as differentiating 2003 summer from 2002 summer?

9 A Well, over that time, except for the work that
10 we have continued to do, I don't notice any new authors
11 or papers.

12 What I do know is that there has been some
13 refinements and extensions and work on a number of the
14 papers that are listed here. You'll notice almost all
15 of the papers listed here are unpublished papers in
16 draft form. So they have been going through a variety
17 of refinements.

18 Q Did those refinements change any of the other
19 conclusions under "Some Conclusions"?

20 MS. DAVIS: If you need to read them, go ahead.

21 THE WITNESS: Well, let me -- let me read "Some
22 Conclusions," and then I'll tell you. Do you have a
23 copy that has page 36 in it?

24 BY MR. JACOBS:

25 Q Mine does.

1 did not take that into account, you could have added
2 incentives that develop.

3 Q When you say, "It would be inappropriate,
4 however, to conclude that greater accountability does
5 not work on the basis of results from most existing
6 state systems," are you saying that there is a major
7 quality jump in accountability from most of the systems
8 to a system in which the value-added is more accurately
9 measured?

10 A I think there are two -- actually, two parts to
11 that sentence that are probably improperly put together.
12 But one is that accountability versus no accountability
13 is clearly desirable; and then secondly, improvements in
14 the system offer possibilities of expanding on what
15 we've seen already.

16 Q Improvements by way of moving to a value-added
17 measure?

18 A That would be my recommendation.

19 Q Do you know of anyone who opposes that
20 recommendation who is a proponent of greater
21 accountability?

22 A It's hard to know who are the proponents of
23 greater accountability. I know there are a number of
24 people who oppose value-added measures, because there
25 are a number of people who don't want that information

1 A I believe that those conclusions are intact.

2 Q So we'll run off our copy of page 36 and add it
3 to the others. Let me ask you about your -- the last
4 paragraph in this. And I'll read it out loud for
5 everybody.

6 "Perhaps more important, because accountability
7 is often viewed as a binary choice -- you either have it
8 or you don't -- it's very likely that some, or even
9 most, of the existing systems will not stand up to
10 expectations. It would be inappropriate, however, to
11 conclude that greater accountability does not work on
12 the basis of results from most existing state systems."

13 When you said "accountability is often viewed
14 as a binary choice," you were characterizing the views
15 of others, not necessarily yourself; is that correct?

16 A Yes.

17 Q And when you said "it is very likely that some,
18 or even most, of the existing systems will not stand up
19 to expectations," what did you mean in the context of
20 that comment between the binary choice?

21 A I mean that, as described previously, for
22 incentive purposes, we do not find a number of the
23 systems to be very appropriate; in particular, systems
24 do not do a very good job of identifying the value-added
25 of schools. And so if you provide large incentives that

1 available.

2 Q Is there a set of published literature that
3 propounds that point of view?

4 A Specifically that value-added should be used?

5 Q Correct. And this is not a trick question. My
6 hand is not up. I'm not holding a report here.

7 A No. I'm trying to think. Most of the
8 discussions of accountability systems do not focus on
9 that aspect. And that is one of the things that we have
10 focused on in all of our work in accountability. So
11 it's hard for me to find the other side, in some sense,
12 because that just hasn't been the focus that a lot of
13 people have put on accountability systems.

14 Q Are many people concerned about accountability
15 systems because of a concern over the reliability of
16 test scores as a basis for establishing incentive
17 systems?

18 A Yes.

19 Q And others oppose accountability systems of the
20 general sort that you're commenting on because they
21 oppose the introduction of incentives in, for example,
22 teacher pay?

23 A Yes.

24 Q But to the best of your knowledge, no one has
25 critiqued in a published paper the idea that, if you are

1 going to have a world of accountability and incentives,
2 it ought to be done based on a value-added approach?

3 A I have not seen it in published or unpublished.

4 Q And on page 34, the area over the sentence on
5 34, you use the expression "'signal-to-noise'
6 characteristics of the systems in place."

7 A Yes.

8 Q What did you mean by that?

9 A What I really want to refer to there is
10 something similar to the discussion we just had on
11 value-added. The information that people are getting
12 from the system is confused by other factors; in
13 particular, family backgrounds and outside-of-school
14 factors. And so policymakers who try to interpret the
15 level of achievement in school is purely reflecting the
16 school will be confused.

17 Q And, again, the diagnosis here is that they're
18 taking a snapshot view of student performance rather
19 than a longitudinal view of student performance?

20 A That's true.

21 Q And that sentence in the middle of page 34,
22 "Other systems make it difficult if not impossible to
23 separate effects on outcomes that are related to school
24 performance from effects on parents or past educational
25 inputs," that sentence captures the ideas that you were

1 be much more important than any continual gaming."

2 What does that sentence mean?

3 A Take the example of special education again.

4 If the system compares what your performance is this
5 year to what it was last year, and you increase special
6 education, if you increased special education placement
7 last year and it artificially pushed up scores the
8 following year, you have to do something again to deal
9 with that, so that you expect that if they do something
10 one time, most systems would prevent them from
11 continuing doing it and getting any gains out of it.

12 They can keep increasing the amount of special education
13 placements, but there is presumably some limit on how
14 many people you can get put in special education.

15 Q So "the immediate gaming to be much more
16 important," that phrase refers to the near-term steps
17 that may result, in the text, in reporting errors that
18 would be important in terms of gauging school
19 performance? That's what you meant by "immediate gaming
20 to be much more important"?

21 A Yes. Most of these studies in their
22 unpublished versions are looking at very new
23 introductions of accountability systems. And in those
24 systems there are a variety of different kinds of,
25 what's called, gaming, that has gone on. And those are

1 just expressing?

2 A Yes.

3 Q In the next paragraph you note that schools
4 react to the introduction of accountability systems,
5 but, quote, "At the same time, not all of the reactions
6 appear to be desirable," close quote. Do you see that?

7 A Yes.

8 Q And then the next sentence, I don't understand.
9 It reads, "A variety of investigations of attempts of
10 schools to alter measured achievement without
11 necessarily changing the reality indicates that schools
12 do operate on this margin," close quote.

What were you referring to in that sentence?

14 A If a school system, for example, increases
15 special education placements to get out of testing, the
16 measured scores would go up for those who are tested,
17 but it could be the case that no achievement changes.
18 That's an example.

19 Q Would this be an example of -- I think you had
20 specified "gaming" in that paragraph. That would be an
21 example of gaming?

22 A Yes.

23 Q So then the next sentence: "Nonetheless, while
24 discovering such unintended consequences is good sport
25 for academics, one would expect the immediate gaming to

1 highlighted in these studies. But they're studies of
2 just the immediate reactions, and they almost certainly
3 become less over time.

4 Q And is that differential true, depending
5 whether there is a value-added measure versus a
6 statistic measure of school performance?

7 A Oh, sure, sure. Because if you added a
8 value-added measure that followed individual students,
9 then you would be concentrating on what these students
10 learned as opposed to -- what's going on here is you're
11 changing characteristics of the cohort that's being
12 measured, in some occasions.

13 Q By virtue of gaming?

14 A By virtue of gaming.

15 Q The next paragraph on page 35: "Most of the
16 initial investigations also show that the introduction
17 of accountability systems leads states to improve on
18 performance." Do you see that?

19 A Yes.

20 Q And then you go on to comment that, "The
21 confusion with artificial increases through gaming or
22 with responses tailored very specifically to the state
23 testing, however, makes the evidence a little difficult
24 to interpret." Do you see that?

25 A Yes.

1 Q And that's still true as of this summer?

2 MS. DAVIS: Vague and ambiguous.

3 THE WITNESS: Which is true? That most --

4 BY MR. JACOBS:

5 Q That the evidence is a little difficult to
6 interpret.

7 A Oh, but we're providing different evidence than
8 this is. That's not subject to this.

9 Q I see. So this is -- the state of this is the
10 state of knowledge before the work in your paper?

11 A Right. This is referring to most of the
12 initial investigations that holds for. And what we did
13 in this paper, and what we've continued to work on, are
14 investigations that aren't subject to that same
15 interpretative problem.

16 Q So your results on the performance improvement
17 is, quote, "...we find that achievement growth between
18 the fourth and the eighth grade is 1 percent higher
19 after the introduction of a state accountability
20 system," close quote. Do you see that?

21 A Yes.

22 Q How does a 1 percent growth compare to some of
23 the other growth levels in student achievement that we
24 have been talking about over this day and a half?

25 So let's take that 1 percent with the observed

1 significant growth through accountability itself. We
2 find it surprising because the systems are so imprecise
3 and sort of crude in many respects, but we find
4 significant impacts. But I think I would call them more
5 modest than the strong statement here.

6 Q Meaning less than almost an entire standard
7 deviation?

8 A Yes. But it's going to take a lot of separate
9 work to put this all into context and put it into
10 context in the other papers, and that's something I have
11 not done at this point.

12 Q But the 1 percent, how was that measured? What
13 is the -- 1 percent of what?

14 A It's the percentage change from fourth grade
15 NAEP scores -- N-A-E-P -- to eighth grade NAEP scores.

16 Q Did you observe a differential growth in
17 achievement within the types of accountability systems?

18 A We did not.

19 Q Did you categorize the accountability systems
20 as to those which were more in the value-added arena
21 versus those in the snapshot arena, and test whether the
22 former resulted in a greater growth in achievement?

23 A No. We did not have, in our opinion, enough
24 data to do that. One comparison we did make was between
25 what we call report-card systems, which just listed

1 effects of inexperienced teachers on students'
2 performance.

3 MS. DAVIS: Same objection.

4 THE WITNESS: I'm just not going to be able to
5 do those calculations here. We've never done those
6 calculations. That would take a lot of effort to try to
7 put them on comparable terms to be able to do that.

8 BY MR. JACOBS:

9 Q Let's just make sure we understand this term
10 then. The "1 percent higher" means what?

11 A 1 percent -- let me look back and see what the
12 comparison is. I think -- I think we would characterize
13 this as significant, but not overwhelming. As modest,
14 but significant.

15 "...standard deviation of growth in state
16 scores between fourth grade" -- I'm reading from page
17 30, at the bottom of the first full paragraph. It says,
18 "This is a large effect since the standard deviation of
19 growth in state scores between fourth grade in 1996 and
20 eighth grade in 2000 is just 1.2 percent."

21 It's not at all obvious of precisely what
22 comparison to use, how to judge these growths. My
23 current thinking, I think, is more modest than this
24 sentence which says it's very strong.

25 My current thinking is that we've seen

1 results without interpreting them across grades or
2 providing consequences, versus accountability systems.

3 It's an unfortunate use of terminology. We're
4 now calling them something like "consequential systems."
5 There is no good terminology to distinguish the
6 different types. But "report card" versus
7 "consequential systems," we could not detect any
8 difference.

9 Q Do you have a view as to whether there is
10 enough time in the system to know whether what we are
11 seeing here is about as much as can be expected from the
12 introduction of accountability systems?

13 MS. DAVIS: Vague and ambiguous. Calls for
14 speculation.

15 THE WITNESS: We don't know the answer to that.
16 We don't know the time path of effects of accountability
17 systems.

18 MR. JACOBS: Let me mark as the next exhibit
19 your markup of Jeannie Oakes' report.

20 (Plaintiffs' Exhibit 7 was marked for
21 identification by the court reporter.)

22 MR. JACOBS: This will be Exhibit 7. And it's
23 produced under Bates range STATE-EXP-EH0249 to -321.
24 And the photocopying isn't perfect here.

25 Q Can you restate what you wrote on the first

1 page of Jeannie Oakes' report, Exhibit 7?
 2 A (1) "Lack of evidence on key linkages." (2)
 3 "Need to relate," quotes, "inequities," end quotes,
 4 "to outcomes," with a bracket indicating that one and
 5 two are untested theories. (3) "Specific disadvantaged
 6 populations?"

7 Q What did you mean by the third point?

8 A I could not figure out what exactly the
 9 disadvantaged group that was being identified referred
 10 to.

11 Q And then in the margin you put some
 12 highlighting by the sentence "The burdens of these
 13 serious shortfalls are borne most heavily in
 14 high-poverty schools, disproportionately attended by
 15 students of color and students still learning English."

16 Did that fail to answer the question you posed
 17 in your Item 3?

18 A Throughout, I found a vagueness with what the
 19 population was and what their situation was. So maybe
 20 that would answer Question 3. Those were the questions
 21 that I came up with after reading the whole document,
 22 and that was my reaction to reading the entire document.

23 Q On page 2, you circled Item "c" in the first
 24 paragraph, which deals with actions or inactions by the
 25 State.

1 BY MR. JACOBS:

2 Q Those are yours?

3 A No. What is not clear.

4 Q What is not clear? I didn't hear you.

5 A Maybe you're better at the handwriting than I
 6 am, but those are the ones that I think.

7 Q So do you have any comment on why that "c" is
 8 circled?

9 MS. DAVIS: Calls for speculation. He's not
 10 even sure if he's the person that circled that.

11 THE WITNESS: Well, I would argue that that's
 12 one of the difficulties that I had with this document.
 13 It is asserted with great certainty that all of these
 14 problems were clearly most heavily borne by the
 15 disadvantaged populations, and then it also said, "Well,
 16 the State didn't collect any data to allow us to know
 17 that." So there was a fundamental inconsistency that I
 18 had problems with that comes out throughout.

19 BY MR. JACOBS:

20 Q So am I, myself, speculating that "Impossible
 21 to prove input standards" are Margaret Raymond's
 22 handwriting?

23 A That is correct.

24 Q And the same with the comments on page 3?

25 A Yes.

1 Item "c" was "The failure to collect and/or
 2 analyze data in ways that would permit the State to know
 3 the extent of needs and problems regarding basic
 4 educational necessities."

5 Why did you circle that fragment?

6 A Well, first, if I might note, the copy you have
 7 is a black-and-white copy. If you had the color copy,
 8 you would note that some of these items were in
 9 different colors. I don't know the color of this one,
 10 frankly. The colors came about from the fact that the
 11 annotations are not just mine, but some are done by
 12 Margaret Raymond. So on circling "c," I don't know the
 13 color, if that's my annotation or not. If you want me
 14 to speculate on why it's circled, I would be happy to do
 15 that.

16 Q Since I don't have Margaret Raymond here, I
 17 better take your best estimate as to why it's circled.

18 MS. DAVIS: And you can tell most of it by the
 19 handwriting differences.

20 THE WITNESS: Yes. Most of it is clear.

21 MS. DAVIS: Who wrote what, it's a pretty
 22 clear difference.

23 THE WITNESS: What aren't entirely clear are
 24 lines in the margin and question marks that sit by
 25 themselves.

1 Q And the same with 4, including the underlining?
 2 It looks like her depth, if you will, of writing.

3 A I'm willing to accept that.

4 MS. DAVIS: As for speculating on that subject.

5 BY MR. JACOBS:

6 Q And 5. So the first time I see your
 7 handwriting again is on 6?

8 A Yes.

9 Q And what does that comment mean?

10 A My understanding of the discussion; that is,
 11 surrounded certification. Part of the discussion
 12 surrounded certification, whether it is certification or
 13 whether it is specific majors of teachers, which is not
 14 the same as certification requirements. So I was just
 15 noting that I thought this was one of the many places
 16 where there was, in my mind, a considerable confusion
 17 between the words "certification" and "highly qualified
 18 majors," and what the results were of the analysis.

19 Q Page 7, you wrote, I think, "Walberg" in the
 20 second -- adjacent to the second paragraph?

21 A I suspect it was that I was going to try to
 22 contact Herb Walberg, since he was actually working for
 23 the defendants in this case, and find out how this quote
 24 related to his work.

25 Q Let's see. And on Footnote 12, the "For good

1 reason" point, that's the -- that's the point made in
2 your report that the international studies, in your
3 view, aren't useful in the state of California given the
4 widely disparate aggregate resources available to
5 California schools?

6 A I would have stated it slightly differently,
7 but that's the gist of it.

8 I would have said that the studies of textbooks
9 have been highly concentrated in less-developed
10 countries, because that is the place where you might
11 think that there are more problems.

12 Q And is the "Any evidence?" comment on the
13 right-hand margin yours?

14 A Yes.

15 Q And you were just asking whether there was
16 evidence to support the idea that, without text and
17 materials to take home, teachers have a difficult time
18 assigning out-of-school learning experiences?

19 A Yes.

20 Q Does that strike you as a controversial
21 proposition?

22 A Yes.

23 Q Do you know anyone who has argued that -- that
24 has, in fact, argued to the contrary that teachers do
25 not have a difficult time assigning out-of-school

1 Public Schools 1993"?

2 A No. Where is it published?

3 Q I don't know. In the right-hand margin, the
4 arrow down is "But what about student performance?"
5 "Student performance," what does that mean?

6 A I think it reflects my general confusion
7 because the statements here didn't match any of the
8 evidence that I knew about, and I could not tell whether
9 a positive learning climate was synonymous with improved
10 student performance.

11 Q As measured by a value-added measure?

12 A As measured by some measure of student
13 performance.

14 Q Page 9, you had some comments about concepts --
15 or adjacent to the Concept 6 section of the study. Do
16 you see that?

17 A Yes.

18 Q And those are still open questions for you
19 because you haven't examined Concept 6; is that correct?

20 A Yes. I was actually terribly confused, because
21 it seemed to suggest that people who went to Concept 6
22 got much less instruction out of the year. I thought it
23 was mandated how much instruction, the minimum amount.

24 Q Are you aware, now having spent some time in
25 the case, that, in fact, Concept 6 -- that Concept 6,

1 learning experiences if the students don't have books
2 and learning resources at home?

3 A I don't know anybody who has addressed either
4 side of the issue. So I didn't address the question of
5 whether they -- I don't know of any that has
6 contradicted that or I don't know of any that's
7 supported that.

8 Q And the econometric data doesn't get down to
9 that level of granularity; correct?

10 A To my knowledge, I have never seen anything
11 that does.

12 Q On page 8, "Facilities," what is the comment on
13 the left-hand margin?

14 A "Check, not consistent with pf" -- production
15 function -- "evidence."

16 Q And did you check -- did you check that? Did
17 you check Earthman's data?

18 A I looked at the Earthman study and couldn't get
19 much out of that in terms of data or analysis, and I
20 also went back to the production function data.

21 Q One of the questions one of our experts on --
22 internal experts on facilities asked me to ask you is
23 whether you're familiar with the study "Berner,"
24 B-e-r-n-e-r, "Building Conditions, Parental Involvement
25 in Student Achievement in the District of Columbia

1 information of year-round multi-track education, reduces
2 the days of instruction by 17 days?

3 A I am not aware of that. I have no -- that's
4 just what's stated here. I have no understanding of
5 where that comes from.

6 Q Page 10, adjacent to the comment on Michelle
7 Fine's report, you wrote, "Compared to what? Any
8 controls?"; is that correct?

9 A That's true.

10 Q What did you mean by that comment?

11 A If I remember this study, it looked like
12 Michelle Fine had sought out a sample of just poor and
13 crowded facilities and then made conclusions about that,
14 but it was not clear to me that there was any comparison
15 group, so it was hard for me to understand how she could
16 conclude that the conditions that she sampled schools on
17 were what was causing any results that she got.

18 Q And at the bottom of page 10, you wrote
19 "Assessed" next to the sentence, "These elements bode
20 ill for academic performance."

21 I think I'm getting to know you. I think that
22 meant that you wondered whether in fact there was any
23 empirical evidence for that proposition?

24 A That's true.

25 Q Let's see. "Evidence" is next to a comment

1 about "...the message of racial inferiority that is
 2 implicit in a policy of segregation" in turn related to
 3 disparate facility conditions associated with the racial
 4 and ethnic identity of San Francisco Unified School
 5 District schools. Do you see that on page 11?
 6 A Yes.
 7 Q And the question is whether there was evidence
 8 to support that proposition?
 9 A Yes.
 10 Q And the kind of evidence that would be
 11 persuasive to you on an issue like this would be what?
 12 MS. DAVIS: Calls for speculation.
 13 THE WITNESS: I would like to see a systematic
 14 study that isolated the causal impact of substandard
 15 school conditions on the disparities that are discussed.
 16 BY MR. JACOBS:
 17 Q On page 13 --
 18 A Yes.
 19 Q -- under the "Three Urban Schools" reference,
 20 you wrote "Select on result."
 21 A Yes.
 22 Q What did that mean?
 23 A As far as I could tell, this was, again, a very
 24 selective sample that tried to pull out schools on their
 25 performance. I actually don't know how it was done.

1 Let me read the footnote here.
 2 I'm not sure of the use of this. They
 3 obviously selected schools. And they don't make it
 4 clear what the selection criteria is. And it's not at
 5 all clear, if you want to make inferences about
 6 characteristics of these schools and how they have
 7 affected any outcomes, that you can do it by the
 8 sampling techniques that they suggest.
 9 Q On page 14, you wrote "Alternative" next to
 10 "...only 10 percent hold full credentials."
 11 A Yes.
 12 Q What did you mean by that?
 13 A Another alternative is credentials that are
 14 held. Or what are the alternative backgrounds of
 15 students?
 16 Q Page 17, you wrote, next to a paragraph about
 17 equipping classrooms, "So shouldn't they get better
 18 teachers?" What do you mean by that?
 19 A I'm not entirely sure what I meant by that. It
 20 appears, in my general view, that the quality of the
 21 teachers is a lot more important than some of the things
 22 being discussed here, but I'm not sure.
 23 Q And you wrote "How are these generalizations
 24 made?" next to the paragraph which generalizes the three
 25 schools. Do you see that?

1 A Yes.
 2 Q And you're questioning how anybody extrapolated
 3 from the three schools to the rest of the paragraph; is
 4 that correct?
 5 A That is correct.
 6 Q Let's see. On page 18, you wrote a few notes.
 7 "New? Or total?" in the middle of the page.
 8 A Yes.
 9 Q Was that a question about what the expression
 10 you underlined, "total number of teachers employed,"
 11 meant?
 12 A Yes.
 13 Q Bottom of page 19, that's not your comment, is
 14 it?
 15 A No. That's mine.
 16 Q Oh. "The Harris group sought information
 17 regarding the teaching and learning conditions and
 18 problems California teachers face. Over one thousand
 19 public school teachers responded." You wrote, "How many
 20 did not?"
 21 A That is correct.
 22 Q And you wondered what the nonresponse rate was
 23 and whether or not that might have biased the outcome?
 24 A Yes.
 25 Q So next to the paragraph about the relationship

1 among some of these conditions, the coexistence of these
 2 conditions, you wrote "Bad facilities. Low paid
 3 teachers and no supplies. How does this add up? Are
 4 they spending less? Are they substituting other
 5 things?" What did you mean by that?
 6 A Well, if in fact they are spending the same
 7 amount as other schools that do better in these areas,
 8 then it presumably is the case that they are spending
 9 more in other areas that aren't identified in other
 10 schools. And so one has to be concerned about the total
 11 of the expenditures in the ways that we discussed
 12 yesterday.
 13 Q It's also possible that there are internal
 14 cross-subsidies within the district?
 15 MS. DAVIS: Calls for speculation.
 16 THE WITNESS: I presume if it was the case that
 17 they were spending less, then that's different than the
 18 fact that they are substituting for other things.
 19 BY MR. JACOBS:
 20 Q And another possibility is that there are --
 21 that there are needs in those schools that require
 22 increased expenditures in other areas --
 23 MS. DAVIS: Same objection.
 24 BY MR. JACOBS:
 25 Q -- such as security, for example?

1 A Well, as I say, my question is: Are they
2 substituting other things? I don't know exactly what
3 they are doing.

4 Q Let me hit the high points here. On page 24,
5 toward the bottom, "Extrapolating from these teachers'
6 responses, students attending schools in Harris' most
7 'at risk' category are 12 times less likely than
8 students in 'most' schools to be taught by a fully
9 credentialed teacher." You wrote "Huh?"; is that
10 correct?

11 A That is correct.

12 Q You didn't understand the math?

13 A The math is a little bit puzzling to me.

14 Q On page 25, adjacent to the Harris survey is
15 another Harris survey. And by the paragraph you wrote
16 "Need to get the Harris survey raw data, reports,
17 interpretation." Do you see that?

18 A Yes.

19 Q Were you able to follow up with that?

20 A That was not within the things I was doing, and
21 have not done.

22 Q Page 26, next to a paragraph about a study
23 showing that shortages of resources seem to be
24 coexistent, you wrote "Adding up?" What do you mean by
25 that?

1 use data," you wrote -- what did you write?

2 MS. DAVIS: If you can read it.

3 THE WITNESS: "With no data, how is this
4 known?" That is the comment we had at the very
5 beginning on the question, as I recall, of how could we
6 do certain -- about the disparities that exist if in
7 fact no data exists on them.

8 BY MR. JACOBS:

9 Q By this time in the report, you're still
10 wondering whether there is data on the disparities?

11 A Even more -- I probably write it more
12 frequently at this point in the report, because I found
13 the evidence on those disparities to be quite lacking.

14 Q On the top of page 33, the carryover paragraph,
15 "Not assumed. Want resources directed at outcome," what
16 were you noting there?

17 A I thought -- Point E, from the previous page,
18 says, "reliance on a test-based accountability system
19 that assumes that the low student achievement results
20 exclusively from insufficient teacher and student
21 motivation rather from a lack of resources and
22 capacity."

23 I thought that was not what was behind any
24 test-based accountability, and that would not be my
25 interpretation of any results of achievement

1 A This suggests that there is a lot of variation
2 in total spending, because if they're short in one area,
3 they are also short in other areas, is what the quote
4 says, and that doesn't seem to add up.

5 Q On page 27, about the relationship between
6 teacher shortages and teacher qualifications, you wrote
7 "1985 report compare projections to reality."

8 What did you -- what were you noting there?

9 A Oh, I'm generally skeptical of projections of
10 shortages into the future. Because every time I've ever
11 looked at any of them, the projections have nothing to
12 do with the reality that occurs. So that's just my
13 common note that, since this is an old report, we could
14 actually see whether that reality had come to pass.

15 Q Have you done that?

16 A No, I haven't.

17 Q Page 29, on textbooks, you wrote "Independent
18 source," after underlining the AAP. Do you see that?

19 A Yes, I do.

20 Q Were you wondering whether the AAP was
21 independent or were you making some other comment?

22 A I think the better phrasing would have been
23 "Unbiased source," since they seemed to have a vested
24 interest in the results of any studies of textbooks.

25 Q Page 32, next to "the failure to collect and/or

1 differences.

2 Q You wrote "This is the LDH idea!!" next to a
3 sentence about the fact that, in California, teacher
4 education is available only at the graduate level.

5 What did you mean by that?

6 A It is my understanding that Linda
7 Darling-Hammond has been pushing for certification of
8 teachers that requires five years of study in which the
9 teacher preparation would be concentrated in the fifth
10 year. And this statement seems to be bemoaning the fact
11 that California, according to this, since 1970, has had
12 a policy that seems similar to that.

13 Q On page 35, you wrote "!!" next to two
14 sentences: "In addition to providing insufficient
15 funding, the State has not assisted districts and
16 schools to manage textbooks and materials effectively.
17 Rather, it has left districts to decide for themselves
18 how best to spend textbook funds and to distribute
19 textbooks among schools, subject areas, and students."

20 What was the significance of your exclamation
21 points?

22 A I thought that the State was doing that
23 correctly in many ways now, and that having an elaborate
24 system of State checking and oversight on the internal
25 distribution of textbooks would not be a good policy.

1 Q On page 39, you wrote "Very expensive and
2 difficult," on a paragraph from the Little Hoover
3 Commission urging an inventory.
4 A Yes.
5 Q And that reflects your view that that would not
6 be a useful exercise?
7 A Yes. Yes, it does.
8 Q Do you have any -- I take it that's at least a
9 hunch of yours, that it would be expensive?
10 A Yes.
11 Q Do you have anything beyond a hunch to support
12 that?
13 A Well, I've worked with other states that have
14 claimed that they don't keep such records or inventories
15 or do it regularly, because of the expense, so it comes
16 from other states that have come to that conclusion.
17 Q Any in particular come to mind?
18 A Florida. I believe, New York State.
19 Q And you received information from both of those
20 that they had looked at whether to do such an inventory
21 and concluded the cost was not justified?
22 A Yes.
23 Q And is any of that information -- is that
24 information anecdotal or reported in a private sort of
25 way, or something you can recall having seen in a public

1 Q Is that something that has been published?
2 A Yes.
3 Q Do you remember the title of that?
4 A It's been published in two different ways. I'm
5 not going to remember the title, but there is a -- the
6 easiest citation would be "Education Next," of maybe a
7 year ago, that has an article on it. There is also a
8 report that I believe is on the CREDO, C-R-E-D-O, Web
9 site at Hoover.
10 Q And you reviewed that --
11 A Yes.
12 Q -- work?
13 A Yes.
14 Q And how does that -- how do the results of the
15 TFA study that you're referring to compare with your
16 results on the value-added contribution of teachers in
17 their early years?
18 A Well, I think that they adjust for experience
19 of teachers in their analysis, and I believe it's the
20 case that there's still -- other things being equal, the
21 first years of teaching are not good, but that's still a
22 small part of the distribution of teacher quality. I
23 believe that's the sort of rough summary of what they
24 found.
25 Q When you say "adjust for years of

1 document?
2 A No. It's all anecdotal.
3 Q Page 40, you wrote next to the -- next to a
4 discussion of support for beginning teachers, you wrote,
5 "State responsibility? What are districts doing?"
6 You were asking is there -- well, what did you
7 mean by that?
8 A Well, I thought that was something that's best
9 done at the local level, to provide support for
10 beginning teachers, and I had trouble seeing how the
11 State could intervene effectively in such a program.
12 Q The "TFA," on the left-hand side of the page,
13 relates to studies about the performance of Teach For
14 America teachers?
15 A Yes.
16 Q Did you, in your Texas research, isolate Teach
17 For America teachers and examine their value-added
18 contribution?
19 A No.
20 Q Was that un-doable?
21 A No.
22 Q It's just another exercise that's not been
23 done?
24 A It's been done by one of my graduate students,
25 Margaret Raymond, and Steven Fletcher.

1 experience" --
2 A They allow -- they have different comparison
3 groups of TFA versus other new teachers and versus all
4 teachers in the district of Houston where they did the
5 analysis.
6 Q So if you were to slot in the TFA results with
7 your results, showing the effects of inexperience, how
8 much -- if the teachers were of the same experience
9 level, how much of the impact of being inexperienced was
10 addressed by the fact that a teacher was in a TFA
11 program?
12 A I'm confused on whether you want me to compare
13 TFA teachers to other hired teachers or to all teachers,
14 or if that was clear.
15 Q Let me -- let me say it a little more
16 precisely. As I understand it, you compared the
17 value-added contributions of teachers of, among other
18 things, varying experience levels?
19 A Me?
20 Q In your study as opposed to the TFA study.
21 A Yes.
22 Q And you showed that there was statistically
23 significant differentials in the value-added
24 contribution of inexperienced teachers versus teachers
25 that have at least several years of experience under

1 their belt?
 2 A Yes.
 3 Q And that -- let's say that differential is "X."
 4 A Yes.
 5 Q And it seems to me reasonable, however, that if
 6 you get really bright students from really good schools
 7 that are highly motivated, and they get this TFA
 8 preparation, that at least some of that experience, if
 9 you will, is -- some of "X" will be compensated for?
 10 A Yes.
 11 Q My question is: Have you compared her study
 12 with your study to see what that impact was -- would be?
 13 A I have not directly compared her study with my
 14 study.
 15 Q Do you have a sense from reading them?
 16 A Well, it's a different -- there's a different
 17 comparison that gets to that, that I will give you my
 18 rough impression of, but I don't have that study right
 19 in front of me.
 20 My rough impression is that their study found
 21 that TFA teachers did better than the average teacher,
 22 hired from other sources, in the initial years of
 23 teaching, and that TFA, on average, made up for the
 24 experience effect by making them comparable to all
 25 teachers in Houston -- that's my rough impression -- so

1 of experience, the proportion of one or two across the
 2 grade.
 3 Q You looked at the -- well, let me ask it this
 4 way: Does aggregating them in that way have some
 5 masking effect on experience levels as opposed to
 6 tracing individual teachers the way the TFA study was
 7 done?
 8 A I don't believe so.
 9 Q And the reason it isn't masked is what? Even
 10 though they are kind of lumped together in this way.
 11 A Because they all -- if there is a constant
 12 effect of being a different experience level, then it
 13 should show up directly in the average achievement for
 14 the grade that we are looking at.
 15 Q At the bottom of page 40, class size reduction,
 16 you wrote in the margin "Do away with class size
 17 reform." That, I take it, reflects your general
 18 skepticism about the benefits of class size reduction?
 19 A That is correct.
 20 Q Page 48, you underlined "rather than following
 21 from an assessment of what a good education actually
 22 costs." Do you see that?
 23 A Yes.
 24 MS. DAVIS: Calls for speculation. We don't
 25 know if he underlined it.

1 that TFA compensated for the initial experience effect,
 2 I think is the right interpretation.
 3 Q Were there any methodological differences in
 4 the TFA study that make it difficult to align its
 5 results with the methodology you used on what I think
 6 was a Texas-wide study; correct?
 7 A Yes. Well, it's -- it's a quite different
 8 methodology, so there is -- they have individual
 9 teachers and trace them over time, where we did not
 10 trace individual teachers but traced teachers within
 11 grades over time. And I guess that's the largest impact
 12 where you get a different approach to it.
 13 Q What do you mean by "teachers within grades
 14 over time"?
 15 A We follow -- we aggregate all teachers in a
 16 given grade in a given school together, when we do our
 17 analysis. And they do not do that, but look at the
 18 individual teacher by what their characteristics are.
 19 Q How did you differentiate among experience
 20 levels if you aggregated them in that way?
 21 A We know the distribution of experience within
 22 each grade, so we know.
 23 Q So you looked at average experience levels?
 24 A No. We looked at the proportion with different
 25 experience levels. So the proportion who are zero years

1 BY MR. JACOBS:
 2 Q You're aware that there are costing-out studies
 3 that have been performed or are underway in various
 4 states?
 5 A Yes.
 6 Q What is your view of the utility of those
 7 studies?
 8 A Negative.
 9 Q Because?
 10 A Because they are costly and they provide no
 11 credible information.
 12 Q Given the limitations that you foresaw in the
 13 econometric data getting granular enough to give
 14 guidance about particular inputs, how else would you do
 15 an assessment of what aggregate spending levels should
 16 be?
 17 MS. DAVIS: Calls for speculation. Vague and
 18 ambiguous.
 19 THE WITNESS: It's not something that I have
 20 ever thought was a useful or productive thing to do.
 21 BY MR. JACOBS:
 22 Q The policymakers do have to decide some
 23 high-level questions like "What's the per-student dollar
 24 amount we're going to appropriate this year?"
 25 A Sure.

1 Q And, again, given the limitation on the
2 econometric data, how would you propose that that be
3 done?

4 MS. DAVIS: Same objections.

5 THE WITNESS: I think you answered your own
6 question. The econometric data are limited on this, and
7 so the idea of starting from the bottom and building up
8 to what an adequate education is is surely prone to huge
9 errors and not -- and is not prone to be very
10 informative.

11 BY MR. JACOBS:

12 Q What kind of policy guidance can be given to
13 officials trying to make a decision about aggregate
14 spending levels?

15 MS. DAVIS: Same objections.

16 THE WITNESS: The aggregate spending levels in
17 anyplace, even if we had that information, would not
18 solve the question of deciding the total amount to be
19 spent on education.

20 The total amount to be spent on education --
21 there is no absolute standard of what achievement we
22 hope to get. And that's a political decision that the
23 legislature has to make, of how to divide up resources
24 between education and other possible uses of funds.

25 BY MR. JACOBS:

1 estimate differences in the quality of individual
2 teachers in terms of their value-added, with a host of
3 things that go along with that. Given that information,
4 then we would have some hope of finding out what the
5 supply function of the quality of teachers looks like.
6 And that would provide us information about figuring out
7 how much this would cost.

8 The problem with the current work is that the
9 things that are costed out have little -- no
10 relationship to student achievement. Thus, it's an
11 entirely different process.

12 Notice, the second element is that we don't
13 know how the quality of teachers would be affected by
14 changing the incentive structure for them, and so I
15 would have a set of designs that experimented with
16 different incentive structures to try to understand what
17 the quality of teachers we got from them is and how
18 they -- that quality related to the cost of hiring and
19 retaining those teachers.

20 Q And I'm going to propose, in addition to your
21 research design, which was implicit in your testimony
22 yesterday, which is part of the cost of recruiting and
23 retaining the high-quality teachers, as you've defined
24 it, might well include an understanding of the working
25 conditions those teachers desire, and one could then

1 Q Uninformed by policy expertise from places like
2 the Hoover Institution?

3 A It would be uninformed, in terms of building up
4 from the classroom level, for somebody to tell them what
5 is the right amount to spend. That would not be
6 informative.

7 Q So what would be informative?

8 A What would be informative is if we could relate
9 the amount that was being spent to the performance of
10 students and to the ultimate outcomes that we're
11 interested in.

12 Q As I understand your -- a major part of your
13 work has, as its conclusion, that it is not a possible
14 task; is that correct?

15 A Yes. That's why I say I think this is -- this
16 is an uninformative approach.

17 Q But also an uninformable question?

18 A Given the current state of our research
19 knowledge, I believe that's the case.

20 Q And you don't have a research design that would
21 lead us to rendering that uninformable question?

22 A That's not entirely true. Would you like the
23 full research design?

24 Q Sure.

25 A The full research design starts with trying to

1 cost out those working conditions --

2 A Yes.

3 Q -- and put all of that together, and you've
4 gotten pretty close to an understanding of what it costs
5 to run a whole school system?

6 A That would certainly be some of the key
7 ingredients.

8 Q What's the comment on the left-hand side of
9 page 51? It starts -- the topic starts, "Policy
10 analysts Marshall Smith and his colleague Jennifer
11 O'Day," on page 50.

12 A Right. "Smith and O'Day have idea" -- maybe
13 something was cut off -- "but where is test of it?
14 Certainly not a constitutional requirement to meet Smith
15 and O'Day."

16 Q What did you mean by that?

17 A Well, let's find out exactly what we're talking
18 about here.

19 Well, it appears that the writings of Smith and
20 O'Day are laid out as the gospel for what is essential
21 for policy reform. And I don't know of any evidence to
22 suggest that this is the right gospel or that that is
23 necessarily the gospel that has to be instituted in the
24 State of California.

25 Q Page 56, at the top, I think you wrote "Not

1 good metric. Why not \$1 per pupil. Still low but not
2 48th." And that was a comment on the share of
3 expenditures -- I'm sorry -- school expenditures as a
4 share of personal income. Do you see that?

5 A Yes.

6 Q And that reflected your view that this, at
7 least, dollar per pupil has some potential relevance to
8 the resource of availability as opposed to personal
9 income?

10 A Right.

11 Q But California wouldn't rank quite as low on a
12 dollar-per-pupil measure?

13 A Right.

14 Q In the middle of it, "Huh? California very
15 high on equalization." That's reflecting some
16 skepticism on your part about the data on inequality
17 that's reported there?

18 A Yes.

19 Q Do you have any data of your own on this
20 question -- data of your own that is data that you
21 believe reliable?

22 A I haven't gone to any of the data on this.

23 Q Page 71, "Evidence that New York schools better
24 for this." You're wondering whether the system that
25 Sobol reports on there has, in fact, led to improved

1 A No.

2 MR. JACOBS: Your witness.

3 EXAMINATION

4 BY MR. HAJELA:

5 Q I just have a few questions, Dr. Hanushek.

6 The first preliminary one is: Do you have any
7 expert opinions regarding this case that you've
8 discussed either with counsel for the State or other of
9 the State's experts that are not contained in your
10 expert report?

11 MS. DAVIS: Overbroad.

12 THE WITNESS: I'm sure I do, but I couldn't
13 identify specific -- as I understood, your question was
14 do I have any other opinions?

15 BY MR. HAJELA:

16 Q Expert opinions, other expert opinions
17 regarding this case that are not contained in your
18 expert report.

19 MS. DAVIS: Vague and ambiguous.

20 THE WITNESS: I have trouble answering that
21 because I have spent a long time studying school policy
22 and have opinions, expert opinions, on a variety of
23 things that are not necessarily directly related to the
24 areas that I was asked to testify in.

25 BY MR. HAJELA:

1 school quality?

2 A Yes.

3 MR. JACOBS: Okay. Let's take just a couple
4 minutes here. I think we are done, or close to done.

5 (Recess.)

6 BY MR. JACOBS:

7 Q I just want to ask you a couple questions about
8 the declaration you did for the motion for summary
9 adjudication on textbooks.

10 We'll mark that as Exhibit 8.

11 (Plaintiffs' Exhibit 8 was marked for
12 identification by the court reporter.)

13 BY MR. JACOBS:

14 Q So first of all, could you examine this and
15 confirm that this is your declaration? And it's not a
16 trick question.

17 A Yes, it is.

18 Q Did you do any additional -- strike that.

19 Did you rely on any additional research in
20 preparing this declaration as opposed to that which you
21 relied on in your expert report?

22 A No.

23 Q Other than preparing this text, did you do any
24 additional analysis in preparing this declaration other
25 than what is set forth in your report?

1 Q I can ask it differently. Do you presently
2 intend to offer any opinions at trial that are not
3 contained in this report?

4 A No.

5 Q Let me ask you a question on local
6 decision-making. I'm referring to part of your report
7 that starts on page 15. I just want to paraphrase your
8 opinion and find out if you can tell me whether it's
9 accurate or not.

10 I understand you to critique rigid input
11 policies that minimize local discretion and favor an
12 accountability system that promotes local
13 decision-making; is that fair?

14 A Yes.

15 Q Is California moving from an input-based system
16 towards an output-based accountability system?

17 MS. DAVIS: Vague and ambiguous.

18 THE WITNESS: I think there is mixed evidence
19 on that. I think in some ways it is, and in some ways
20 it is not.

21 BY MR. HAJELA:

22 Q Okay. Could you explain some of the ways it is
23 moving to an output-based?

24 A I think that California has been pushing output
25 accountability systems, and it has been continuing to

1 develop those and putting into place ways of doing that,
2 and has had, but does not always fund, incentives for
3 performance of schools.

4 At the same time, there are signs that it also
5 continues to increase the regulations on exactly how
6 local districts operate, so it's working in both at the
7 same time, as far as I can tell.

8 Q Okay. That's helpful. Let me just ask: The
9 output-based system that we're referring to for
10 California, would you consider that starting with the
11 Public Schools Accountability Act?

12 A I'm not able to identify the specific
13 legislation.

14 Q Do you have an opinion that since California
15 has started to implement this output-based
16 accountability system, whether districts have more or
17 less discretion?

18 A No. I don't have an opinion on that.

19 Q Okay. You have partially answered this already
20 just now, but on page 10, in the second paragraph at
21 about the middle of that paragraph, there is a sentence:
22 "Nonetheless, if incentives were changed -- say, to be
23 more in line with improved student performance -- it is
24 likely that resources could have a more systematic
25 impact." Do you see that?

1 BY MR. ROSS:

2 Q Those incentives that correlate to student
3 performance. I'll restate the question.

4 A Yeah. Well, I'm a little confused, and also by
5 the question here.

6 There are the high school graduation
7 requirements that seem to relate quite directly to
8 students and the incentives to students. But in
9 general, incentives to schools are, first, the
10 measurement of performance and the correlation of
11 performance.

12 What I talked about a lot yesterday, and some
13 today, was that I don't think that the performance
14 measurement is very precise in terms of identifying
15 exactly what the schools contribute to the performance
16 levels as opposed to a mixture of students in schools.

17 Q And referring specifically to the sentence on
18 page 10 that says, "Nonetheless, if incentives were
19 changed -- say, to be more in line with improved
20 student performance -- it is likely that resources could
21 have a more systematic impact," I understand, from your
22 testimony yesterday and today, your suggestions as to
23 how the incentives could be changed.

24 How would the changes in the incentives
25 correlate to a more systematic impact of the resources?

1 A Yes.

2 Q Does California now have incentives in line
3 with improved student performance?

4 A I don't think they have very strong incentives
5 right now. I think they are moving to strengthen them
6 there. They are still not particularly strong.

7 Q If California strengthens those incentives, is
8 it your opinion, then, that additional resources would
9 be likely to have a systematic impact?

10 A Yes.

11 MR. HAJELA: Thanks. That's all I have.

12 EXAMINATION

13 BY MR. ROSS:

14 Q I'm Jeff Ross. I represent the Los Angeles
15 Unified School District, which is an intervener in this
16 action. I have a few questions.

17 I'm going to start off on the same page where
18 Mr. Hajela left off, page 10.

19 A Okay.

20 Q He asked you about the incentives which
21 correlate to student performance. And I was wondering
22 if you could identify, to the extent you're familiar
23 with them, those student incentives currently in effect
24 in California which correlate to student performance.

25 MR. JACOBS: Did you mean "student incentives"?

1 A As a starting point, my research has suggested
2 that resources today are not very closely correlated
3 with the quality of schools or student performance; in
4 fact, change the incentives so that people were rewarded
5 more for student outcomes.

6 One result is that -- as I would expect would
7 be, that schools use resources more efficiently, that
8 they use resources more in ways that lead to outcomes
9 that were the desired student performance. And that
10 would automatically mean that extra resources were more
11 closely aligned to the results you see if schools used
12 those resources more efficiently.

13 Q When you use the term "resources" in the
14 context I have identified, were there particular
15 resources that you were referencing?

16 A This is used in a very generic way here. It
17 would refer to the myriad of decisions that school
18 districts make about how to take expenditures and break
19 them into specific resources and allocate them to
20 classrooms and schools.

21 Q Is one of the resources to which you were
22 referring, in page 10, teachers?

23 A Teachers, in my opinion, is the prime resource.

24 Q And do I understand, based upon your testimony
25 yesterday and today, you're suggesting that if we had

1 measures which more accurately reflected the value that
2 teachers add, we would better utilize the teacher
3 resource in our schools?

4 A Yes. In particular, pay more attention to who
5 are our teachers and trying to retain and keep the best
6 teachers.

7 Q I think, on that page, I wanted to talk about
8 the next two sentences. If you could just read them to
9 yourself, please.

10 A Yes.

11 Q Are there particular policies which you
12 understand to be advocated by the plaintiffs, which, in
13 your opinion, are deleterious to decision-making based
14 on local conditions?

15 A Yes.

16 Q Which, in particular, of the policies that you
17 understand the plaintiffs to be advocating in the case,
18 do you think would be harmful to local decision-making?

19 A My interpretation of the plaintiffs' position
20 is that they want to have the State guiding the hiring
21 of teachers and the decisions on textbook policies and
22 decisions on school building policies. And, therefore,
23 if they are imposing State decision rules on the local
24 districts, that set of policies would be deleterious to
25 local decision-making because local decision-making

1 would have to accept the policies of the State.

2 Q To the extent that you're familiar with the
3 policies advocated by the plaintiffs, are there any
4 policies that they are advocating that you think would
5 enhance local decision-making and contribute to better
6 the performance of our schools?

7 A I see nothing in their policy that would
8 enhance local decision-making.

9 Q To follow up on that answer, is there anything
10 in the plaintiffs' proposal, with regard to increased
11 regulation of local districts, that, from your
12 perspective, would enhance performance at schools?

13 A I don't see that their policy would do that,
14 that the net effect of their policy would be to improve
15 performance.

16 MR. ROSS: Thank you.

17 THE WITNESS: Okay.

18 MR. JACOBS: Do you have any questions?

19 MS. DAVIS: No.

20 FURTHER EXAMINATION

21 BY MR. JACOBS:

22 Q I just have a couple follow-ups.

23 Have you spent any time examining the Los
24 Angeles Unified School District?

25 A No.

1 Q Have you ever been in any schools in the LAUSD?

2 A No.

3 Q Do you have any --

4 MR. ROSS: I'm not going to let you -- go
5 ahead. I didn't ask any questions. It seems you're
6 going beyond what I asked.

7 BY MR. JACOBS:

8 Q Do you have any opinion on whether the Los
9 Angeles Unified School District has effectively utilized
10 the local control that has been made available to it by
11 policy or regulation over the last 20 years in
12 delivering high-quality education to students?

13 MS. DAVIS: Objection. Outside of the scope.
14 Inappropriate questions. Vague and ambiguous. Calls
15 for speculation.

16 MR. ROSS: And lacks foundation.

17 THE WITNESS: I have no opinion.

18 BY MR. JACOBS:

19 Q And as to any other suburban school district in
20 California, have you spent any time examining the
21 performance of local decision-making in delivering
22 high-quality education?

23 MS. DAVIS: Same objections.

24 MR. ROSS: I join those objections.

25 THE WITNESS: No. I have no opinion on those.

1 BY MR. JACOBS:

2 Q If the plaintiffs' proposals were successful in
3 reducing the maldistribution of inexperienced teachers
4 such that the -- that economically disadvantaged
5 students had a higher probability of receiving
6 instruction from teachers in, say, their fourth or fifth
7 year rather than their first or second year of teaching,
8 doesn't your data indicate that that would improve
9 student performance?

10 MS. DAVIS: Same objection. Assumes facts not
11 in evidence. Incomplete hypothetical.

12 THE WITNESS: If everything else is the same --
13 if the teacher quality is the same and nothing else is
14 different -- it might. My evidence would suggest that
15 would improve performance.

16 BY MR. JACOBS:

17 Q If the plaintiffs' proposals to ensure that the
18 kinds of conditions we discussed yesterday with respect
19 to school facility conditions, lighting, sound-proofing,
20 health and safety were addressed and corrected, isn't it
21 your view that that would likely improve student
22 performance, all other things being equal?

23 MS. DAVIS: Same objections.

24 THE WITNESS: Presumably, all other things
25 can't be equal in that, because, somehow, if you're

1 calling for more expenditures in one area, you have to
 2 alter either the total spending or the expenditures in
 3 other areas. And I don't know what the alternative is.
 4 BY MR. JACOBS:
 5 Q But all other things being equal, isn't it the
 6 case that that would likely improve the quality of
 7 education delivered to California school children?
 8 MS. DAVIS: Same objections.
 9 THE WITNESS: I don't -- as I said yesterday, I
 10 don't have specific knowledge of those specific items.
 11 I suggested that I knew of little relationship between
 12 facilities and achievement, but that I believe as a
 13 matter of social policy we should make safe and sanitary
 14 and healthy facilities, but I do not believe that I
 15 entered any evidence to suggest that we knew much about
 16 those specific characteristics.
 17 BY MR. JACOBS:
 18 Q And if plaintiffs' concern with respect to
 19 textbooks is that there are nontrivial numbers of
 20 California school children who go to school in an
 21 instructional environment that is impoverished as
 22 opposed to rich, as compared with the typical California
 23 school, isn't it likely the case that school quality
 24 would improve again, all other things being equal, if
 25 that situation were corrected?

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 9 I, ERIC A. HANUSHEK, do hereby declare under
 10 penalty of perjury that I have read the foregoing
 11 transcript; that I have made any corrections as appear
 12 noted, in ink, initialed by me; that my testimony as
 13 contained herein, as corrected, is true and correct.
 14 EXECUTED this _____ day of _____,
 15 2003, at _____, _____.
 (City) (State)
 16
 17
 18
 19
 20
 21 _____
 22 ERIC A. HANUSHEK
 23 Volume 2
 24
 25

1 MS. DAVIS: Same objections.
 2 THE WITNESS: It's hard for me to understand
 3 what you're holding constant, and we have no evidence to
 4 suggest that that's going to have a material impact on
 5 performance.
 6 MR. JACOBS: No further questions.
 7 MR. ROSS: Thank you.
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1 STATE OF CALIFORNIA)
 : ss
 2 COUNTY OF ALAMEDA)
 3
 4 I, the undersigned, a Certified Shorthand
 5 Reporter of the State of California, do hereby certify:
 6 That the foregoing proceedings were taken
 7 before me at the time and place herein set forth; that
 8 any witnesses in the foregoing proceedings, prior to
 9 testifying, were placed under oath; that a verbatim
 10 record of the proceedings was made by me using machine
 11 shorthand which was thereafter transcribed under my
 12 direction; further, that the foregoing is an accurate
 13 transcription thereof.
 14 I further certify that I am neither financially
 15 interested in the action nor a relative or employee of
 16 any attorney of any of the parties.
 17 IN WITNESS WHEREOF, I have this date subscribed
 18 my name.
 19
 20 Dated: _____
 21
 22
 23
 24
 25 _____
 KATHY NELSON
 CSR NO. 9796