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

) ELIEZER WILLIAMS, a minor,) by SWEETIE WILLIAMS, his guardian) ad litem, et al., each) individually and on behalf of all) others similarly situated,) Plaintiffs, No. 312 236) vs.) STATE OF CALIFORNIA, DELAINE EASTIN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, STATE DEPARTMENT OF EDUCATION, STATE BOARD OF EDUCATION, Defendants.

> DEPOSITION OF CAROLINE MINTER-HOXBY Los Angeles, California Monday, August 4, 2003 Volume

Reported by: STEVEN M. ORENSTEIN CSR No. 2321 JOB No. 44189

Page 2 1 SUPERIOR COURT OF THE STATE OF CALIFORNIA 2 FOR THE COUNTY OF SAN FRANCISCO 3) 4) ELIEZER WILLIAMS, a minor,)) 5 by SWEETIE WILLIAMS, his guardian) ad litem, et al., each)) 6 individually and on behalf of all) others similarly situated,)) 7) 8) vs.) No. 312 236 9) STATE OF CALIFORNIA, DELAINE) 10 EASTIN, STATE SUPERINTENDENT OF) PUBLIC INSTRUCTION, STATE) 11 DEPARTMENT OF EDUCATION, STATE) BOARD OF EDUCATION,) 12) 13	Page 4 1 INDEX 2 WITNESS EXAMINATION 3 CAROLINE MINTER-HOXBY 4 Volume 1 5 BY MS. LHAMON 6 7 8 9 9 EXHIBITS 10 PLAINTIFFS' PAGE 11 1 Multi-page document entitled 12 12 Curriculum Vitae 12 2 Multi-page document entitled 15 13 Achievement, Efficiency and Centralization in California 14 Public Schools 35 15 3 One-page document entitled 35 17 18 19 INFORMATION REQUESTED 20 (None) 21 22 23 24
 Reporter No. 2321. Reporter No. 2321. Page 3 APPEARANCES: For Plaintiffs: ACLU FOUNDATION OF SOUTHERN CALIFORNIA BY: CATHERINE E. LHAMON Attorney at Law 1616 Beverly Boulevard Los Angeles, California 90026-5752 (213) 977-9500 For Defendants: O'MELVENY & MYERS LLP BY: LYNNE M. DAVIS Attorney at Law 400 South Hope Street Los Angeles, California 90071-2899 (213) 430-7221 430-7221 13 14 15 16 17 18 19 20 21 22 23 24 25 	 Page 5 Los Angeles, California, Monday, August 4, 2003 9:00 a.m 5:00 p.m. CAROLINE MINTER-HOXBY, having been first duly sworn, was examined and testified as follows: EXAMINATION BY MS. LHAMON: Q I am Catherine Lhamon and I am an attorney for the plaintiffs in this case. Could you state and spell your name for the record. A It is Caroline Minter-Hoxby, C-a-r-o-l-i-n-e M-i-n-t-e-r, hyphen, H-o-x-b-y. Q I know I said I would call you Professor Hoxby and I started off with Doctor. I will try to do better. A It doesn't matter. Q You have been deposed before today; is that correct? A That's correct. Q How many times? A Four, I think. Q Was each of those cases in education related

	Page 6		Page 8
1	matters?	1	for clarification. You will get a transcript at the
2	A Yes.	2	end of the deposition that you can review and you can
3	Q Could you tell me what cases they were?	3	make any changes that you would like to the
4	A The New Hampshire case, which is Claremont	4	transcript, but you should know that I and the other
5	versus the State of New Hampshire. I believe it was	5	parties in the case can make an inference that is fair
6	1996. This is the case that has had several different	6	to draw from those changes.
7	lives, but it was 1996.	7	Do you understand that?
8	There is a case in Texas and I am not sure	8	A I understand everything, yes.
9	what the official name of the case is. I could look	9	Q If later in the day, after you have answered
10	it up for you. It is David Hobson, I think, versus	10	a question, you think of something else you'd like to
11	probably the Dallas Independent School District. It	11	clarify or you'd like to amplify on an answer, please
12	is an unusual case, because the State is an	12	go ahead and let me know and we can go back to that
13	intervenor.	13	question. I'd like to get your fullest testimony.
14	Q Do you know when that testimony was?	14	A I will do that.
15	A 2002. Most recently, in Massachusetts,	15	Q If at any time you need to take a break today
16	Hancock versus the State of Massachusetts in 2003.	16	and we haven't already offered it, let me know and we
17	Q There is a fourth case?	17	can take a break. The only thing I ask is that if
18	A I think in the fourth case, you probably	18	there is a question pending, you go ahead and answer
19	would not count me as having been deposed, because I	19	the question and then we can take a break.
20	did everything in a written way.	20	A Yes.
21	Q Which case is that?	21	Q In the four cases that you listed for me in
22	A It is the case that went to the Supreme Court	22	which you have given either a deposition or the
23	for the State of Ohio. The exact name of the case	23	written testimony in the Ohio case, were you an expert
24	I can't remember the name of the plaintiff.	24	in each of those four cases?
25	Q Do you know the subject matter of the case?	25	A Yes.

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A It is the school voucher case that went to 1 2 the State of Ohio.

- Q When was your written material on that case?
- 3 4 A Either 1999 or 2000. Probably in both years.

5 Q I know that you are a veteran of depositions, but would you like me to go over the rules of a 6 7 deposition?

A Of course.

8 9 Q You have probably talked about it with your counsel, but the goal of a deposition is to get your 10 full answers to my questions. I don't want you to 11

guess, but if you have an estimate, I'd like to hear 12

13 that. It is best if we try not to talk over each

- other, so I will try very hard to let you finish your 14
- answer before I ask my next question and if you could 15
- wait for me to finish my questions, that will make it 16

17 easier for the court reporter. 18 It is best to give yes or no answers rather

- than nods of the head or shakes of the head, because 19
- the court reporter can't write that down. If you 20
- 21 don't understand anything that I ask you, please tell 22 me.
- 23 If you answer a question, any other people
- 24 reading the transcript will assume that you did
- 25 understand it. If you don't understand something, ask

Page 9

- Q Taking the New Hampshire case first. On
- whose behalf were you testifying? A In that case, I was an expert for the State.
- Q For the Texas case?
- A I am an expert for the plaintiffs.
- Q And the plaintiffs were not the State,
- 6 7 because the State was an intervenor?
- 8 A No. The case is set up in the following way:
- 9 The plaintiffs are taxpayers and they are suing their
- own school district and their own school districts in 10
- some cases agree with the plaintiffs and in some cases 11
- 12 do not. 13

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- Q You have to love litigation.
- 14 On what basis are they suing the school 15 district?
- 16 A That the current system of school finance in
- Texas violates the set of standards set up by the 17
- 18 Supreme Court.
- 19 Q And then the Massachusetts case, on whose
- behalf are you an expert? 20 21
- A The State. 22
 - O What did this case concern?
 - A The Hancock case is mostly concerned with
- school finance. The system of school finance in the 24
- 25 State of Massachusetts, but it also has some

	Page 10		Page 12
1	provisions about the State's accountability program.	1	Q Having reviewed the expert report, separate
2	Q And then the Ohio case, on whose behalf?	2	from the changes that you just told me about, is there
3	A The State.	3	anything that you would now state differently?
4	Q Thank you.	4	A No.
5	Have you reviewed your expert report in	5	Q Is this report, the report that you
6	preparation for today's deposition?	6	submitted, equivalent to a report you would submit for
7	A Yes.	7	a paper or a journal?
8	Q Do you have anything you would want to change	8	A Yes.
9	in the expert report?	9	Q I'd like to show you a document that I will
10	A There are several typos to which I could draw	10	mark as Exhibit 1.
11	your attention. The most important one most of	11	(Plaintiffs' Exhibit 1 was marked
12	them, I do not think change the nature of the	12	for identification by the court reporter.)
13	sentence. On Page 26, however, the word "not" is	13	BY MS. LHAMON:
14	missing from the fourth sentence. The sentence should	14	Q Would you take a look at that document,
15	read, "Centralizing a state does not equalize	15	please, and let me know if you recognize it.
16	achievement," because that changes the meaning of the	16	A Yes, it is a C.V.
17	sentence. It is an important typo.	17	Q Is there anything substantive that needs to
18	Q Actually I assumed that is what you meant,	18	be added to this C.V. to make it current?
19	but thank you.	19	A Yes. I suppose this C.V. is about a year old
20	Was there anything else you wanted to change?	20	or perhaps more than a year old. As a result, there
21	A I could draw your attention to several other	21	are several publications that I have published since
22	typos. Most of them are less important.	22	this C.V. was created and are not listed here. I
23	Q You are welcome to if you like. If it	23	could get you a list of those, but I cannot do it off
24	doesn't matter to you, it doesn't matter to me.	24	the top of my head accurately.
25	A I don't think so. Oh, yes, on Page 14, there	25	I could tell you, for instance, that the

first publication listed here is no longer is a formula which is missing a little part of the 1 1 2 forthcoming. It came forth and there are a number of 2 formula. 3 3 other publications since then. Some of the papers What it should be is three percent equals 4 would be minus 97 percent equals and then the rest of 4 that are listed here as unpublished papers are now 5 the formula. There is one minus 97 percent. The rest 5 published papers. In fact, most of them. of the formula is equal to 97 percent, if that 6 So, I can tell you that --6 7 7 Let me go down the list of the unpublished. clarifies that. 8 There is a typo on the next page, as well. 8 Start with the book in progress. That book is no 9 On Page 15, the number 80 percent is in the 9 longer in progress. It was published in 2002. The 10 10th line and it should read 83.3 percent. 10 unpublished papers, the first one is still I think that is it. 11 unpublished. The second one is published. The third 11 one is published. The fourth one is published. 12 12 Q Thank you. I appreciate that. 13 Does the report fully state the opinions you 13 The fifth one is forthcoming in a journal. 14 intend to offer as an expert in trial? 14 That means it has been accepted for publication. It just hasn't actually been printed yet. The fifth one 15 MS. DAVIS: At this time? 15 is still unpublished. The sixth one is published. 16 THE WITNESS: At this time, yes. It states 16 The seventh and eighth ones are still unpublished and 17 what I had to offer at the time that I wrote the 17 18 report. 18 the remainder are actually going into a book that I am 19 working on right now. 19 BY MS. LHAMON: Q Your view hasn't changed since you wrote the 20 Q That is the last three? 20 21 A Yes. 21 report? 22 A My views haven't changed, but there certainly 22 O What is the title of that book? 23 will be more data available. 23 A There is a preliminary title of Competitive Q Do you anticipate additional data? 24 New World Changes in the Market for College Education. 24 25 A Not at this time, but I suppose I could. 25 Q Is your plan to edit that book with other

	Page 14		Page 16
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\end{array} $	Page 14 people's publications or entirely going to be A Entirely going to be my book. Q Do you have a more up-to-date C.V. that has the completed publications listed? A Yes, on my Web site. There is a copy of an up-to-date C.V. and I believe it is up to date as of the middle of this summer. Q Until we have that to work with, we will work with Exhibit 1. In the meantime, is there anything else that is subject to being changed? A No, there is nothing else that should be changed. Q I appreciate that. Do you know if the C.V. that is on your Web site has the full list of your publications or would I still need a separate listing of some of the new publications? A It would certainly have everything that I had published as of May or maybe early June and I update it every three months or so. So, there are a couple of things that would have changed data. In general, the list of papers themselves is not changed as much as my changes of something from forthcoming to	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\end{array} $	Page 16 Q The third line down there is a sentence that begins, "Very little of the evidence they cite" and refers to funding by organizations that use strong peer review systems. A Right. Q My question is whether you participate in making funding decisions for any such organizations? A No, I don't. Typically organizations that fund research use peer review to make decisions about the quality of the research proposal, but people like me who provide them with peer review do not make funding decisions. In fact, we are not in on that stage of the proceedings at all. Often I have no idea whether a project has been funded. I know what rating it got in terms of quality, but it is still the organization's decision to make funding decisions and that is not done when we are present. Q Thank you. Could you tell me the list of organizations and journals for which you provide peer reviews? A I provide peer review for the National Science Foundation, the National Institute of Health and Child Development, which is known as NICHD, the
24 25	published.	24 25	National Institute of Health, NIH, the United States
	Page 15		Page 17
1 2 3	Q Are you a member of any organizations that are not listed on your C.V.? A The American Economics Association, the National Tax Association I think that is probably	1 2 3 4	Department of Education and a variety of foundations. Let me list the ones that I can recall. The Spencer Foundation, which funds research on education: the Russell Sage Foundation: the Ford

- 4 National Tax Association. I think that is probably 5 it.
 - Q Thank you.

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7 Do you make or participate in making any 8 funding decisions for any organizations?

- MS. DAVIS: Vague and ambiguous.
- 10 THE WITNESS: It actually would be helpful if
- 11 you could clarify that question.
- 12 BY MS. LHAMON:
- 13 Q Sure. Let me show you another exhibit to14 help clarify that.
- 15 (Plaintiffs' Exhibit 2 was marked
- 16 for identification by the court reporter.)
- 17 BY MS. LHAMON:
- 18 Q Do you recognize Exhibit 2?
- 19 A Yes.
 - Q What is it?
- 21 A It is the expert report that I prepared on
- 22 April 16, 2003.
- 23 Q Thank you.
- 24 If you will turn to Page 2 on Exhibit 2.
- 25 A Right.

on education; the Russell Sage Foundation; the Ford 4 5 Foundation. There are others that I am probably not remembering all of them. 6 7 In addition, I review for many journals. The 8 American Economic Review, the Quarterly Journal of Economics, the Journal of Labor Economics, the Journal 9 10 of Human Resources; the Economics of Education Review; the Industrial and Labor Relations Review; the Journal 11 12 of Public Economics; the European Economic Review, the 13 Journal of the National Tax Association -- I am sorry. That is called the National Tax Journal; the Journal 14 15 of Economic Literature and others. 16 I do review for others, but there are literally hundreds of journals for which I will 17 18 provide a very occasional review. Those are the ones 19 for which I would routinely provide. 20 I am sorry. The Review of Economics and 21 Statistics. 22 In addition, I occasionally provide reviews 23 for law journals at the Harvard Law Review and for 24 education journals that are purely educational, like 25 the Harvard Educational Review.

Page	18

	Page 18		Page 20
1	Q You said that you occasionally provide	1 2	Q Very nice.
2 3	reviews for them. How often have you provided reviews for the Harvard Law Review?	2 3	That is the book that we talked about that
4	A Three times.	4	has the final three papers in the unpublished list? A Yes.
5	Q Is that approximate?	5	Q Have you completed the draft of the book?
6	A That is approximate.	6	A No.
7	Q Approximately how often have you provided a	7	Q You will return to teaching at Harvard in the
8	review for the Harvard Education Review?	8	fall?
9	A Three or four times, too. Those are less	9	A Yes.
10	formal review processes, so there is less of a formal	10	Q Are you looking forward to that?
11	report and therefore it is probably less memorable for	11	A Yes.
12	me.	12	Q What courses have you taught since becoming a
13	Q When you say it is a less formal process,	13	professor?
14	what do you mean by that?	14	A I teach a course called The Economics of
15	A Sometimes reviews are done on the telephone	15	Education. I teach an undergraduate course called
16	and I am less likely to receive, for instance, a copy	16	Public Sector Economics. I teach an undergraduate
17	of the editor's letter to the authors, a copy of the	17	course called Econometrics. I teach a graduate course
18	other reviewer's comments. Sometimes there are no	18	called Public Economics and I teach a graduate course
19	other reviewers. They are less formal than the review	19	called Labor Economics.
20	process for an economics journal, which is typically	20 21	In addition, I teach some research seminars, one of which is called Research in Micro Economics.
21 22	highly formalized where there are multiple reviewers and where you would see all of the other reviewers'	21 22	One of which is called Research in Labor Economics and
22	comments as well and often you would see all of the	22	another one of which is called Research in Public
23	stages of the process and the paper.	23 24	Economics. Research seminars are sometimes for
25	Q Thank you.	25	graduate students and sometimes for Harvard seniors
20		20	Stadante stadents and somethies for that tald sensits
	Page 19		Page 21
1	-	1	-
1	Turning to the articles that you have	$\frac{1}{2}$	who are writing theses.
2	Turning to the articles that you have published to date. Do you still subscribe to the	2	who are writing theses. Q The first course, Economics of Education, was
	Turning to the articles that you have	2 3	who are writing theses. Q The first course, Economics of Education, was that undergraduate or graduate course?
2 3	Turning to the articles that you have published to date. Do you still subscribe to the views in those articles? A Yes.	2 3 4	who are writing theses.Q The first course, Economics of Education, was that undergraduate or graduate course?A Advanced undergraduate course that some
2 3 4	Turning to the articles that you have published to date. Do you still subscribe to the views in those articles?	2 3	who are writing theses. Q The first course, Economics of Education, was that undergraduate or graduate course?
2 3 4 5	Turning to the articles that you have published to date. Do you still subscribe to the views in those articles? A Yes. Q You were on leave from Harvard during the	2 3 4 5	 who are writing theses. Q The first course, Economics of Education, was that undergraduate or graduate course? A Advanced undergraduate course that some graduate students take for credit.
2 3 4 5 6	Turning to the articles that you have published to date. Do you still subscribe to the views in those articles? A Yes. Q You were on leave from Harvard during the 2003, 2004 quarter? A That's right. Q Were you affiliated or employed by another	2 3 4 5 6 7 8	 who are writing theses. Q The first course, Economics of Education, was that undergraduate or graduate course? A Advanced undergraduate course that some graduate students take for credit. Q That is a full list of all the courses you have taught since becoming a professor? A Yes.
2 3 4 5 6 7 8 9	Turning to the articles that you have published to date. Do you still subscribe to the views in those articles? A Yes. Q You were on leave from Harvard during the 2003, 2004 quarter? A That's right. Q Were you affiliated or employed by another organization or university during that time?	2 3 4 5 6 7 8 9	 who are writing theses. Q The first course, Economics of Education, was that undergraduate or graduate course? A Advanced undergraduate course that some graduate students take for credit. Q That is a full list of all the courses you have taught since becoming a professor? A Yes. Q How did you first hear about the Williams
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- 24 Q Did you look at anything else on the Web 25 site?

25 Yale.

Page 22	Page 24
1 A I looked at some of the other plaintiff 1 different school finance formulas.	
2 expert reports and I looked at some of the overall 2 Q That is a complete list?	
3 introductory material. 3 A No, it probably is not a complete list;	
4 Q Which is what? 4 however, those are the things that spring to min	ıd.
5 A I think things that you see when you go to 5 Q What was Paul's reaction when you liste	
6 the Web page in the first place. Those things have 6 those and perhaps others as to possible areas of	
 7 changed since December of 2002, however. 7 expertise? 	
8 Q But, I assume you went to and then clicked on 8 A He said he thought it would be useful for	r me
9 the Web site and looked at those pages? 9 to prepare a report for him.	
10 A I looked at what was basically there, yes. 10 Q What was your next contact with him?	
Q What else did Paul say in that conversation? 11 A I think I had ongoing, although not terri	oly
12 A Not a great deal. He said that if I read the 12 frequent, contacts mainly with Paul Salvaty in	
13 synthesis report by Jeannie Oakes, I would have a 13 February and March and April, so repeated con	tact, but
14 pretty clear sense of what the plaintiffs' expert's 14 not frequent.	,
15 Case was about. 15 Q And they were all by telephone?	
16 Q Did he tell you why he was asking you to look 16 A Yes.	
17 at that? 17 Q They were to check in on the progress of	f the
18 A He said that he wondered whether I would be 18 report?	
19 interested in helping the State formulate its case. 19 A Yes. Sometimes Paul Salvaty would ca	l me
20 That is basically all he said. 20 and say that plaintiffs' experts have filed somet	
21 Q Did you say that you would be interested? 21 new or we have noticed something in the plain	
A At the time in my first conversation with 22 expert report that we think you should look at.	
22 A At the time in my first conversation with 23 him, no, because I didn't know what the case was 23 Q What kind of things were those?	
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23 him, no, because I didn't know what the case was 23 Q What kind of things were those?	
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25

- 23 A Particularly state and local control, 24 centralization of school finance and control of
- 25 inputs. Accountability in general and the impact of

7 (Pages 22 to 25)

Raymond was on the telephone, Eric Hanushak was on the

telephone and Herbert Walberg was on the telephone.

	Page 26		Page 28
1	Q When was that?	1	Q How about Herb Walberg? What did he say he
2	A Sometime in January of 2003, I believe, but I	2	would write about?
3	am not sure of the exact date. I would say probably	3	A I believe he said he was going to be mainly
4	the first or second week in January.	4	writing about school accountability and good school
5	Q What was the purpose of that conference call?	5	accountability systems. That is his area of
6	A I suppose that the purpose of the conference	6	expertise.
7	call was to coordinate our reports in the sense that	7	Q Did you all discuss your views about the
8	Paul Salvaty wanted each one of us to outline for the	8	plaintiffs' case?
9	others what we thought we would have in our expert	9	A No, not really.
10	report so that people would be aware of possible	10	Q Did you all discuss timing for the expert
11	duplication of topics.	11	reports?
12	Q Did you each do that?	12	A I believe at the time, Paul Salvaty had a
13	A Yes, very briefly. It was not a long call.	13	deadline for us that was toward the end of February.
14	Q Have you sent anything to the other	14	I believe that deadline later was changed, but I think
15	participants in the call?	15	that was the deadline that was discussed at that time.
16	A No.	16	Q Did Paul tell you anything else on that call?
17	Q Has anybody sent anything to you?	17	A Not that I can recall.
18	A No.	18	Q Were there ever any other conference calls
19	Q What did you say that you would describe in	19	with other experts in the case?
20	the report?	20	A No.
21	A I think I described	21	Q Did you ever talk to any of the other
22	In fact, I know all of the people reasonably	22	participants on that call about this case?
23	well, so it was a short call in part because I think	23	A No.
24	they know the areas in which I would consider myself	24	Q Did you ever talk to any of the other experts
25	to be an expert. I said I would be talking about	25	that are working for the State on this case?
	Page 27		Page 29
1	school finance and state versus local control and	1	A No.
2	centralization, mainly.	2	Q Do you know the experts?
3	Q What did Margaret Raymond say she would talk	3	A I know their names. In many cases, I don't
	Q what the margaret Raymond say she would talk		A I Know men names. In many cases, I don't

- 4 about?
- 5 A She said one of the things that she was going
- to do was carefully review the plaintiffs' expert's 6
- 7 reports. I remember that. She may have also said
- 8 other things, but that was what I remember
- 9 particularly.

10 Q Is that consistent with what you thought she 11 would write about in this case?

12 A Yes.

13 Q What did Eric Hanushak say he would write 14 about?

- 15 A I think Eric Hanushak is particularly
- interested in high quality studies of the effective 16
- inputs on student achievement and that he was going to 17

18 be providing critical analysis of evidence on that.

That is his area of expertise. 19

Q So, you weren't surprised that that is what 20 21 he would write about? 22

- A No. not at all.
- 23 Q Did he mention anything else he might write 24 about?
- 25 A He probably did and I just don't recall.

- 4 know them.
- 5 O You haven't met them in connection with this 6 case?
- 7 A No. 8
- Q Have you been contacted by anyone from the 9

California School District about this case?

10 A No.

13

Q Are you presently involved in any other 11 litigation? 12

A In any other litigation as an expert?

- Q As an expert, separate from what you have 14 15
 - described from the previous depositions.
- A No. Perhaps I should revise that. The 16
- 17 Hancock case in Massachusetts has a case that is
- 18 related to it and I am not an attorney, so I don't
- quite understand the relationship between the two 19
- cases. They are tied together in some sense and are 20 being heard by the same judge, but on a different
- 21 22 schedule. I believe they have some relationship, so
- 23 some of my expert reports are being used for that
- other case, but I have not written separate expert 24
- 25 reports for that other case. It is just that there

	Page 30		Page 32
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 are these two parallel cases going through that court system in Massachusetts. Q No other litigation that you haven't already told me about, that you are involved in? A No. Q You have already told me that you told Paul Salvaty some topics that you might discuss as an expert. Were you asked to discuss anything in particular as an expert for the State, for this case? A No. Q You were never asked to examine anything related to equal education opportunities in California? MS. DAVIS: Vague and ambiguous. THE WITNESS: I think equal educational opportunity is inherently part and parcel of studying school finance and issues like centralization. The main reason we study centralization is to think about issues like educational opportunities and its distribution. BY MS. LHAMON: Q What other issues do you also think about when studying school finance and centralization? A Overall performance of children. Efficient use of state and local revenues and how supportable 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 with which school reserves are used in school districts. That would include issues like how centralization affects parental involvement, how centralization affects local politics and things like that. Q Thank you. Is every word in your expert report your own? A Yes. Q No lawyer wrote the report? A No, certainly not. Q Anyone else that wrote any part of the report for you? A No. Q Are there any portions of your expert report which is Exhibit 2, that appear in sum or substance in your other writings? A No. Well, there are some figures that do appear in published writings. In those cases, they have a citation to the published writing, I believe, but none of the text does so. Only some figures and I could tell you which ones if you'd like me to. Q Yes. A The figure on Page 12, which is entitled Shares of Explained Variation in 12-Graders' Math Scores. That also appears in a published paper called
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	Page 31 the system will be in the long run. We are interested in not only the immediate impact on the school finance system, but also what will its impact be in 10 years. Therefore, we are interested in how sustainable a formula will be. Q Could you walk me through how issues of equal educational opportunity are a part of studies of school finance? A Right. Most studies of school finance start with the premise that the states have an interest in attempting to equalize educational opportunities for students in their state and that the goal of economists or other people who try to devise or understand the implications of school finance systems is to understand how that goal can be achieved efficiently and in a sustainable way. So, it is with the understanding of quality educational opportunity that is perhaps the motivating force behind studies. Q Is the same true of studies of centralization? A There are two issues that come up. One of them is quality of educational opportunity and the other one is how centralization affects the efficiency	2 3 4	Page 33 If Families Matter Most, Where Do Schools Come In. I believe that published paper is on my C.V. If not, I can give you more publication details. The two figures on Page 13, Shares of Explained Variation in 33-Year-Olds' Educational Attainment and Shares of Explained Variation in 33-Year-Olds' Incomes also appear in that chapter, which is published in the book. Those are the only two figures or illustrations in this report that appear anyplace else. Q Okay. Thank you. Paul Salvaty, did he give you some suggestions about changes to your expert report? A Yes. Q What suggestions did he give you? A They were mainly suggestions about how to clarify Well, he drew my attention to certain sentences that he thought were either unclear, perhaps ambiguous in some way or that he drew my attention to certain lack of sentences. So, for instance, I might have a figure and I thought I had explained it sufficiently to be clear to readers and he might have said to me, "I think a few

	Page 34		Page 36
$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array}$	 additional sentences to explain this terminology or what this means or how to interpret this figure or this table might be helpful." So, it was mainly things like that. He also drew my attention to typographical errors. Q But, there was nothing substantive that he wanted you to change? A No, not really. It was really just drawing my attention to sentences that he thought were unclear or not sufficiently explanatory. Q On how many occasions did he give you suggestions like that? A I think it was probably multiple telephone calls, but on one draft. I think it was more that we had a telephone call. One of the two of us had to end the telephone call and we picked up the conversation in another telephone call. There were not additional rounds of interaction. Q Did he later send those suggestions in writing? A No. As far as I can recall, it was telephone based. Q I just want to show you another exhibit and then I have a few questions about it. 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 about certain data sources," and that was what I was drawing up my memo about sources that I believe was later sent to the plaintiffs. Q You did that on March 27, 2003? A I started drawing up that memo, yes. I started making notes about where data sources had come from. Some of those, I suppose might have made it into this April 16 report, but most of my information in the data sources, in fact, probably did show up in that later memo. Q Is there a reason that you didn't include it in the report in April? A I think it was probably the deadline was pressing and it was important to get the report done. Q I just want to check with you and make sure your memory is correct, because we received that memo well after March 27th. A Oh, yes, right. Q If you wrote it on March 27th, 2003, and we just received it later, that is good to know. I just want to check and make sure. MS. DAVIS: I believe she said she started it in March, but go ahead. THE WITNESS: That is correct. A memo like that actually takes a long time to prepare. So, I
	Page 35		Page 37
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	 (Plaintiffs' Exhibit 3 was marked for identification by the court reporter.) BY MS. LHAMON: Q Do you recognize what we have marked as Exhibit 3? A Yes. Q What is that? A It is an invoice for January through March 2003 from me to the office of the attorney general. Q Thank you. At the bottom of the invoice on the date 3/27/03, you have a marker for time spent revising the report in line with T. Salvaty's written comments. Do you see that? A Yes. Those, I think, were not comments on the text or the figures in the report. I think rather those were comments on my writing source information that, in fact, I would later amplify in a memo to you. So, I suppose I was thinking of that more as being the memo about sources. Q When you say that, being the memo about sources, you mean Paul Salvaty's memo being the memo about sources? 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\end{array} $	 began writing notes for myself in March, but it took me a long time to prepare this. I think mainly in May or June and in particular, because my understanding of what was wanted in that memo increased over time, it depends on, I guess, the level at which someone wishes to look at the sources. It is some sources which are public information and are readily available that would have seemed more obvious to me and I would not have thought about writing a memo on them. It turned out that a memo was wanted on absolutely everything. BY MS. LHAMON: Q I am very careful. MS. DAVIS: All your fault. BY MS. LHAMON: Q I am just wondering if you started writing this report in March and turned over the report in April, why those details that you started writing in March didn't appear in the report or in what you turned over? A I think it was purely an oversight. Q Thank you. Still looking at Exhibit 3, have you prepared

	Page 38		Page 40
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 Page 38 A Yes. Q Have you given that to the State? A Yes. Q Do you recall how much the invoice was for? A Let me think. I believe it was for approximately 30 hours, most of which were spent preparing this memo and also preparing the actual CDF data and documentation. Q Does that invoice cover your time up until today? A Up until yesterday and today, yes. Q Have you just given that invoice to the State? A I gave it to the State at the end of the fiscal year, which I believe ended on June 30th. Q Then I'd appreciate seeing a copy of that. MS. DAVIS: I don't recall seeing a copy. I will see if I can track that down. BY MS. LHAMON: Q That reminds me, also, we sent a letter asking to have you bring the list of the restricted use license? A I didn't. I could get one for you. It is also posted all of these are posted on the Web. 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 Page 40 Q You started by saying that the expert needs to be serious about doing good research on education. Are you referring specifically to experts in the area of education or any experts? A To experts who would want to give testimony on a case having to do with school finance. Q My question is a bit broader. I am wondering, in any case, what do you think of the necessary qualifications for an expert? MS. DAVIS: Vague and ambiguous and calls for speculation. THE WITNESS: I just don't know how to answer that question. I know what I would consider to be expertise in the areas in which I am working, but many cases would concern areas in which I don't work. BY MS. LHAMON: Q When Paul Salvaty called you and talked to you about working for the State on this case, you identified some areas in which you might be an expert. I am wondering, based on your understanding of expertise, how do you determine what one might be an expert in? A I think I am an expert in areas in which I have a record of producing evidence which is regarded or well
	· ·		
1 2	Page 39 They are generic. They contain no individual information. They do not contain, for instance,	1 2	Page 41 regarded by my peers. Q That standard, in your view, does that obtain

- 3 provisions that are specific to me as the researcher
- 4 and do not apply to other people.
- 5 Q The copy that you brought is not a copy that is actually yours? You just printed it off the Web? 6 7 There is nothing different about yours?
- 8
 - A Nothing different about mine.
- 9 Q We will add that later. I can make copies of
- all of this. Thank you for making it, I appreciate 10
- 11 it. 12
 - In your view --
- 13 Actually, let me stop. Would you like to take a break? We have been going for about an hour. 14
- MS. DAVIS: It is up to you. 15
- THE WITNESS: I suppose actually not. Let's 16 17 keep going.
- 18 BY MS. LHAMON:
- 19 Q In your view, what are the necessary
- 20 qualifications for an expert?
- 21 A I think an expert needs to be serious about
- 22 doing good research about education and needs to base
- 23 his or her opinions on evidence. We have standards as
- 24 well that I typically do apply to evidence and the use
- 25 in interpretation of evidence.

- 3 to anyone else who would want to be an expert?
- 4 MS. DAVIS: Vague and ambiguous and calls for 5 speculation.
- 6 THE WITNESS: I believe that there are
- 7 multiple different ways of getting evidence. I do
- 8 think that all evidence on which an expert bases his
- 9 or her opinion should be scientific in its nature and
- 10 should be able to withstand criticism of a high
- 11 quality.

- BY MS. LHAMON: 12 13
 - Q What is the basis for that belief?
 - A The underlying basis for the belief is the
- 14 knowledge that evidence that is produced and that does 15 16 not meet that standard is often misleading and can
- 17 produce very bad policy. 18
- Q You know that because of what? 19
 - MS. DAVIS: Vague and ambiguous.
 - THE WITNESS: Part of what I do when I do
- 21 research is look at previous research that has been
- 22 done, how it has guided policy and then whether policy
- 23 has had the intended effect. Often we find that
- evidence that does not meet a high standard of quality 24
- 25 produces policies that do not have the effect

	Page 42		Page 44
1	intended.	1	school performance.
2	BY MS. LHAMON:	2	Q Do you think that practical experience in
3	Q Okay.	3	another area is important for being an expert in
4	That is some of the materials you discussed	4	education?
5	in your expert report; is that right?	5	MS. DAVIS: Vague and ambiguous. Calls for
6	A Yes.	6	speculation.
7	Q Is it your view that an expert should have	7	THE WITNESS: The most practical experience
8	published in a relevant field?	8	we have is actually working with evidence. Some of
9	MS. DAVIS: Vague and ambiguous and calls for	9	that work would necessitate visiting schools,
10	speculation.	10	interacting with people who work at schools, but our
11	THE WITNESS: No, not necessarily. I think	11	practical work, what we do in practice, most
12	that you could judge the quality of someone's	12	researchers on education, is to practice the gathering
13	evidence. Looking at the actual evidence and	13	of evidence and the presentation of evidence and
14	publication, in and of itself, is not necessarily a	14	allowing it to be criticized by others and revising it
15	mark of quality. There are many publications that	15	accordingly.
16	have very low standards of quality, so having	16	BY MS. LHAMON:
17	published them is not particularly useful.	17	Q I have assumed that your experience as a
18	There are even good publications that	18	professor and thus as a teacher had also formed your
19	occasionally publish bad papers. So, publication in	19	expertise in this case? If that is not correct, I am
20	and of itself is not a mark of quality. It is	20	interested to know that.
21	helpful, but it is only one of the things you should	21	A Yes, I think a professor, as being a teacher,
22	consider. The best way to make a decision is actually	22	is the same experience as being a teacher. However, I
23	to read the evidence itself and make a decision based	23	would say that the students whom I teach are not
24	on the evidence.	24	representative of students in general in the United
25	I believe that some evidence that is not	25	States and therefore help me in a limited way to
	Page 43		Page 45
1		1	
1	published anywhere could be very high quality		understand elementary and secondary schools in the
2	evidence. You just have to look at it more carefully	2	United States in a very limited way.
3	in that case, because you know that has not been	3	Q How are your students not representative?

- in that case, because you know that has not been 3
- 4 reviewed by others.
- 5 BY MS. LHAMON:
- 6 Q So, I take it from the last answer, then,
- that you believe research in the relevant field is 7
- 8 necessary for expertise? 9
 - MS. DAVIS: Vague and ambiguous.
- 10 THE WITNESS: Yes. Research in education, I
- think, is necessary to be an expert in education, yes. 11 12 BY MS. LHAMON:
- 13 Q Practical experience in relevant fields 14 necessary for expertise?
- 15 MS. DAVIS: Same objection.
- 16 THE WITNESS: I don't know what practical 17 experience in your mind would consist of.
- 18 If you ask about specific practical
- experience, I could answer your questions. 19
- 20 BY MS. LHAMON:
- Q Tell me what you think of as practical 21 22 experience.
- 23 A For instance, I do not think it is necessary
- 24 to actually have been a high school teacher or high
- 25 school principal to have expert opinions about high

- Q How are your students not representative?
- A Students who attend Harvard are
- 5 disproportionately likely to have had very high, high 6
 - school achievement.
- 7 O Okay. 8

9

12

- Do you believe that training in relevant
- fields is necessary for expertise?
- 10 MS. DAVIS: Vague and ambiguous and calls for 11 speculation.
 - THE WITNESS: I believe that training, for
- 13 instance, statistics and econometrics are useful for
- 14 doing any sort of work in education which is
- 15 quantitative. I believe that having coursework or
- training in public economics absolutely is essential 16
- to doing any work on school finance, which is a highly 17
- 18 technical field. I believe that good training in
- 19 empirical applied work is necessary for doing policy 20 analysis.

21 However, some of that training can be

- received at a variety of different places, public 22
- 23 policy schools, Ph.D. programs and economics or
- government or sociology or EDD programs in education. 24
- 25 The same people often train across departments.

	Page 46		Page 48
1	For instance, I train students at the Harvard	1	really the area is of tremendous interest.
2	Graduate School of Education where I am an affiliated	2	\vec{Q} You said that you had studied both the cost
3	faculty member.	3	of implementing accountability systems and also some
4	BY MS. LHAMON:	4	benefits; is that correct?
5	Q Are you an expert in school desegregation?	5	A Yes.
6	A No.	6	Q When you say you studied the cost, do you
7	Q Are you an expert in educational testing?	7	mean the actual dollar cost to a state?
8	MS. DAVIS: Vague and ambiguous.	8	A Yes.
9	THE WITNESS: There are two or at least two	9	Q Do you mean anything else by cost of
10	and probably more types of expertise in educational	10	implementing?
11	testing. One is the interpretation of test scores and	11	A Well, I think we are interested in some of
12	the other is the construction of tests. I have	12	the non-tangible costs. For instance, we are
13	expertise in the interpretation of test scores, but	13	interested in how accountability systems affect the
14	not in the construction of tests.	14	housing market in a state and how they affect the
15	BY MS. LHAMON:	15	incentives that schools have to spend their time in
16	Q Thank you.	16	various ways. I suppose these would be described as
17	Are you an expert in state accountability	17	costs only in a very general or broad sense.
18	systems?	18	Q When you are talking about the incentives
19	A Yes.	19	that schools have, what do you mean by that?
20	Q What is the basis for that expertise?	20	A A typical accountability system provides
21	A The basis for the expertise is having studied	21	schools in the district with both implicit and
22	state accountability systems.	22	explicit incentives.
23	Q What have you studied?	23	By implicit incentives, I mean an
24	A All 50 states, both the cost of implementing	24	accountability system might publish a school's
25	their accountability systems and some of the benefits	25	academic performance in a newspaper, regardless of

1 whether there are any rewards or sanctions based on of the implementation of accountability systems. 1 2 that academic performance index. The school might 2 In addition, in my capacity as the director 3 of economics of the education program for the National 3 feel impelled to attempt to improve that simply 4 Bureau of Economic Research, I have reviewed, 4 because it has been publicized. That is what I would 5 criticized and in many cases made decisions about the 5 describe as implicit. 6 An explicit is one which the state or other 6 working papers or publication status of every article 7 7 on accountability that has been published by organization rewards the schools that have better 8 economists in these years. I think I am very aware of 8 academic performance and sanction those that do not. 9 not only the evidence I myself have produced, but the 9 Most states do not have strong explicit incentives. 10 10 evidence produced by others. Most of them are mainly implicit incentives. Q Are you very aware of the evidence produced Q So, when you say that you have studied the 11 11 by others who are not economists? 12 cost of implementing accountability systems in the 12 13 A Yes, because most of the conferences that I 13 sense of examining the incentives that schools have, 14 attend for which I read papers or discuss papers, 14 you mean by that, that you have looked at whether the systems have implicit or explicit incentives; is that criticize papers are conferences that cross 15 15 disciplinary boundaries. Typically conferences would 16 16 correct? be dominated by people who are not economists. 17 17 A Yes, and how schools have responded to these 18 Economists would be the minority or I might be the 18 incentives. 19 Q When you say that you have studied some of 19 only economist. There are many more economists who do 20 the benefits of accountability systems, what do you 20 21 mean by that? 21 education now. Q That is largely a testament to your work, 22 22 A Well, most accountability systems have the 23 isn't it? 23 intention of improving student achievement. Typically 24 an accountability system like that of California has a A No, I don't think so. I think it is a 24 25 testament to the interest in education. I think it is 25 disproportionate focus on improving the performance of

	Page 50		Page 52
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	students who are initially low achieving or below the State's target level of achievement. Therefore, I and others are interested in whether accountability systems actually appear to produce the effects that they are intending to achieve in the long run. This is quite a difficult thing to do in the short term, because children do not improve overnight in their achievement. It is perfectly normal to see a policy that will eventually be a very useful policy have very little effect in the first few years simply because children improve slowly and you often need to wait several years before you are able to evaluate a policy. For instance, right now, it is easiest to evaluate state accountability systems that were implemented in the early 1990s and very, very difficult to assess the performance of any accountability system that was implemented in the late 1990s, simply because we just do not have enough years of data in most cases. Q Have you written any papers talking about this benefit of state accountability systems? A Yes. I have a very short published paper. I am trying to remember its title. I don't recall its title. It is posted on my	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	California has been phased in. In fact, a system full-blown version of an accountability system often takes three, four years to be put in place. Some states, it has taken as long as eight years to have a full-blown version in place. Q Going back to the list of the area of expertise for you. Are you an expert in equal educational opportunity? MS. DAVIS: Vague and ambiguous. THE WITNESS: I regard equal education opportunity as being a subset of finance. Yes, I am. I am an expert in the trying to understand systems that would create equal education opportunity. BY MS. LHAMON: Q Are you an expert in school management? MS. DAVIS: Vague and ambiguous. THE WITNESS: People like me who do research on incentives that schools face and how schools respond to them are naturally attempting to create evidence about how schools are managed. There is a second set of experts who teach in management schools or principals. I do not teach management. I do gather evidence on the facts of incentives and constraint on the managers. BY MS. LHAMON:
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\end{array} $	Page 51 Web page, however, and I believe that its title is approximately, Did States With Accountability Systems Improve Performance Faster In The 1990s. Something along those lines, but that is not its exact title. Q We can come back to it when we have your up-to-date C.V. You said it is easier to evaluate an accountability system that was implemented in the early '90s. Which accountability studies are those? A Systems like Texas, Connecticut, Tennessee, Kentucky. Those are the most striking examples. Then there are some that were implemented in the mid 1990s. The '90s was a decade in which many accountability systems were put in place. Q Which state accountability systems are included in the mid '90s? A I don't have an exact list of them. I would really need to look at my own work and make sure that I was not skipping states. Some of the states would be Michigan, Arizona, Illinois, Indiana,	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\end{array} $	Page 53 Q You mentioned people like me who do research about the incentives schools face. Who else are you thinking of? A Many people, actually. I could give you a long list. Bryan Jacobs, who is at our Kennedy School of Government has done work on incentives. Eric Hanushak we mentioned earlier has done a lot of work on incentives in schools. I could give you a very long list. I am not sure that would be helpful. Almost anyone who does research on the effects of incentives, on what happens in schools could be described as someone who knows about schools, the evidence on school management. But, it would just be a list of almost everyone who works in the area and does serious research. They may know more or less. Not all of them know an equal amount. Q I appreciate it is not an exhaustive list. I'd be interested to hear it. A I'd say Joshua Angrist at the Massachusetts Institute of Technology. Henry Levin, who is at

21 Massachusetts, South Carolina, Florida. Florida is 22 mid to late.

- 23 I don't know that you'd want to say early,
- 24 mid, late. You'd really want to look at the year they

implemented. Most of them are phased in, just as 25

- tute of Technology. Henry Levin, who is at
- 21 Columbia Teachers College. You know, there are just
- 22 way too many people for me to mention. They are not
- 23 all equal by any means. I don't want to give you a
- 24 longer list, because I think I cannot be sufficiently
- 25 inclusive to be fair to people. I would need some

	Page 54		Page 56
1	time to assemble a long list.	1	a school choice plan that would be very accessible to
2	Q Okay. We have four days, so if you think	2	children who have disabilities.
3	about it and have more people you'd like to add, let	3	Q What did you say in that report on the
4	me know.	4	reauthorization of the IDEA?
5	A Okay.	5	A I commented on a program in Florida called
6	Q Are you an expert in state education policy?	6	the McKay Scholarships Program, which is a program of
7	A Yes.	7	giving scholarships to students who are disabled and
8	Q When did you acquire that expertise?	8	those scholarships allow them to attend other public
9	A It is the result of having done a lot of	9	schools in the state that might have a disability
10	research on the effects of state education policy and	10	program that is a better match for them than their
11	what policies states have implemented.	11	local district. It also allows them to attend private
12	Q By that, do you mean which accountability	12	schools, since the private schools offer a special
13	states have implemented or something else?	13	disability program that matches their disability.
14	A No, states implement a variety of policies on	14	I commented on the feasibility of
15	education and they include accountability, school	15	implementing such similar types of programs in other
16	finance. The state system of both distributing aid	16	states. States have, at least some program that
17	and also the requirements that make up logical	17	allows disabled students to attend schools outside
18	districts and how they distribute revenue.	18	their district or schools that might be private
19	States also have policies regarding special	19	schools. Few states have a policy that is as
20	education, disabled education, bilingual or	20	widespread and fully implemented as Florida, so this
21	English-learner education. States usually have	21	is a serious issue for the reauthorization of IDEA.
22	policies regarding student transportation. All of	22	We are largely concerned with trying to
23	these are areas in which an expert should be aware of	23	figure out what is the right amount of money to go
24	what the typical range of state policies are and	24	into each child's scholarship.
25	whether notable state policies have had effects.	25	Q How did that relate to school choice?
L			
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Q Have you researched all of those areas? A A disabled child being able to choose a 1 1 2 A I have not published on all those areas, 2 school out of his or her district or go to a private 3 because not all of them are equally interesting to 3 school. It is a form of school choice. 4 policy makers right now. 4 Q I should ask you, what do you mean by school 5 Q What do you mean by that? 5 choice? 6 A Student transportation, for instance, is A School choice is an extremely broad term. 6 7 7 certainly something on which most states need to have That can be referred to -- it really encompasses any 8 a policy. It is not considered an exciting or 8 type of choice that parents would make over schools. 9 interesting area of policy at this point in time. 9 That would include children being able to choose Most states are not thinking of changing their another school within their own district. It includes 10 10 policies, for instance. some forms of decentralized schools. For instance, in 11 11 12 On the other hand, I think it would be unwise Chicago and Manhattan, states have implemented 12 13 to not know what the normal state policy was on 13 decentralized control of some schools so parents have 14 transportation. So, many times we do research on 14 more involvement. something and we don't publish an article on it, but 15 School choice also includes charter schools, 15 it is just background information we need to know. 16 16 open enrollment programs, which are children being Q So, you have already told me that you have able to choose to attend a school outside their 17 17 18 written about accountability systems and I know that 18 district. It can include, although in practice, it you have written a lot about school finance. Have you rarely does include, programs like school vouchers. 19 19 written about special education? Q Have you written also about the area of 20 20 21 bilingual education? 21 A I have produced a report for the committee --22 the President's Select Committee on the IDEA, which is 22 A Yes. 23 special education. In that sense, I have done some 23 Q What have you written? research on special education. Mainly as it interacts 24 24 A A paper called -- this is going to be an 25 with the issue of school choice. How would you create 25 approximate title, I am afraid. The Effects of the

Page 58 Page 60 1 1 Ban on Bilingual Education in the State of California. In addition to that, we have some data that 2 2 This is an approximate title. It is also available on was directly given to us by certain school districts; 3 3 my Web site. San Diego and Los Angeles, I recall we have 4 Q Thank you. 4 particularly used. We also have data on how teachers 5 5 What did you conclude in that paper? were reassigned after the ban on bilingual education. 6 A We were rather surprised by the evidence in 6 So, it is a variety of different data from 7 7 that paper, because many people had believed that the the California Department of Education. 8 ban on bilingual education would have had a larger 8 Q Did you do any examination of what tools the 9 impact on children who were limited English 9 studies have access to before and after the ban on 10 proficient. Although people disagreed strongly about 10 bilingual education in California? the direction of the impact, some people thought it MS. DAVIS: Vague and ambiguous. 11 11 would improve their performance in the long run and 12 12 THE WITNESS: I don't know what you mean by 13 some people thought it would make their performance 13 tools. 14 worse banning bilingual education. 14 BY MS. LHAMON: 15 Also, people felt there might be small 15 Q The teachers, the students have access to. 16 effects on nonlimited English proficiency. In other 16 The instructional materials the students have access 17 words, native English speakers. In the paper, we were 17 to. somewhat surprised to find that the effects of the ban 18 18 A We know what teachers they have access to 19 before and after and whether the teachers are 19 on bilingual education appeared to be insignificant on 20 students of limited English proficiency. 20 certified in bilingual education. Using not 21 I would say this is not because there were no 21 California data, but some other data on schools and 22 effects on them, but because probably good and bad 22 staffing surveys. 23 effects are somewhat offsetting and the effects on 23 We also knew for some teachers whether or not 24 24 students who were native English speakers appeared to they would have had classes in bilingual education 25 be positive, which again, surprised us. It was 25 even though that wasn't the area they were certified

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different than what most people had expected. That is 1 2 what we found.

3 We looked first after the first year, the

4 second year and the third year and we are currently in

5 the process of addressing evidence on the fourth year

of performance after the ban on bilingual education. 6

7 So, somewhat different than what we had expected, but 8 sometimes that happens.

9 Q What did you use to examine what the effects 10 were on populations?

11 A Well, we used a lot of data from the

12 California Department of Education. The California

13 records for each school and each grade, how many

14 students are limited English proficient or limited

15 proficient in each language and whether they have been

16 assigned to bilingual education, English as a second

- language, some form of treatment and after the ban, of 17 18
- course, they would be assigned to English immersion. 19 Then we also looked at performance -- we were using the California Star data and we particularly 20 21 focused on the Stanford 9 scores really only for
- 22 practical reasons, because if you go back before the
- 23 ban on bilingual education, it was the only test that
- 24 was being given to every child in the State of

25 California. 1 in.

2 We also used from the schools and staffing 3 survey something about the types of curriculum that 4 they would have been using in the classrooms. But, 5 no, we did not specifically study, for instance, the particular textbooks that were used before and after. 6 7 O Why is that?

8 A Because I think that is part of the nature of 9 changing from bilingual education to, say English 10 immersion, that you will naturally have some changes 11 in instructional materials and also the focus of the 12 classroom per the expectation.

13 Q Did you specifically look at the training 14 that the teachers had before and after the ban or 15 their certification the teachers had before and after 16 the ban?

17 A Yes.

18 Q Why did you look at that?

19 A We were interested in whether teachers who

- were certified in bilingual education were still 20
- 21 teaching students who were limited English proficient.
- 22 who would now be in an English learner classroom and
- 23 whether they were teaching other students who might
- 24 need remedial help, but were not limited English
- 25 proficient. We did look to see whether they had been

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1	reassigned.	1	I have also done research on questions like,
2	In many cases, teachers with bilingual	2	when states have decided that their teachers can do
3	certification or teachers that had been teaching	3	collective bargaining, how do we see teacher salaries
4	bilingual classes are now assigned to classes that	4	change and how do we see changes in who becomes a
5	contain a lot of students with limited English	5	teacher in the state. Again, that is a state
6	proficiency, even though they are now English	6	education policy.
7	immersion classrooms.	7	It is also possible to do studies on things
8	Technically we were also particularly limited	8	like what happens when a state raises its requirements
9	to teachers with bilingual certification, because they	9	for teacher certification. Those studies, I do not
10	tend to be better educated. They are usually more	10	think are very productive area of research; therefore,
11	recent graduates. They often have more total credits	11	I have not published myself on it. However, I am very
12	and more total education.	12	aware of studies done on it.
13	Q Thank you.	13	Q So, I want to ask you more about that, but
14	When we started this line of questioning, you	14	just to make sure I have my complete list of areas of
15	were telling me areas of state education policy that	15	state policy that you have researched with respect to
16	you have researched and I believe you have listed, and	16	education, you just added school choice. My initial
17	I apologize if I leave anything out, accountability,	17	list was accountability, school finance, special
18	school finance, special education and bilingual	18	education and bilingual education.
19	education.	19	Is there anything
20	Are there any other areas that you have also	20	MS. DAVIS: And transportation.
21	studied of state education policy?	21	BY MS. LHAMON:
22	A I suppose you could put down school choice	22	Q I think you said you had not researched
23	and class size. I guess you would describe it as	23	transportation. Was that correct?
24	teacher qualifications or the effect of teachers.	24	A I think one thing that I wish to be clear
25	In general, I have done research on the	25	about is in many cases, I have done research on

market for teachers and that actually covers quite a something and not published on it. That is because it 1 1 2 number of things. It includes teachers unionization 2 is not --3 3 and the effect of teachers going to colleges, the There are two reasons to publish something. 4 effect of teachers having different college courses. 4 One is that there is evidence that exists and the 5 In addition, I have done, with a graduate 5 other is someone wants to know about it. In some student, some work on teacher effects, which are the 6 6 cases, there is evidence that exists, but the evidence 7 systematic effects that a teacher has on a student. 7 that you have may be evidence that you feel does not 8 This is not an effect of a credential, but the effect 8 particularly change what is out there, so you don't 9 of a particular teacher. 9 publish evidence. 10 10 O Just to be clear, the teacher qualifications You may feel that there is no productive way research that you have done, is that research about to add to the evidence, even though you may feel that 11 11 state education policy with respect to teacher the evidence that exists is poor in quality. If you 12 12 13 qualifications? 13 cannot produce better evidence yourself, there is no 14 14 A Yes, although it is not so in the most reason to add to a body of evidence poor in quality. straightforward way. Yes, I would say. 15 Thirdly, there is not anyone interested. 15 16 Q Explain it to me, then. 16 That does not mean you don't have to do research on 17 A For instance, one of the things that I have 17 it. I think most people who do research do research 18 done research on is what is the effect of states 18 on a variety of things they need to know background information on and indirectly might affect what they 19 allowing their charter schools to often have different 19 20 thresholds for teacher qualifications than regular 20 write in other areas. O That is why I am asking you for a list, 21 public schools. So, that is a state policy. It 21 22 affects the types of teachers who teach in charter 22 because I won't otherwise know what you have 23 schools. We are interested in and I have done 23 researched. Should I give you the list again? 24 A No, I think you have given it. research on what we end up seeing in teacher 24 25 qualifications in charter schools as a result. 25 The only other area that I will bring up

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specifically or two more, actually now that I look at 1 have done research on open enrollment programs. Those 1 2 it. One is about peer effects. Peer effects are how 2 are the programs in which people can send their 3 3 students affect one another in a classroom. I have children to other school districts in which they live. 4 also done research on districting. How districts have 4 I have done research on the impact of voucher 5 5 programs, but not on the children who use the changed and also how the structure of a district in an 6 area affects students. I did a lot of research on 6 vouchers, but on the children who remain in the public 7 7 higher education that I do not think is germane. schools. 8 MS. DAVIS: Is this a good time to take a 8 I have done research on not just the effects 9 break? 9 of school choice on students' performance, but also on 10 10 some other related things, like what happens to MS. LHAMON: Absolutely. teachers in the labor market where there is a school (Recess.) 11 11 12 BY MS. LHAMON: 12 choice. Q Professor Hoxby, you know the same rules we 13 I have looked at the interaction between 13 14 discussed still apply. Actually, I forgot to ask you 14 school choice and teachers unionization. I have 15 looked at the interaction between school choice and 15 this morning if there is any reason you can't give your best testimony today? 16 the treatment of students with disabilities and the 16 17 A No. there is not. 17 interaction between school choice and the school finance which is a very important area of interaction. 18 Q Before we took the break, we were talking 18 19 In particular, when school choice of any type 19 about the list of areas of research you have done in 20 state policy with respect to schools. I'd love for 20 is in place, that includes even the very traditional 21 form by which you choose a school by choosing where to 21 you to talk to me about your research in school 22 choice. 22 live, there are implications of how school finance 23 A As I believe I said earlier, school choice is 23 works. 24 24 To give a very simple example, in most a very broad topic and I have done research on --25 states, if I choose to live in one school district 25 perhaps I will tell you what I have not done research

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Page 67 1 on first, because it is the most well-known area of research. 2 3 What I have not done research on is what 4 happens to students who use vouchers in a voucher 5 program, such as the voucher program in Cleveland or the voucher program in New York City or Washington, 6 7 D.C. or Milwaukee. I have not done research on that. 8 What I have principally focused on is what 8 9 happens when a school choice program is in place, to (the students who remain in regular public schools. 10 1 So, not the students who actually use the choice 11 1 program, per se, but the students who remain in 12 1 13 regular public schools. 1 14 I have mainly focused on the effects on them 14 and I have looked at a variety of different school 15 1 choice programs in that general area. I have looked 16 1 at what is called TIEBOUT choice, named for Charles 17 1 18 Tiebout, who is actually at UCLA. The TIEBOUT choice 1 is the normal traditional form of school choice in the 19 19 United States that parents make when they choose a 20 20 2 21 residence and by choosing the residence, they choose 22 22 essentially where their kids are going to go to 23 school. This is just a normal part of American life. 2 24 I have done research on that form of school choice. 24 25 25 I have done research on charter schools. I

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1	versus another, my choice will have an impact on
2	property values, which will usually have an impact on
3	how that district receives aid from the State.
4	So, you really have to understand both of
5	these things together in a typical state to understand
6	the impact of school choice. It is one of the most
7	poorly understood areas.
8	Another is what to do with disabled children
9	and that is an area I am very interested in.
0	Q Why have you principally focused on what
1	happens to students who remain in regular public
2	schools when a school choice system is in place?
3	A Because I don't think that we should judge
4	the success or failure of a school choice program
5	based on what happens to children who take advantage
6	of the program in the most obvious sense by actually
7	using or making a choice actively.
8	My assumption and also the evidence suggests
9	that if you actually take advantage of the program,
20	you probably like the program. After all, you could
21	decide not to take advantage of it and just return to
2	your public school. I am not terribly worried about
23	people who take advantage of the program. I figure it
24	is at least as good as they would otherwise have.

Therefore, I think our principal hope for

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1	school choice and our principal concern is what would	1	concerned, is redistributed in the state, so they have
2	happen in the school to students who do not take	2	a per-pupil-type share. They are also given money
3	advantage of the program in an obvious way.	3	from the general budget in the State of California.
4	For instance, we might think that they would	4	So, they are not affected by local property values
5	be better off because their school would have an	5	particularly.
6	incentive to try to keep students from leaving and	6	So, no, California is not an example of that.
7	might therefore pay more attention to students or pay	7	California is unusual in that way.
8	attention to parents.	8	Q Do you think it is still important to
9	We might think that they would be potentially	9	research school choice in California?
10	worse off because they are losing some group of peers	10	A Yes. It is just that it does not have the
11	who are taking advantage of the program. Whether that	11	same implication for school finance that it has in
12	group of peers is a good group of peers, something	12	some other states. It makes it actually easier to do
13	called cream skimming or a bad group of peers who	13	research in California and not harder.
14	might be leaving it doesn't have a name, but also a	14	Q Why is it so important to research in
15	concern. We need to pay attention to that.	15	California?
16	In addition, in some states, when a child	16	A Well, I think it is important everywhere. In
17	takes advantage of a school choice program, the	17	California, the only real policy action on school
18	children who are in the school that remain in the	18	choice has been in the charter schools. There are
19	regular public school actually have more money on a	19	some magnet schools, as well in California. Whether
20	per-pupil basis. That is pretty standard, basically.	20	or not you want to call that school choice, there is
21	On the other hand, you might worry that the	21	an issue for discussion.
22	school district often has less money in total. Even	22	But, California, it is obviously the most
23	though it might have more money per pupil, we have to	23	important state in the United States. It is the
24	figure out what type of impact that would have.	24	largest. It tends to be on the front tier of policy
25	Finally, I think we are concerned about how	25	in many ways. It often is out in front of the other
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school choice would affect how teachers choose to work 1 states in terms of what it is doing on the policy 1 2 in different schools. It is not obvious at all that 2 frontier, so we are always interested in what is 3 3 school choice programs work the same way. I think happening in California. 4 they do not. 4 In addition to the fact that it is such a 5 5 diverse state suggests that California will often One of the things we are trying to learn 6 about is by altering the parameters of the school produce a more extreme version of whatever the outcome 6 7 choice program, do we end up with different effects on 7 would be in a state that is less diverse. 8 the kids. I think they are a primary concern. They 8 Q Do you support increased school choice in 9 are certainly 98 percent of the kids are the ones that 9 California? remain behind. You really need to pay attention to 10 10 MS. DAVIS: Vague and ambiguous. what is happening to them. 11 THE WITNESS: I don't recall support 11 12 Q When you say interaction between school positions one way or the other. I am an evidence 12 person, so I don't have policy positions. 13 choice and school finance is especially important, 13 because in most states, I believe you said when 14 BY MS. LHAMON: 14 families leave, that affects the property value and 15 Q Thank you. 15 16 Can you describe for me the research you have 16 that affects the money that a school has? done on class size with respect to state policy? 17 A Right. 17 18 Q Is that true in California? 18 A There are two papers that I have that bear 19 A Well, no. With the exception of a very few 19 somewhat on class size. Mainly one. I will say by districts in California, because California has a way of background that the main problem with doing 20 20 system in which most districts -- again, there are 21 21 research on class size is that class size is generally not randomly assigned to children and therefore there 22 some who are special category. The hold harmless 22 23 category. 23 are two reasons why we see class size vary, 24 24 principally. Most districts are in a system where all of 25 the property tax revenue, as far as they are 25 First of all, more affluent parents in many

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1	states choose to have smaller class sizes for their	1	For instance, if I had a class size maximum
2	children. Now, that is not true in all states, but	2	of 22 and I had 44 students who enrolled in one year,
3	that is true in many states.	3	then I'd split them into two groups of 22. But, if I
4	In addition, it is also true that within the	4	had 45 students who enrolled, then all of the sudden,
5	district, you will often see students who are more in	5	I'd have to split them into three classes each of 15.
6	need of remedial education being assigned to small	6	Class size is very different between two
7	classes. Sometimes very small classes. These two	7	years and we can take advantage of those little
8	basic facts cause an extraordinary problem in doing	8	experiments if you have enough data and you have a lot
9	research on class size, because most of the variation	9	of experiments. That is the sort of research I have
10	we see in class size is not at all like randomly	10	done on the State of Connecticut. I think it is
11	assigning or experimentally assigning a child to a	11	probably the most cited natural experiment study on
12	different class size.	12	class size.
13	Saying if we put Johnny and Jenny in a	13	Q As I heard in that description, that sounded
14	smaller class, would they do better or worse. The	14	like the study was about cost of benefits of class
15	reason they are in a smaller class is that Johnny or	15	size and I didn't hear its relationship to state
16	Jennie were having a problem or they have affluent	16	policy.
17	parents and therefore they got into a small class.	17	A Well, the reason that we do research on class
18	As a result, most of the new and recent class	18	size is that states are considering class size
19	size researchers either focus on what they call policy	19	reduction. As you know, many states have either done
20	experiments where the area has done an experiment to	20	class size reduction policies or considered it. Most
21	reduce class size in some schools and not in others or	21	class size reduction policies are done with the
22	is based on natural experiments and natural	22	intention of improving student performance.
23	experiments occur sort of by accident.	23	So, it is very important to try to figure out
24	Classes are smaller in some schools than in	24	what is the causal effect of class size performance,
25	others. It should be the case that the accident is	25	because states are thinking of investing billions of

1	something that is not correlated with something else	1	d
2	happening. For instance, it couldn't be that the area	2	р
3	got a lot richer. It ought to be something that	3	n
4	appears to be something accidental.	4	n
5	So, I have done research, these two types of	5	
6	research on the policy experiments and the natural	6	a
7	experiments are complimentary to one another. They	7	t
8	both have problems and they both have merits.	8	b
9	My principal research is what one would	9	b
10	describe as natural experiment approach or the	10	tl
11	accidental experimental approach, using all the data	11	i
12	from the State of Connecticut from about 20 years. It	12	tl
13	takes advantage of the fact that school class size	13	v
14	will fall for two reasons in the State of Connecticut.	14	
15	One is if the school has unusually small	15	S
16	enrollment for a year, they will end up with small	16	e
17	classes. Think of kindergarteners showing up in	17	
18	kindergarten and one year there are 50 children that	18	p
19	get divided into two classes, 25 apiece, and the next	19	
20	year, there are 39 and they get divided into a class	20	e
21	of 20 and 19. You can use that sort of variation as	21	t
22	accidental.	22	а
23	If you do it good enough, you can use only	23	e
24	the accidental part to figure out what the class size	24	1
25	is. You will see big variations in class size.	25	e

dollars in these policies and if the effect on student

- 2 performance is small or negligible, that would not
- necessarily be the best place for a state to spend itsmoney.

5 That is not to say that if you had infinite 6 amounts of money, you might not spend it. You ought 7 to know what the effect on student performance would 8 be, because there are a variety of policies you might 9 be able to institute. You might be able to lengthen 0 the school day or school time. You want to know what 1 is the effect of class size, what the effect of all

these different things is just so you choose policieswisely.

4 Q I appreciate that last explanation and that 5 sounds like why a state would want to know about the 6 effect of class size.

Have you specifically researched statepolicies regarding class size?

- 9 A In the course of doing research on bilingual
- 0 education in California, we had to deal with the fact
- 21 that California had done a class size reduction. Not
- 22 at exactly the same time as the ban on bilingual
- education, but essentially the year before.
- Therefore, we did actually have to do quite a bit of
- evidence finding on the effects of class size

1	Page 78 reduction in California just in order to get the	1	Page 80 teachers' salaries by about 12 percent. It depends
2	estimates on bilingual education. That is a common	2	upon the state.
3	sort of problem. \check{Y} ou have to learn about the effects	3	Collective bargaining does not appear to have
4	of both policies.	4	had much of an effect on student performance one way
5	There is also, as I am sure you know, a lot	5	or the other. Mainly it had an effect on teacher
6	of other research on class size reduction by several	6	salaries and teacher benefits.
7	other authors, as well.	7	Q How would you go about reaching that
8	Q I'd like to turn to the research you have	8	conclusion?
9	done about teacher qualifications. You listed for me	9	A Again, this is an area where there is an
10	three principal areas, I believe. One is the effect	10	obstacle to doing good research. That is that
11	of the state allowing charter schools to have	11	collective bargaining is not randomly assigned to
12	different requirements for teacher quality and another	12	schools. It just doesn't come along and say you get
13	is the effect of state's decisions to do collective	13	collective bargaining and you don't. We see the
14	bargaining for teachers and the third was the effect	14	schools that do it are much more likely to be urban
15	of states raising requirements for teacher	15	schools. They are likely to be bigger school
16	certification; is that correct?	16	districts and in addition, the political composition
17	A That's right.	17	of the area often affects whether there is collective
18	Q Do you know if, in California, the state	18	bargaining.
19	allows charter schools to have different requirements	19	Just as an example, almost every school in
20	for teacher quality?	20	New York has collective bargaining, including small
21	A I believe that charter schools	21	schools in New York City were some of the first
22	Well, I don't know. I know what the laws	22	schools to have collective bargaining in the United
23	say. I don't know entirely about the practice. My	23	States. It is not an accident that if you look at
24	understanding is that charter schools do not have	24	schools in Mississippi or South Carolina, they are
25	exactly the same requirements, because they are or at	25	much less likely to have collective bargaining. You

1	least were initially exempted from collective or local	1	cannot look at the difference between teacher salaries
2	collective bargaining agreements. So, that would	2	in New York and Mississippi and say that is due to
3	create a difference right there.	3	collective bargaining. That is nonsensical.
4	In addition, they are not required to have	4	So, you can't just compare across schools
5	the same percentage of teachers be certified teachers.	5	that have it and schools that don't and assume that
6	That is my understanding of the system.	6	all the differences between those two cases are due to
7	I also know that laws are not always enforced	7	collective bargaining. It is very important to look
8	consistently in the regular public schools, so the	8	at the same school before and after collective
9	differences between the two systems may be less than	9	bargaining and see what the changes are. It helps
10	it would appear to be.	10	very much to look at schools that change their
11	Q And the basis for your understanding is	11	collective bargaining status when the state changes
12	having reviewed the laws in California?	12	its laws about collective bargaining, so that is what
13	A Yes.	13	I did.
14	Q Have you examined whether California has	14	In my study, I look at what happens when a
15	allowed collective bargaining for its teachers?	15	state allows schools to do collective bargaining. As
16	A Yes, California has allowed collective	16	you may know, the collective bargaining for public
17	bargaining for its teachers for many years.	17	school teachers was illegal in every state in about
18	Q Have you examined the effects of that	18	1960 and states only made it legal over a period of
19	decision?	19	time, some states starting in the late '60s and
20	A Yes, because I have examined the effects of	20	gradually unfolding over the course of the 1970s and
21	collective bargaining in every state, yes.	21	1980s. States have changed various provisions about
22	Q What is your view about the effects of that	22	what you could do with your teacher organizations.
23	decision?	23	What I did was I looked at schools that
24	A Most collective bargaining in the United	24	changed to doing collective bargaining right around
25	States appears to have had the effect of raising the	25	the time that their law changed. That is a good set

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Page 82 1 1 of schools to look at, because usually the conditions There are many things that are different 2 2 for doing collective bargaining were there in the between these two areas, so almost any sort of naive 3 school before the law changed. They just waited until 3 comparison across the school districts with widely 4 the law changed and started to do collective 4 different conditions is usually a bad idea in 5 bargaining. It is a good group to examine. You are 5 education. We have to be very careful to try to take 6 not just looking at the effect of being more urban account of other things that differ between schools. 6 7 7 O And the research you did on the collective district. 8 What I did was I looked at before and after. 8 bargaining effects in, I think you said all 50 states, 9 did try to take account of those kinds of differences? Schools that implemented the collective bargaining 9 right around the time of their law change and that is 10 A Well, I think it did better than that in the 10 where I came to the conclusion that teacher salaries sense that I was always looking within a given school, 11 11 went up by a substantial amount, about 12 percent, and here you are in 1984 and you didn't do collective 12 12 also teacher benefits usually go up by about the same 13 13 bargaining. In 1995, you did. How did you change 14 percentage. So, the total compensation package went 14 when you did collective bargaining. I was never 15 up about 10 percent, too. trying to compare apples and oranges. I was always 15 trying to compare a school to itself. 16 School spending also was affected, but that 16 Q Okay. Thank you for explaining that. 17 is what you would expect, because you can't pay more 17 teacher salary without having bigger school budgets. 18 You said that you haven't published, but have 18 O You said, I believe, that is nonsensical to researched what happens when states raise requirements 19 19 20 assume the differences in teacher salaries in, for 20 for teacher certification. How come you haven't 21 example, Mississippi or New York are a result of 21 published on that? 22 collective bargaining. 22 A It is because this is an area in which I 23 think as researchers, we probably do not have a policy 23 A Only due to collective bargaining. It might 24 24 experiment or a natural experiment that would allow us be one of many, many factors. There are so many 25 things that are different between Manhattan and rural 25 to produce good estimates and the research that exists

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Mississippi, to consider it was mainly due to 1 on this topic is of questionable quality. I can tell 1 collective bargaining, it would be naive. 2 2 you about a variety of different types of studies, 3 The income of people who live there, the 3 some of which are significantly higher quality than 4 education of people who live there, those are two 4 others, but none of them are going to meet the 5 principal things. Then there are a lot of other 5 standards for the best quality research. 6 things about the resources that are available to 6 We don't have the policy experiments in the 7 7 real world that will allow us to do that. As a schools and available to children. You can take your 8 child down to the Metropolitan Museum of Art in 8 result, it really doesn't make sense for me to publish 9 Manhattan. There is no Metropolitan Museum of Art in 9 research that is sort of middling quality and is like 10 rural Mississippi. There are a variety of amenities 10 a lot of other research of middling quality. and cultural and educational institutions that are I don't publish in that area, although in my 11 11 12 also different. 12 research life and in training my own students, I have 13 In addition, educational opportunities and 13 to, of course, look at evidence on that topic all the 14 the labor market opportunities are quite different for time and I have to generate evidence like this. I 14 15 adults in the two states. So, a child may think just don't publish it, because there isn't much of a 15 growing up in rural Mississippi that the job he might 16 16 point. be able to have as an adult than a child may have as 17 17 Q Thank you. 18 an adult in Manhattan is different. We would think 18 Coming toward the end of our list, you said 19 that would also affect what students did in school. 19 you looked at peer effects in the classroom and how 20 In addition, the labor market, because the state policy affects those peer effects. Can you 20 21 labor market is different between rural Mississippi 21 describe that research for me? 22 and New York, it is not clear that you would need to 22 A Right. 23 pay the same teacher salaries to get the same quality 23 One of the things that states are interested 24 teacher that you would get in Manhattan. It might be 24 in is whether students should be tracked, for 25 easier or harder. 25 instance, or not tracked in schools. States have

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1	policies about tracking or about segregation,	1	disproportionate amount of girls and high scoring and
2	classroom segregation of students who are either in	2	the next year the reverse happened and maybe it was
3	need of remedial attention or gifted and talented.	3	more boys and unusually low scoring. Then you try to
4	We are interested, therefore, in the question	4	research what happened in between those two years in
5	of how students affect one another in the classrooms	5	the same school. It is important to compare apples
6	and whether, for instance, I would be better off being	6	and apples.
7	in a classroom with more kids who were high scoring	7	In that study, I find evidence of peer
8	kids or whether in fact that might have a bad effect	8	effects that are of the form that we generally expect.
9	on me. Maybe they would depress my self-esteem or my	9	That you are generally better off being with children
10	ideas of how much I can achieve.	10	who are high scoring. The effects are not tremendous.
11	So, this research on peer effects tries to	11	They are not going to change your life if you are with
12	look at what happens when a child is essentially	12	students who are more high scoring than you are, but
13	assigned to different peers. We have a problem that	13	it does have an effect on a child's scores.
14	most assignment of peers to children is not random.	14	Q Did you examine the relationship between
15	If you see a child and he or she is in a class with a	15	state policy and those effects?
16	lot of very able children, that is probably not	16	A Yes, in the sense that I talked about the
17	random. It is probably that the school or his parents	17	implications for state policy in the paper. For
18	or someone else has decided he ought to be in a	18	instance, the implications for state policy about
19	classroom with a lot of able children and vice versa.	19	tracking, so I describe that implication for state
20	This causes a serious problem for research	20	policy.
21	and therefore we need to look for, in the case of peer	21	Q What are those?
22	effects, usually natural experiments where we see	22	A In this case, there are none. What I am
23	children getting assigned peers. Assigned, I think	23	going to say will sound a little tricky, but here
24	you realize is in quotation marks. Assigned to peers	24	goes.
25	who are unusually good or bad, given the circumstances	25	State policy around tracking is usually based

on the assumption that peer effects are what I would that his parents in the school have put him in. So, 1 1 2 describe as non-linear. Let me give you an example of this research is based on the State of Texas and it 2 3 3 both ways. takes advantage of natural experiments, again. 4 So, just to give you a simple example, girls 4 Let's say it is good to be around students 5 5 who score a little higher than you and bad to be tend to be higher scoring than boys in elementary around students that score a little lower than you, 6 school in all subjects. In a small school district or 6 7 7 a small school, you could send your child to but these effects are offsetting and pretty much a 8 kindergarten or first grade and find out that his or 8 mirror image of one another. All you can do is change 9 her classroom is 30 percent girls or 70 percent girls. 9 who gets to be with students who have higher scoring. 10 It happens. It varies. It is just nature. 10 Somebody always has to be with the students with lower 11 If your child is in a classroom where 70 scores. Those don't disappear. You just move them 11 percent of the other students are girls, your child 12 around. 12 13 tends to be in a classroom unusually high scoring, 13 In that case, there is really no state policy 14 because girls tend to be quieter and more well-behaved implication. You could put them with one another, in 14 students in elementary school. Therefore, your child which case all the high scoring kids would have good 15 15 effects on one another or you could put the high 16 sort of gets a dose of unusually good peer group in 16 elementary school, just randomly. scoring kids with low scoring kids and in this case, 17 17 18 Similarly, your child might be sort of 18 there would be effects on the low scoring kids, but it accidentally assigned to a classroom that ends up in a 19 will always be someone who has to be with the low 19 cohort that has an inherent large group of kids coming 20 scoring kids. It just depends on who you decide to 20 21 21 in with very low oral skills. We try and take put them with. 22 22 advantage of that. So, there are no obvious indications for 23 So, you look within a school at the same 23 state policy. 24 24 school, the same parents and you say, one year they The peer effects were what we call 25 had a kindergarten class and there was a 25 non-linear. Let's say having one good student in your

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1	classroom had a wonderful effect on everybody else.	1	Therefore, people may find it harder to be in
2	It doesn't matter how many low scoring kids you have.	2	a school district with people who are different than
3	That would actually have big implications with state	3	they are. Not just on the basis of ethnicity or race,
4	policy. You want to carefully spread these high	4	but they might also find it difficult to cooperate
5	scoring kids around and that would have good effects	5	with people who have different incomes than they have
6	for state policy.	6	or different religions or things like that.
7	You could imagine a situation where having	7	So, we look for evidence that school
8	one or two students who were disruptive was very bad.	8	districts became smaller and formed around ethnic or
9	Just having a critical mass of disruptive students was	9	racial or income groups in areas that had more
10	bad. You need to try to keep them isolated from one	10	heterogeneous populations and we do find that
11	another. As soon as you had two disruptive students,	11	metropolitan areas that got a big racial migration or
12	they made the whole class a chaotic situation. In	12	had big influxes of people with different incomes
13	that case, again, you probably want to spread them	13	would end up seeing more school districts and the
14	very carefully among classrooms and not allow them to	14	school districts would form around what looks like
15	be in little clumps with one another.	15	differences in the population.
16	It turns out that the evidence just does not	16	So, when you look at school districts today,
17	tell us that these non-linearities exist. Maybe they	17	most of this formation, by the way, took place in what
18	do, but I cannot find evidence of it, so the	18	is now, I think for our purposes, the remote past,
19	implications for state policy are easy if we find some	19	1910 through 1920s, before World War II, in any case.
20	of these non-linearities, like the clumping situation	20	When you look at school districts today, you
21	I talked about.	21	should not assume they are randomly on the ground.
22	But, in fact, for the sort of evidence I	22	They usually reflect something about the history of
23	found, you could include a variety of state policies.	23	the area and the immigration.
24	They would have different effects and there would be	24	Q Thank you for working me through this area of
25	distribution impacts on different students, but there	25	research. I appreciate it.
	Page 91		Page 93
			Ũ
1	is no overall recommendation for state policy that is	1	Back to your areas of expertise.

2 obvious. 3 Q So that I understand, when you have been

4 researching peer effects, class size, teacher

5 qualification, transportation, special education and

their relationship to state policy, is it fair to say 6

7 that that means that you have research implications of

8 each of these areas and how they are affected by state 9 policy choices?

10 A Yes, and we often motivate studies by looking at recent state policy changes and saying, what would 11 the effect of this state policy change be given the 12

13 sort of evidence we are gathering.

14 Q The last area you identified for me was districting and how districts have changed. Can you 15 describe what that means? 16

17 A I have done research that I suppose could be 18 brutally described as historical and looked at what happened, for instance, when metropolitan areas of the 19

United States received either migration of different 20 ethnic groups or migration of blacks, usually, from 21

the south to the north. The underlying theory is that 22

23 the school districts are areas in which people have to

24 cooperate with one another and to have a system of

25 schools that they mutually support.

Are you an expert in the evaluation of the 2 3 quality of public education through educational

4 assessment? 5

6 7 A Yes, I would say I am.

Q When did you acquire that expertise?

A That is the sort of expertise that one

8 acquires by doing a lot of research on education. I

9 think looking at a variety of different outcomes that

are related to what happens in schools. I don't just 10

11 mean test scores. 12

Also what happens to children's later life

13 outcomes, including their income, their ultimate

educational attainment and the occupations they have. 14

It may even include things that are more sociological, 15

like whether they get married, stay married, have 16

problems with crime and stuff like that. 17

18 Q So, the entirety of your research has

19 contributed to your expertise in that area?

20 A Yes. 21

22

Q Who most do you consider expert in the area?

A Which area?

23 Q Evaluation of the quality of education

through educational assessment. 24 25

A Well, of the people I know well, I can tell

Page 94 1 you some people who I think are particularly good. I 1 University. I also teach students in the Kennedy 2 think Eric Hanushak, who is at Stanford is really one 2 School and students from other schools in the Boston 3 3 of the best people who works in this area. I think area. Students from Harvard Graduate School of 4 that someone like Tony Bryk at the University of 4 Education. This is most of my job. 5 Chicago has done very good work. Richard Murnant who 5 Q I take it, then, it has been an area of expertise you have had ever since you have been a 6 is at the Harvard Graduate School of Education. 6 7 7 Joshua Angrist, who is at MIT has done some good work. professor? 8 There are some people who have not done as 8 A It is what I am really trained to do. 9 9 much work, because it is not as big a part of their Q You said, for example, you teach the correct 10 empirical method for evaluating policy changes. Can 10 research agenda, but they have done good work are people like Bryan Jacobs, who is at, I think, the you walk me through what that correct empirical method 11 11 Kennedy School of Government, Derrick Neill, who is at is? 12 12 13 the University of Chicago, Sandra Black, who is at 13 A Right. 14 UCLA. There is a long list of people who do research 14 In education, we rarely have access to simple on this occasionally, but for whom this is not a laboratory experiments, because we don't get to 15 15 16 primary area of research. 16 experiment on children. Therefore, every policy that Q Most of your papers and publications is put in place presents us with a set of problems 17 17 18 contribute to this area of research? that are created by the fact that we are not operating 18 19 A I think this is such a fundamental question 19 in a laboratory environment where you can compare the 20 that they all do in some sense. 20 children who get whatever it is and the children who Q What do you mean when you say such a 21 21 don't. Therefore, a lot of what we train people to do 22 fundamental question? 22 is to recognize the set of problems that exist when a 23 A Ultimately, we are very interested in what 23 particular policy has changed. 24 are the effects of education and what contributes to 24 For instance, in the case of evaluating the 25 quality in schools. 25 change in bilingual education in California, one of

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1 Q Are you an expert in research methods? 1 the problems is that California was simultaneously 2 A Yes, in the sense that I have taught and I 2 implementing a class size reduction, most of which had 3 also continue to teach people to do policy evaluation 3 occurred already. Nevertheless, it did have a class 4 related to education. It is really my main job. 4 size reduction policy that was recent. California was 5 O And policy evaluation is necessarily related 5 also implementing an accountability system that it had not had before. There was a lot of economic changes 6 to research methods? 6 7 7 A Yes, it is mainly about methods. going on in California at the time. 8 O How is that? 8 In 1998, California was not quite at the 9 A Well, I don't try to teach a student, say a 9 height, but close to the height of the economic boom 10 doctoral student or an advanced undergrad what to do 10 that was having very nice effects on the labor market research on. That is up to them. They do their own 11 for California in general. 11 research, but I do try to teach them standards of how 12 12 In addition, California has immigration that to conduct research, how to do statistics on 13 13 changes from year to year and California is also 14 14 implementing a variety of welfare-related policies and econometrics. 15 There is a real right and wrong there. That 15 health care-related policies. All of these things are going on at the same time. It is not that bilingual 16 is not really a matter of subjective opinion. A lot 16 of it is actually teaching, literally teaching education is changing and nothing else is changing. 17 17 18 methods. I also teach things like how to use data 18 One of the things we try to do is train 19 properly, how to get data, how to merge data or 19 students to figure out ways of isolating the effects assemble data properly. All of these are very of a change that they are particularly interested in. 20 20 21 21 important parts of what I teach people. Sometimes we can do this well and sometimes we can't In addition, I teach people how to look at a 22 22 do it very well, but what we try to train people to do 23 policy change and devise the correct empirical method 23 is recognize how to do it. To be able to say at the 24 to evaluate that policy change. I teach many students 24 end of their study how well have I actually achieved 25 in these methods; not just from my own part of Harvard 25 what is the gold standard here and that is to isolate

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1	the effects of a particular change I am interested in.	1	A I think applying the expertise says I cannot
2	That is what I try to train students to do.	2	achieve research that is of sufficiently high standard
3	You really have to show them a wide array of	3	that I can make research better than what already
4	studies of how people tackled these problems and	4	exists. So, it could be that I think that most
5	whether they have succeeded or not to get them to	5	research out there does not achieve even the bronze
6	understand the variety of methodologies and also which	6	standard or something like that, but if what is
7	ones are of high quality or low quality. They need to	7	available is the best that people can do, then I may
8	see the effects of low quality research. I think most	8	not wish to contribute to that.
9	people don't realize all their pitfalls when they	9	In the particular area of teacher
10 11	start. I think students do need to see them. Students very often catch on very quickly.	10 11	certification, I think there is some very good quality
12	Q You just mentioned a gold standard of	11	research, but the higher the quality of research, the less of a conclusion it comes to, unfortunately, in
12	research. I may have just misheard what you said.	12	that area. It does not come to strong conclusions.
13	If you could, tell me what that gold standard	13	The better you do it, the less you get. It is not
15	is. I'd appreciate that.	15	perhaps the most exciting area in which to do
16	A I think part of reaching the gold standard of	16	research.
17	research is if there is not one standard that you can	17	Q You are an expert in school finance? Is that
18	say applies to all types of studies. I mean, that is	18	fair to say?
19	quite clear. There is a single standard in some sense	19	A Yes.
20	and a single standard is that you have done a good job	20	Q When did you acquire that expertise?
21	of isolating the effects that you are interested in as	21	MS. DAVIS: Do you have a verbal answer?
22	a causal effect, so I want to know the causal effect	22	THE WITNESS: Yes. Thank you.
23	of banning bilingual education. That is the standard.	23	BY MS. LHAMON:
24	It is the same standard you would use in	24	Q When did you acquire that expertise?
25	science if you were trying to find out what is the	25	A I have done a lot of research on school
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1	causal effect of someone taking a particular drug	1	financing starting in about 1995 and I have published
2	instead of taking a placebo. That is the same	2	various papers on school finance.
3	standard. It is not different.	3	Q Are there any other areas of expertise that
4	Recognizing whether you have achieved that	4	you have that we have not talked about yet today?
5	standard is something that probably requires a fair	5	A Yes, there probably are, but
6	amount of experience and knowledge of what studies are	6	Q Can you list them for me?
7	out there, what people have done in the past, what is	7	A I just don't think I can give an exhaustive
8	possible to do.	8	list.
9	So, it is not something that is so easy that	9	Q How about limited? Do you have other areas
10	I could just write down if you followed the following	10	of expertise we have not talked about today, that are
11	set of instructions, you can recognize whether a	11	not relevant to this case?
12	study, a particular study achieves the gold standard.	12	A Probably not. Not that I can think of right
13	That actually requires some expertise in education.	13	now.
14	Q Just a couple of follow-up questions.	14	Q If you think of any other areas during the
15 16	When you were just defining the gold standard for research, that standard applies to any educational	15	course of the deposition, I hope you will let me know.
16 17	research; is that fair?	16 17	A Okay.
17	A That's correct.	17	Q You have acknowledged Julian Betz as a reviewer for some of your articles?
19	Q It is an example of having expertise in	10	A I have. Acknowledgments are generally made
20	knowing when you have achieved the gold standard and	20	for people who have helped you in one way or another
21	when you have not. The example you gave me earlier	20	in a paper. That doesn't mean they have reviewed the
22	is, you have done a lot of research about teacher	22	paper.
	certification, but you haven't published because there	23	For instance, I could have acknowledged
23	certification, but you haven't published because there	25	1 of mistance, 1 could have acknowledged

- 24 are so many problems with that area of research you
- 25 just can't figure out. Is that an example?

24 Julian Betz for helping me get data. I'd have to look

25 at the specific example to know what I was

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 Page 102 acknowledging him for in that specific paper. I acknowledge people for all different reasons. Q Do you know Julian Betz? A Of course. Q Do you view him to be a sound researcher? A He is a good researcher. Q As distinguished from a sound and obviously distinct from better and best? A As distinguished from better and best. Q Do you think highly of the quality of his work? A I can think of some studies of his of which I think very highly and I can also think of some studies that would have flaws. I would have to think about specific studies. Most researchers vary actually and vary from piece of research to piece of research. It is much easier if you think a particular piece of research is of high quality. Q What are some examples that you think of as high quality? A He has a very, very nice review of the literature on the effects of school resources on student performance in which he categorizes studies 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	Page 104 quality research? A He has also done research on peer effects, kind of indirect research, you would say. That is some of probably among the best quality research that was on peer effects before the more recent wave. There is some that is distinctly higher standard than that. He was doing the best up to a few years ago. Q Can you think of any examples that you think of his as low quality? A I think some of his research on grading standards does not make very much sense. Q Can you think of any other examples? A That is the prime example that comes to mind. Q Which of the plaintiffs' expert reports did you review? A Particularly reviewed Jeannie Oakes. MS. DAVIS: You should probably clarify. THE WITNESS: Both the synthesis and the report that is specifically on textbooks. I particularly reviewed the work of Linda Darling Hammond on teachers and there are two BY MS. LHAMON: Q Shall I tell you names? Gwen Earthman and Robert Corley, Nancy Myers.
25	according to the level of analysis. Whether it is at	25	A I know that I reviewed the Robert Corley one
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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	the state level or district level or the school level or individual school level. Also he describes what controls the studies had, whether it used, for instance the control for students in prior performance and describes the research methods and he identified some very interesting patterns in the research. For instance, it appears that as we go from studies that had a very aggregate level, they only have state level data to studies that look at individual student level data, we tend to normally think that the latter or the individual student level data based studies would be better because they have a lot more information contained in them. You tend to find that the results or the effects of school inputs or resources appear to be more attenuated or smaller. I think identifying some of the patterns, the historical patterns, was very important for this research and advanced many people in their thinking of how the research had changed over the years, why it had changed and where we needed to go forward with the research in the future. So, I think that is really a quite important paper. Q Can you think of any other examples of high	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	and the Earthman one. I did look at all of the plaintiffs' expert reports. I just did not look at all of them with equal care. Q So, the ones you have listed; the Oakes synthesis report and the Oakes textbook report, the Hammond report, the Corley report and the Earthman report, those are the five you looked at with more care? A Yes. Q Any others? A I read them all quickly. In any case, when I read them, it was some months ago. So, I would prefer not to have to make statements about very specific things in the report unless I have the report in front of me. Q I have them and if you ever want to refer to any of them, just let me know. They are readily accessible in this office. Is it that you looked with most care at the Oakes synthesis and the Oakes textbook report and the others A When I read Jeannie Oakes' synthesis report, it appeared to me that she was particularly relying on those reports. She, of course, relies on all of the expert reports, but she disproportionately relied on

27 (Pages 102 to 105)

$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	Page 106 those reports. Q What is your basis for that? The number of citations to them? A A combination of the number of times she cited them and her emphasis on the results that were likely to have come out of those reports. For instance, when she was describing evidence on textbooks, I assumed she was relying on her own study of textbooks. When she described evidence on teachers, I assumed she was relying on Linda Darling Hammond, even if she was not citing a piece of evidence in that study or a sentence in that study. Q Okay. Did anyone ask you to read particular reports? A No, apart from the fact that Paul Salvaty asked me to read generally the Oakes synthesis report specifically. He also said to me, "You should make an effort to read the expert reports that you think are necessary for you to understand anything that you would not understand in her synthesis report, unless you specifically looked at the specific expert report. Q You testified he called every once in a while	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	A My general criticism is that some of the plaintiffs' experts do not distinguish clearly between correlation and causality. Another way of saying this, which is what I am really trying to say the same thing in a different way is that they do not apply the best research methods to their studies. I think I could amplify a little bit on what I mean by the difference between causation and correlation, which is fairly important. If I were to look at people who go to the hospital with chest pains and I were to say that some of them get aspirin and are sent home and some of them get triple bypass surgery, I would find on the ones that get sent home with aspirin, they do pretty well and don't have heart disease. The ones that get triple bypass surgery are the ones that die more frequently. I could do a study in which I correlated the effects of getting aspirin or getting triple bypass surgery with later health outcomes and it would appear that it was much better to get aspirin, because nothing bad would happen to you. This is a correlation. It is not saying that giving someone aspirin has a causal effect on their heart condition. In fact, it has very little effect.
25	Q You testified he called every once in a while	23	in fact, it has very fittle effect.
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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 and said would you look at a paper? A Exactly. Q Do you remember what it was that he wanted you to look at in those papers? A I don't think he said specific things. Rather he was suggesting to me that these were reports that were getting a lot of attention and therefore they should get more of my attention, as well. Q With those calls, was that based on having seen a draft of your report and wanting you to add more to it? A No. He had not seen a draft of my report at this point, so I believe he was probably responding to conversations or discussions that he was having here in California. Q To which of the plaintiffs' expert reports do you respond directly in your expert report? MS. DAVIS: Vague and ambiguous. THE WITNESS: I don't think I respond directly to any of them. I think I have a criticism that applies to several of them. I don't know whether you would call that a response. BY MS. LHAMON: Q Okay. What is the criticisms that you have on several of them? 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	However, it is very easy to do studies that basically pick up correlations implying that they are causations. If I were to do my correlational study of getting aspirin and what your later health outcomes are, you would probably realize that was not a causal study and that it was kind of silly. Nevertheless, many studies that pick out just correlations are published. They sometimes get a lot of publicity and show up on front pages of newspapers, et cetera. So, the amount of attention given to a study, especially by non-peer review types of situations, does not tell you particularly whether they have done a good job at getting at the causal effect of something or whether they are merely picking up correlations if you do not carefully apply research methods. It is much easier to pick up correlations than it is to pick up causation. It is what you will do if you are not careful. It is not something you can avoid without care. I was deeply concerned that the plaintiffs' experts were routinely describing correlations and implying that they were causation. For instance, saying that children's higher achievement in schools where teachers are more certified is a correlation. That is not causation.

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 In order to find out whether there is a causal effect of teachers being more certified, you would need to do a very different type of study than most of the studies that were reviewed or cited by Linda Darling Hammond. She does not discriminate between studies that were more likely to be causal and less likely to be causal. That is a big concern to me. Q Just to be clear about the earlier question, I will ask you to look at Exhibit 3. If you look at Exhibit 3, the invoice that you sent on March 28, 2003, if you look at the entry for February 16th, it talks about or lists a review of plaintiffs' expert reports for purposes of responding directly in draft report. So, it is that use of responding directly that I am trying to figure out. A What I would be referring to is, for instance, on my Page 2 and Page 3, I describe different types of research that I consider to be good, better or best. I was trying to read through the experts' reports and literally make notes for myself on whether I think the study being cited is good, better or best. That literally is what I was doing. Yes, when I said responding directly, I am 	 and I was also trying to do a subtler thing, which is to see whether the expert himself or herself was trying to distinguish for the reader between research of higher or lower quality. Sometimes the best study on something is not of high quality. Sometimes we just don't have good quality evidence, but when you present evidence that you know to be relatively low quality, you ought to introduce it that way. That is part of what you should do for the reader if you are an expert. You should say, I present this evidence, but it is presented with all of the caveats, because it really had the following problems that are not addressed. That is always what I was looking for. I was looking for signs that the reader was being told about the different distinctions in quality among the research. My tallies, I am afraid, did not go very far. What I did not find is evidence of what I considered to be high quality research and I found almost no distinguishing between better and worse research, which I find very troubling, because I think the reader needs to know that. Q Were you looking for that kind of thing when you introduced the centralization research?
 Page 111 referring to my Pages 2 and 3 and I guess it runs over maybe into Page 4, but that is specifically what I mean. Q Based on that procedure, which are the experts whose reports fell below the good, better and best research? A All of them. Q By all of them, you mean A All the ones that I reviewed and even the ones that I saw just summarized, just the synthesis reports. I saw routine and consistent attribution of causation to studies that were clearly correlation studies. Q When you say all the ones you reviewed, you are talking about the Oakes synthesis, textbook, Linda Darling Hammond, Corley A Specifically, right. Q And then it may be also that you saw something in the other reports, but in particular the synthesis report? A Right. Q You said you literally made notes on which experts' research was substandard; is that correct? A I was trying to keep a tally of whether I thought very much high quality research had been cited 	 Page 113 A You mean pointing out that there were problems and saying what we can do? This is the best we can do? Yes. (Lunch recess.) BY MS. LHAMON: Q Before we took the break for lunch, you had just mentioned that you had made some notes about which expert reports had substandard research. Do you have those notes? A I don't. Q What happened to them? A Usually what I do is I make notes in the body of the draft of the report that I am writing and then as I write the report, the notes disappear. So, it is a bit of they are transitory by their nature. Q So that I know, is it your view that literally none of the research relied on in the Oakes synthesis, textbook, Linda Darling Hammond, Corley and Earthman reports is good. I say a minority of it is good. I don't think I observed any that I considered to be better or best. Also, there was no distinguishing among research that I considered to be good and research that was below good.

	Page 114		Page 116
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	In general, in these areas, there is a bulk of the research that will not be of high quality. You really do need to make the distinction between the most research will not be of high quality. Q Which of the research was good quality? A I would have to see the studies. In general, there was not very much of it. You'd have to go through page by page. Q Well, I have them here. Because they are in alphabetical order, I have Corley, Darling and Earthman first. A Do we want to go through on a page-by-page basis? Q That is okay. We have got the time. MS. DAVIS: Are you marking those as exhibits? MS. LHAMON: I don't think we need them as exhibits. You can go through and point it out to me. MS. DAVIS: First, you might want to make sure those are the reports you recognize. I am not questioning Catherine's accuracy. BY MS. LHAMON: Q Then I am handing you the Oakes textbook and Oakes synthesis reports, as well. Take as much time as you need to review them.	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	I wondered what in the liability disclosure statement you were referring to? A I believe what I was focusing on was the plaintiffs Well, let's see. Let me be specific. On Pages 13 through 20, there is a section which is entitled, "The Education Code provides for a state agency involvement in administration of provisions relating to instructional materials, teachers in school facilities." And then subheadings in that section include things like state agencies responsibilities relating to instructional materials, the state agencies responsibility relating to teachers, so these are, I think, specific claims about responsibilities for instructional materials, for teachers, for facilities, et cetera. So, when I say, "See the plaintiffs liability disclosure statement," what I was trying to point out is that there are specific recommendations that are embodied in this liability disclosure. It is not as though the experts were merely saying I have found evidence about facilities and just left it at that. There are actual recommendations, so that is what I meant to highlight.
	Page 115		Page 117
1 2 3 4 5 6 7 8 9 10	 A I don't know if you'd be comfortable with me, for instance, taking them back with me tonight and coming up with a list? Q I am very comfortable with that if you'd like to. A That might be more time efficient. MS. DAVIS: If you want to spend your time. THE WITNESS: Thank you. Otherwise, I think it will take quite long. I only read so fast. BY MS. LHAMON: 	1 2 3 4 5 6 7 8 9 10 11	 Q Okay. Is there any other part of the liability disclosure that you are relying on there when you say see plaintiffs liability disclosure statement on Page 1? A I suppose I am relying on the entirety in general. I don't wish to say I am relying exclusively on that section, Pages 13 to 20, but I was focusing on the specific recommendations that sentence specifically refers to. O Okay. If there are other parts of the

Q I appreciate the warning.

13 Did you review the plaintiffs' liability

14 disclosure statement?

12

- 15 A I believe that it was sent to me and
- 16 therefore that I did review it. I do not recall it at 17 this time particularly.
- 18 Q I have a copy of it if you'd like to look at 19 it. 20

A That would be helpful if we are going to 21 discuss it.

- 22 Q I will show you the copy and we can decide. 23 Your report, if you look at Page 1 of the
- 24 report on the fourth line, you say, "(See plaintiffs
- 25 liability disclosure statement.)"

liability disclosure that you think support that 12 13 statement, I'd like to hear what they are.

14 A I think in general, the entire liability

- disclosure supports the idea that these are the 15
- specific recommendations that the plaintiffs would 16
- like to have implemented. So, throughout the 17
- 18 liability disclosure, there are many arguments or
- descriptions that would support those specific claims, 19
- 20 but it is so basic to the case that is like saying
- 21 everything in the case is related to those claims. 22 Q Well, you haven't read everything in the
- 23 case? 24

A No, but I am just saying that I think they

25 are talking about something that is very much the core

	Page 118		Page 120
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	of the policies that they would like to see implemented. So, in fact, many documents are at least tangentially related to those. Q That is certainly true, obviously because we filed many documents in the case, but I am actually just asking about the ones you read and which parts of the ones you have read support the statement that you have on Page 1 that plaintiffs argue for several specific policies known as input policies. A I think I highlighted a few of the pages that I was focused on. I am not really willing to say everything else in here I did not read at all, because in fact, I think I was influenced by the bulk of the material I read and not just those few pages. These few pages are what I focused on. Q That is what I want is the most truthful answer there. Did you read the entire liability disclosure statement? A No, I am sure I did not. It was not sent to me in this form. An electronic version of it was sent to me. What I did, I searched it for specific things that I knew I was I think I probably read the first 50 pages or so and then I started looking for things that I	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 it. It probably ended up being pro bono work. If it occurred during a day when I was busy or during a week when I was busy, sometimes I forget to make a note of it. Q Sitting here today, you don't have any memory that it took you five hours or half an hour? A I think by its nature, I don't read that fast, so I don't see how I could have done it in half an hour. Apart from having a sense of approximately how many pages I would have read, I don't have any more sense than that. Q Thank you. Did you read the sections in the liability disclosure statement that talk about conditions of schools in California? A Yes. Q Did you see any schools or did you read about any schools in the liability disclosure statement that send children you care about to? MS. DAVIS: Vague and ambiguous. THE WITNESS: I think there are many schools in the United States that have facilities that are lower than we would like. I just am not sure that is policy relevant. BY MS. LHAMON:
1 2	Page 119 thought were clearly related to what I was interested in.	1 2	Page 121 Q Why is that? A Because what policy makers can effect is what

- 3 Q What kinds of things would those be?
- 4 A I searched on textbooks and I searched on
- 5 instruction. I searched on sort of a teacher
- 6 certification, things like that, so I was sure that I
- 7 read sections that were particularly appropriate.
- 8 Q What did you think?
 - MS. DAVIS: Vague and ambiguous.
 - THE WITNESS: I think it is what it is. I
- 11 think it speaks for itself.
- 12 BY MS. LHAMON:

10

- 13 Q Well, you have evaluated the quality of the 14 plaintiffs' expert reports. I wonder what you think 15 of the quality of the liability statement, as well. MS. DAVIS: Vague and ambiguous. 16 THE WITNESS: I think the liability 17 18 disclosure statement is a legal document. I do not think I have the expertise to say it is high quality 19
- or low quality. I am not an expert in that. 20
- 21 BY MS. LHAMON:
- Q Do you know how much time you spent reviewing 22 23 the liability disclosure statement?
- 24 A I really don't recall. It is not in my
- 25 invoice, which means I probably forgot to invoice for

- A Because what policy makers can effect is what 2
- 3 finding schools have for facilities. They can effect
- 4 what incentive schools have to keep their facilities
- 5 good. It may be able to send some direct inputs to
- 6 schools, but what they cannot do is, in general, make
- 7 facilities good. That is something that you actually
- 8 have to be on the ground to do as a manager and very
- 9 little state policies can do that.
- 10 Q What are the kinds of things that state
- policies cannot do related to schools? 11
- 12 MS. DAVIS: Vague and ambiguous and calls for 13 speculation.
- 14 THE WITNESS: State policy can mainly effect
- 15 things that can be written into laws. They can effect
- 16 anything that has to do with the budget that a school
- 17 has. Certainly they can effect the conditions or
- 18 provisions for hiring people or making contracts,
- 19 things like that. Things that you can write into a
- 20 law or into a contract. It cannot be the case that
- 21 people in Sacramento can actually manage a school.
- 22 That is in Southern California. 23
 - So, there are many, many things that people
- 24 in Sacramento cannot do and many things that happen in
- 25 schools on a daily basis are things that cannot be

	Page 122		Page 124
			-
1	written into state policy. You cannot deal with a	1	Q So, anything, any question that was
2	child who is having a particular family problem that	2	examining, you have included in the report and used
3	day if you are a policy maker in Sacramento. It is	3	the data that supports it?
4	impossible.	4	A Yes; that's right.
5	Most things that happen in schools are not	5	Q If you will look again at Exhibit 3, which is
6 7	really or cannot be directly controlled by state	6	the invoice that you sent. You will see that for
7 8	policy. BY MS. LHAMON:	7 8	January and February of 2003, you identified archival
o 9	Q So, when you say that someone in Sacramento	0 9	work using older digests of education statistics at the Mudd Library and Yale University. What is the
10	cannot manage a school in Southern California, are you	10	archival work you did?
11	referring to not being able to deal with a child that	11	A Well, let me show you. There are some
12	is having a bad day?	12	specific graphs in here that I needed to use. Some of
13	A It would include, for instance, not being	13	them are on Page 20, Page 21, where I am using data
14	able to deal with a workman who is supposed to come in	14	not just that is very recent. In other words, 2000
15	and repair something and is not doing a good job	15	data, but I am actually looking at changes from 1970
16	repairing it. Many, many things. Most aspects of	16	to 2000.
17	direct school management cannot be directly controlled	17	Therefore, I needed to get older data from
18	by state policy makers.	18	1970. That data is not available in electronic form
19	Q Because the person needs to be on site to say	19	at the United States Department of Education. It is
20	that the person is not doing a good job or isn't here?	20	the same data that they now have available in
21	A Yes. I think it is as it is in any other	21	electronic form, but if you want to get the data in
22	type of organization, that there are some things that	22	1970, you basically need to use older digests of
23	can be managed from a distance and other things that	23	education statistics.
24	can't. Some things, you can write into a law and you	24	Q Is that data that you shared with us?
25	cannot enforce this if you are not there to manage the	25	A If I haven't, it was an oversight and I'd be
	Page 123		Page 125
1		1	-
$\frac{1}{2}$	situation.	$\frac{1}{2}$	glad to share it with you. It is readily available.
2	situation. Q Is it possible for state policy to set	2	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every
2 3	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a	2 3	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States.
2 3 4	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school?	2 3 4	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government
2 3 4 5	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous.	2 3 4 5	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California.
2 3 4 5 6	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says	2 3 4 5 6	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it,
2 3 4 5 6 7	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the	2 3 4 5 6 7	glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics?
2 3 4 5 6	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a	2 3 4 5 6	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly.
2 3 4 5 6 7 8	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the	2 3 4 5 6 7 8	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly.
2 3 4 5 6 7 8 9	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but	2 3 4 5 6 7 8 9	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970?
2 3 4 5 6 7 8 9 10	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no	2 3 4 5 6 7 8 9 10	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that.
2 3 4 5 6 7 8 9 10 11	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think	2 3 4 5 6 7 8 9 10 11	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared
2 3 4 5 6 7 8 9 10 11 12	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation.	2 3 4 5 6 7 8 9 10 11 12	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the
2 3 4 5 6 7 8 9 10 11 12 13	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds	2 3 4 5 6 7 8 9 10 11 12 13 14 15	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay. Stepping back from the liability disclosure,	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California schools have approximately equal level of resources,
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay. Stepping back from the liability disclosure, did you do any data analysis in preparation for your	$\begin{array}{c} 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\end{array}$	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California schools have approximately equal level of resources, taking each school's student body into account.
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$\begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \end{array}$	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay. Stepping back from the liability disclosure, did you do any data analysis in preparation for your report that you did not include in the report? MS. DAVIS: The data set? MS. LHAMON: Any data analysis. THE WITNESS: I don't think so. I did this	$\begin{array}{c} 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ 22\\ \end{array}$	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California schools have approximately equal level of resources, taking each school's student body into account. A Uh-huh. MS. DAVIS: Where are you, Counsel? MS. LHAMON: I can tell you. Not off of my notes.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay. Stepping back from the liability disclosure, did you do any data analysis in preparation for your report that you did not include in the report? MS. DAVIS: The data set? MS. LHAMON: Any data analysis. THE WITNESS: I don't think so. I did this report at a time when I was very busy, so I don't	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California schools have approximately equal level of resources, taking each school's student body into account. A Uh-huh. MS. DAVIS: Where are you, Counsel? MS. DAVIS: Okay.
$\begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \end{array}$	situation. Q Is it possible for state policy to set minimums? For example, to say that there should be a building for a school? MS. DAVIS: Vague and ambiguous. THE WITNESS: I can write a law that says there has to be a building for a school. What the building consists of is more difficult to write into a law. So, I can say the building must have rooms, but what must a room consist of? I think state policy makers can attempt to define exactly what they think should go on in schools, but ultimately there is no substitute for actually having someone on the grounds who manages the situation. BY MS. LHAMON: Q Okay. Stepping back from the liability disclosure, did you do any data analysis in preparation for your report that you did not include in the report? MS. DAVIS: The data set? MS. LHAMON: Any data analysis. THE WITNESS: I don't think so. I did this	$\begin{array}{c} 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ 22\\ \end{array}$	 glad to share it with you. It is readily available. The Digest of Education Statistics are in any or every government document library in the United States. They are required to be there. There are government document libraries in every major city in California. Q It is just if I were to go looking for it, would I ask for the Digest of Education Statistics? A Exactly. Q Do I need to know the particular year? 1970? A Yes, you would ask for that. Q That is what you used and you compared 1970 A To the year 2000. Q On Page 1 of your report, you write that the current system is one in which the state monitors school performance and ensures that all California schools have approximately equal level of resources, taking each school's student body into account. A Uh-huh. MS. DAVIS: Where are you, Counsel? MS. LHAMON: I can tell you. Not off of my notes.

- MS. LHAMON: Thank you. Q What do you mean? What is your definition of

1resource as used in that sentence?1QI don't want you to speculate. I just want2ADollars per student.2to know if you have a view on the following king3QThen two sentences later, are you using the3things: For example, do you have a view about4same definition when you use the term resources?4things: For example, do you have a view about5AResources to me means budget and it could5A6mean some in-kind resources.7QIn your view, is it essential for a school7QIn your view, is it essential for a school1	Page 128
 3 Q Then two sentences later, are you using the 4 same definition when you use the term resources? 5 A Resources to me means budget and it could 6 mean some in-kind resources. 7 Q What is that? 3 things: For example, do you have a view about 4 it is essential for a school to have teachers? 5 A Yes, it is essential for a school to have 6 teachers. 7 Q In your view, is it essential for a school 	
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6mean some in-kind resources.6teachers.7QWhat is that?7QIn your view, is it essential for a school	
7 Q What is that? 7 Q In your view, is it essential for a school	
	С
8 A Land, things like that, that a district might 8 have buildings?	
9 have. 9 A It is essential for most schools to have	
10 Q So, it is fair to say that throughout the 10 buildings, but there are examples of unusual so	
11 report, when you use the term "resources," you are 11 that, for some reason, are able to operate without	
12 talking about dollars or budget? 12 buildings. I would suggest, however, most sch	ols
13 A I am talking about the financial and other 13 should have buildings.	
14 in-kind resources that they can translate into actual 14 Q In your view, is it essential for schools t	
15 inputs that the students will experience. 15 have instructional material for students to use?	
16 Q Taking the first sentence that refers to 16 MS. DAVIS: Vague and ambiguous.	
17 resources, the one that begins, "The current 17 THE WITNESS: I think actually this is a	
18 system" 18 changing thing. Instructional materials are ver	
19 What do you mean when you say, "Taking each 19 fluid these days. It used to be the case that	
20 school's student body into account"? 20 instructional materials meant flip charts and ch	
21 A Well, the current system of school financing 21 and workbooks and textbooks. There is a muc	
22 in California does two things. Let me first say that 22 variety of instructional materials now, electron	
23 there are a certain number of districts that are 23 on-line. Therefore, I think you need to have w	atever
24 effectively not quite in the system, because they are 24 it is that is going to allow you to instruct your	
25 hold harmless, but that is a small amount. 25 students, but that may not be just the traditional	

form of instructional materials. 1 For the districts that are in a school 1 2 finance system, the state first has a system in which 2 BY MS. LHAMON: 3 3 it basically provides an equal per-pupil basic amount Q What other kind might it be? 4 for each student. Then it provides adjustments or 4 A Well, the question is whether your students 5 compensatory spending in the school's budget for 5 have the sources of information that they need to learn, say math or reading. I have been in unusual 6 students who have certain disabilities, limited 6 7 English proficiency, who are socioeconomically 7 schools in which children were reading textbooks 8 disadvantaged. 8 on-line and they did not, in fact, have a physical book. Although that is still unusual, I wouldn't want 9 So, that is what I mean by taking each 9 10 school's student body into account. It is not exactly to say that I know that that is worse or better than 10 the same level per-pupil budget for each school. It having a physical book. It is not obvious. I don't 11 11 then adds on some compensatory spending. think we know that yet based on any evidence. 12 12 13 Q Do you have a view of what is required to 13 Q But, some kind of instructional material; 14 operate a school? 14 computer, book, some other mechanism you think is 15 MS. DAVIS: Vague and ambiguous and calls for 15 essential for a school, in your view? MS. DAVIS: Vague and ambiguous. 16 speculation. 16 THE WITNESS: Teachers certainly need to have 17 THE WITNESS: Yes, I think that is such a 17 general question, that it is difficult to answer. I 18 18 some type of material they are going to work with. I think one can talk specifically about whether a school 19 actually think there are a wide variety of ways to 19 has a budget that appears to be adequate for schools teach. I don't think it is straightforward. We know 20 20 21 in its state. The area costs that it deals with. I 21 from research on developing countries that 22 think that is something that is relatively concrete 22 instructional materials are not consistently helpful. 23 and you can talk about. Beyond that, I think it is 23 Sometimes it is better to have a more knowledgeable 24 kind of speculative. teacher. I think instructional materials, where you 24 25 BY MS. LHAMON: 25 probably would have to know the circumstance.

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1	BY MS. LHAMON:	1	THE WITNESS: Usually we think that
2	Q This is a management principle you have been	2	centralization is most helpful when there is some
3	talking about, right?	3	reason why you would want to have a lot of
4	A I would say that you do need to consider your	4	standardization across school districts. So, an
5	circumstances and what would be the best ways to use	5	example would be that you would not want, if you
6	instructional material. I do not believe it is going	6	consider tests to be an input. The test itself is
7	to be the same in every school.	7	probably an input. The performance is an output.
8	Q That is very helpful. Thank you.	8	You wouldn't want the state to allow each
9	What we have just been talking about is some	9	school district to choose its own tests and send all
10	kind of instructional material, some teachers, some	10	of these variety of tests up to the state for
11	buildings. Do you view these ingredients as inputs?	11	accountability purposes. There is clearly a public
12	Is that a fair definition?	12	interest in having a centralized decision about what
13	A Yes, I do view those as inputs.	13	tests should be given to students.
14	Q Do you include anything else in your	14	That is one sort of obvious input where you
15	definition of inputs?	15	could manage a state having a public interest in some
16	A Almost anything on which you would spend your	16	type of control. Anything where you would expect
17	school budget could be considered an input. It could	17	children to normally cross school district lines a
18	be paint, having clean floors, having a janitorial	18	lot.
19	service. It is really anything on which you spend	19	You might also say that the state had some
20	your resources, assuming that the resources have not	20	interest in inputs. In this case, the main thing that
21	been embezzled and spent on something that goes	21	I would think of is in the State of California,
22	outside the school. Even something like a playing	22	children with very severe disabilities who usually do
23	field could be inputs into the learning process.	23	not attend schools in their own district, but attend a
24	Q That is because you think of it as a function	24	special disability district in the State of
25	so that there is inputs toward the output?	25	California. The state clearly has an interest in
	Page 131		Page 133
1	A That's right.	1	understanding the inputs that are going to those
2	Q Do you know whether California manages any	2	children, because they are not really being managed
3	inputs now?	3	and probably it is not appropriate for them to be.
4	A California had some	4	These are the two clear areas, but I do not,
5	I'd say it provides guidance for its schools.	5	in general, think that it makes a tremendous
6	It does the textbook buying for the state. In that	6	difference for states to manage inputs centrally.
7	sense, it is managing its inputs more than other	7	BY MS. LHAMON:
8	schools in other states do. It also has a variety of	8	Q Just going back to the first example. I
9	rules about teacher certification that you could say	9	believe you said you would not want states to allow
10	are managing its teacher-related inputs in some sense,	10	each school district to choose its own tests?
11	but it does not do a lot of hands-on management of the	11	A Right.
12	inputs in its schools.	12	Q Can you tell me why one would not want that?
13	For instance, janitors in the State of	13	A Because the state has an interest in
14	California are hired by districts. They are not hired	14	monitoring how well districts are using its money. In
15	by the State of California and the State of California	15	particular, in a state like California where the state
16	does not actually manage janitors in school districts	16	has a large role in school finance, perhaps really has
17	in the state.	17	almost the whole role in school finance, I believe
18	Q Do you think that is a wise policy?	18	that the state has a responsibility to monitor what
19	MS. DAVIS: Vague and ambiguous.	19	happens with its money, the outcomes that occur when
20	THE WITNESS: I do not believe that	20	it gives a district money.
21	centralized management of many inputs is a factor.	21	It is very difficult for the state to tell
22	BY MS. LHAMON:	22	whether a school district is performing if the school
23	Q Are there any inputs for which centralized	23	district decides to judge itself by a scale that is
	monogoment is on attactive prestical	24	different than all other school districts. It is just
24 25	management is an effective practice? MS. DAVIS: Vague and ambiguous.	25	a matter of having a common scale.

- Q Are there any inputs for which centralized management is an effective practice? 24
- MS. DAVIS: Vague and ambiguous. 25

34 (Pages 130 to 133)

25 a matter of having a common scale.

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\end{array} $	Page 134 Q You gave me some examples of inputs that California now manages. Do you know if there are any other inputs that California now manages? A You see, I don't think manage or not manage is really a very good way to think about this answer to this question. Most states provide guidance and constraints on inputs. Very few states actually manage inputs, with the exception of the State of Hawaii, which runs all of their own schools. To the extent that the constraints that a state puts on its inputs cause the state to actually be in charge of some small amount of the management of the inputs, I suppose all states manage inputs to a certain degree. That is not the same thing as saying they actually are principally in charge and manage. I don't think California is in charge of any of the management of the district's inputs. The districts do control how their money is used largely. Q Let me just show you on Page 5 of your report, which we have marked as Exhibit 2, you wrote in Section 3.4, "Showing that inputs have a causal relationship with performance is not sufficient to	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\end{array} $	Page 136 do not think it practices a high degree of management of most state inputs. It does practice a much higher degree of textbook management than some other states. It does not actually oversee what happens with textbooks once it gets into the classroom. It does not actually manage the textbooks once they are in the school. However, it is selecting textbooks for the state. This is a higher degree of management than being completely hands off. It is a spectrum and I think that there is some degree of management of textbooks. Having standards about teacher certification, some degree of management of teacher hiring and having to give waivers to schools that want to manage certified teachers is some degree of management. It is not very far along the scale of one on management of a policy. Q I really appreciate that distinction. Thank you. Have you made any inquiry to find out which other categories of inputs in which the state has some degree of management in California and which are not? A I know what is in the California laws about
		_	
24	justify state determination of input policies. This	24	various inputs, like textbooks and teacher
25	is because a state can easily manage inputs less well	25	certification and whether schools can hire emergency
1	Page 135	1	Page 137
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	 than schools." My question has been just whether you know if there are any inputs that the state manages, as you have used the term in that sentence? MS. DAVIS: Other than what she testified? BY MS. LHAMON: Q Well, I think we have now had an exchange and I am not sure what you testified to. I just want to be clear. A I am afraid I am just losing the strain of this question. I am not clear on what you are trying to ask about these specific sentences. Q Thank you. What I am referring to is the second sentence. It says, "Because the state can easily manage inputs less well than schools." I take that point we will ask you about it later. I am not interested right now about substance. I am wondering if there are any categories of inputs that the State of California does now manage as you have used the term "manage" in that sentence. A Well, I think, as I tried to say before, I 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\22\end{array} $	 certified teachers and things like that. I suppose that is the research one would do with states managing inputs. Q You testified that you know the laws for teacher certification, for emergency credentialing or selecting textbooks for the state. Do you know what the laws are in California for any of the other inputs? A I know some of the things about facilities. I have reviewed California's laws for fulfilling the provisions of an accountability system. I have reviewed the laws in California about professional development hours, in-service teaching hours and things like that. In some cases California does not have a law on something, so I reviewed its not having a law on certain things. You know, I would not consider myself to be an expert in the intimate details of how some of these laws are implemented in California. Someone who literally knows every word of the legislation and knows exactly how it has been interpreted by the State
$\begin{array}{c} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \end{array}$	 than schools." My question has been just whether you know if there are any inputs that the state manages, as you have used the term in that sentence? MS. DAVIS: Other than what she testified? BY MS. LHAMON: Q Well, I think we have now had an exchange and I am not sure what you testified to. I just want to be clear. A I am afraid I am just losing the strain of this question. I am not clear on what you are trying to ask about these specific sentences. Q Thank you. What I am referring to is the second sentence. It says, "Because the state can easily manage inputs less well than schools." I take that point we will ask you about it later. I am not interested right now about substance. I am wondering if there are any categories of inputs that the State of California does now manage as you have used the term "manage" in that sentence. 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	certified teachers and things like that. I suppose that is the research one would do with states managing inputs. Q You testified that you know the laws for teacher certification, for emergency credentialing or selecting textbooks for the state. Do you know what the laws are in California for any of the other inputs? A I know some of the things about facilities. I have reviewed California's laws for fulfilling the provisions of an accountability system. I have reviewed the laws in California about professional development hours, in-service teaching hours and things like that. In some cases California does not have a law on something, so I reviewed its not having a law on certain things. You know, I would not consider myself to be an expert in the intimate details of how some of these laws are implemented in California. Someone who literally knows every word of the legislation and

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\\end{array} $	 Q For what purpose did you review the laws on the inputs you just described to me; the accountability? A Really because when I was trying to compute statistics about how centralized control was in different states, the only way to do that is to review the laws in different states and figure out what the state is attempting to control. Q So, it was for purposes of writing a report in this case? A Yes. Q Is it your understanding that the state does not now set detailed requirements regarding educational inputs? MS. DAVIS: Vague and ambiguous. THE WITNESS: The state has a lot of control over the total amount of inputs available to each district and each school in the State of California. So, in that sense, California has more centralization than any other state in the United States except for Hawaii. So, yes, that is ultimate control of the total basket of spending for each district. Right 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\\end{array} $	clear that way. For instance, on textbooks, if the state were actually to monitor and ensure that certain textbooks were in certain classrooms or in the hands of certain children, the state would have to implement a centralized system of monitoring which child has which textbook and it would presumably have to have some type of inspector to ensure that that monitoring was done and that state would also have to probably buy textbooks for each school based on exactly which students it had in each class or would have to, at a minimum, give the school exactly that budget and tell them to buy a certain number of textbooks. That would be a substantial increase in the control that the state has over textbooks. I could give you examples with other specifics. Q I'd love that, but let's stay with that one for a moment. Tell me why each of the components you just described would be required if the state were to substantially centralize control over textbook use. A I think the correct answer to this requires a
18	district and each school in the State of California.	18	Q I'd love that, but let's stay with that one
18	district and each school in the State of California.	18	specifics. Q I'd love that, but let's stay with that one
21 22	Hawaii. So, yes, that is ultimate control of the	21 22	described would be required if the state were to substantially centralize control over textbook use.
25	your district be spent in, say maintaining your	25	California schools have a relatively equal

amount of money to spend on a per-pupil basis compared bathrooms and one and a half percent be spent on 1 1 to most schools in the United States. 2 maintaining your playground. It does not break down 2 like that. It doesn't have something implicit that 3 The plaintiffs' experts in their reports have 3 4 4 because you can't get state matching money for noticed that the same amount of money does not always 5 5 translate into what appears to be the same materials, facilities improvement if you don't spend enough local say in the classroom, the same textbooks. If you are 6 money. 6 7 So, there are some incentives there to spend 7 going to have the same amount of money translate into 8 local money on things, but there are not mandates 8 different textbooks and you want to prevent that from 9 about --9 happening, you want to make the same amount of money 10 always turn into exactly the same set of textbooks or 10 Well, for instance, there is a mandate that you lose your use of state funds to buy textbooks. In availability of textbooks, you will have to actually 11 11 manage what happens to each dollar that is designed to 12 general, the district would have to spend some of its 12 13 own money, too. 13 be used for the textbooks. 14 14 You cannot merely give the dollars and then BY MS. LHAMON: 15 15 not provide some centralized control over the textbook Q Thank you. purchasing, the textbook allocation, the textbook 16 Turning back to Page 1 of the expert report 16 we have marked as Exhibit 2. Let me just -delivery and the textbook maintenance. There is no 17 17 18 If I say your expert report, will you know 18 way to get from one to the other without a lot of that I am referring to Exhibit 2? 19 centralized control of those things. 19 20 20 O Which of the plaintiffs' experts have you A Yes. said noticed that the same amount of money doesn't 21 Q What does substantially centralized control 21 22 mean as used on Page 1 of your expert report? It is 22 necessarily translate into, for example, textbooks? I 23 the bottom line of the second full paragraph. The 23 take it when you say "noticed," you mean noted in an paragraph right below the bullet points. 24 expert report? 24 25 A Let me give you an example, because I can be 25 A Yes. For instance, in Jeannie Oakes' expert

36 (Pages 138 to 141)
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1 uge	17

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	report, she comments on some school districts or schools, anecdotal comments, where she says that in such and such a school, the children in this classroom do not have textbooks to take home. That is because we know that the school that she is talking about has as big or a bigger per-pupil budget than many schools have in the State of California. We know that the dollars are not translating. Yes, she is describing a situation in which dollars are being used differently. Q You gave me an example in defining substantial control. Then you said you can give me other examples. I'd love to hear the other examples, if you don't mind. A On facilities, if the state wanted to, I think, do what the plaintiffs' experts would like them to do to make all facilities very similar in the State of California, the state would have to probably hire contractors on behalf of districts. The state would have to monitor contractors. The state would have to monitor maintenance staff. The state would probably have to have an inspector right there that went around and saw whether the contractors were doing what they were supposed to do. That would all imply quite a centralization in	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 think it is the nature of all principals to hire exactly the same set of teachers that they are not forced to. Q When you say the same set of teachers, you mean the same qualifications? A The same distribution of qualifications. Q Turning to the other extreme, also on Page 1 and then in other places in the report, you use the phrase "local control." A In California, the local districts do not have very much control of their finances. So, in a normal state, we would say local control would entail both local management of how the budget is spent and it would entail local control of how big the budget is. In California, it really only is about the former set of issues. Local control is making decisions about how to spend the budget that a school has, in part, whether it asks for bonds to build facilities, how to do hiring, how to manage school staff. All of those things come under the heading of local control," in your expert report, you are referring to the definition of local control that is specific to
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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\end{array} $	the control over facilities. Also, some states in the remote past not now have said that all districts have to build exactly the same buildings. There is an architectural plan and that must be built, so you couldn't even go that far. I don't think that is probably envisioned. Q Do you have anything else in mind when you talk about substantially centralized control? A Centralizing control over teacher certification or who is teaching in schools would also entail much more centralized control. The state could do hiring for the entire state. It could do allocation of teachers to individual schools. That would certainly be a remedy that appears to be one of the remedies that is implicitly asked for here. If you want to have teachers evenly distributed across the state, the state probably would have to have some centralized role in allocating teachers to other schools.	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\end{array} $	California, then? A I think it probably depends. When I am talking about California specifically, yes, I am using that definition of local control. Later in the report when I am talking about rating different states on their degree of centralization, I do take into the fact that different states have different degrees of state control over school finances. So, there I would also take into account how much centralized finance is in the state. Q Is it your view that local control and local funding really cannot be separated? A Local control probably works better when there is some degree of local funding. I do not think local funding of 100 percent local funding is necessary for local control to work well. You can certainly have a large degree of local control without having local funding. It is probably a spectrum as opposed to a yes

20 Q Is that centralized role, as you understand it, actually hiring the teachers or is there some 21 22 other component? 23 A If the state did not actually hire the

- 24 teachers or distribute teachers, they would not be the
- same in every school in the state, because I don't 25
- It is probably a spectrum as opposed to a yes and no thing. If you have no local funding, you can 20
- 21 still have quite a degree of local control. You still
- 22 control how your budget is used and how you decide to
- 23 hire teachers, given how much you have to spend on
- 24 teacher salaries and/or how much you spend on teacher
- 25 salaries versus something else; buildings,

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1	instructional materials.	1	described in a very crude sense as being very similar
2	If you have local control of how you spend	2	often create some different effects. States have not
3	your inputs and you have some degree of control over	3	all been equally good at working out school financing,
4	the size of your budget, the state would have some	4	in part because people do not look carefully enough at
5	control and the district has some control, probably a	5	the formulas.
6	greater degree of local control and at the extreme, a	6	Q You said that school finance is a very
7	district has almost complete control over how much it	7	complex view that I agree with. Were you referring to
8	has to spend and how it chooses to allocate its	8	the complexity solely with respect to its relationship
9	spending. But, it is a spectrum. It is not a yes or	9	to local control or just school finance is very
10	no thing.	10	complex?
11	Local control probably works better when it	11	A Let me put it this way: I think school
12	is tied, at least somewhat, to local financing.	12	finance is complex for a layperson for two reasons.
13	Q Why is that?	13	One is that understanding it actually requires a fair
14	A Because I think that if voters think that it	14	amount of economic knowledge. That doesn't make it
15	is their dollar that is being spent at the school,	15	different than other tax things. Understanding income
16	they pay more attention and that is why you can still	16	taxes also requires that.
17	achieve quite a lot of good local control even if it	17	The second thing is that it also requires
18	is only a small share of the total dollars. If they	18	some knowledge about the institutions of school
19	are the marginal dollars, that makes a big difference	19	districts and it is relatively rare in the United
20	to people.	20	States to find people who have both types of
21	Q You have researched this question quite a	21	knowledge, so therefore, it is complex.
22	lot, haven't you?	22	Q Just to stay with the relationship between
23	MS. DAVIS: What question?	23	school finance and local control, I believe you
24	BY MS. LHAMON:	24	testified that in preparing for the paper that you
25	Q The question of the relationship between	25	wrote called Not All School Finance Equalizations Are

1 local control and local funding.

A Yes.

2

3 Q How long have you held the view that there is 4 a spectrum on the local control and local funding 5 matter?

A I think as I have done more research on
school finance and understood the range of school
finance formulas that are available, I have developed

9 a view that it is very important to have some local

10 control of funding, but that it really matters what

11 the state's finance formula is.

12 I don't think there is a simple yes or no

13 answer for you. I think that what is important is to

14 look at the actual formula and decide whether local

people have the incentive to monitor how local inputsare being used. That can occur in systems that have a

state role, but it depends on what the role the stateplays is.

19 School finance is not simple. It is

- 20 something that you actually need to read the formula
- 21 and understand what kind of funding the state is
- 22 giving the districts by formula. I think I developed
- 23 that view because in doing my research, as a result, I
- recognized that there are a wide variety of incentivesgiven by the formulas and two formulas that might be

understanding what you just said?

25 A There are a few. I think there are -- it is

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- 1 Created Equal, that you modified your view of the
- 2 relationship between local control and state control
- 3 of school finance; is that correct?
- 4 A I'd say I made it more sophisticated. Before
- 5 I wrote that paper, I am not sure that there was any

6 research by any researcher literally in the United

- 7 States and I don't just mean economists, that actually
- 8 tried to look at the impact of various types of school
- 9 finance formulas. So, I think before I wrote the
- 10 paper, I had a view that was about as new as anyone
- 11 had in the United States.

24

12 After I wrote the paper, I understood much

- 13 better that two states that are both playing an equal
- 14 role in some gross sense, both of them control 60
- 15 percent of the state's spending, can actually be doing
- 16 very different things with their local districts and
- 17 can be giving them very different incentives.
- 18 I think this is a view that is still there
- 19 are very few people that are expert in school finance
- 20 to understand what I just said, because I just think
- 21 you need to do so much work understanding what school
- finance depends on in the United States.Q Who are the other people expert enough in

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1	a view that is known to people who are school finance	1	many states where the state plays a strong role in
2	experts. I think if you would talk to someone like	2	school finance, but does not control the marginal
3	William Evans at the University of Maryland, he would	3	dollars of school spending, it is the administrator
4	say that he was very influenced by my paper, because	4	who handles, manages school inputs well that will not
5	he had not bothered to look at the school finance	5	only be rewarded by having parents who are happy, but
6	papers before. Now when he trains students, he does	6	he is likely to be rewarded by people deciding that
7	make them do that.	7	they want to move into the school district.
8	I think this has been a very influential	8	Property values rise in the district and that
9	paper, influencing a lot of people.	9	usually makes things easier for him in terms of
10	Q Are there any other people you can think of?	10	getting bonds enacted, possibly having a bigger budget
11	A I suppose there are many people. Richard	11	for some special projects that he wants to have in
12	Mernane who is at the Harvard School of Education,	12	areas where property values are rising. There is a
13	Sandra Black at UCLA there aren't that many people	13	link between property values and school spending. It
14	who teach school finance in the United States. Edward	14	is easier to get things done, so there is a reward
15	Gramlick, who is at the University of Michigan.	15	there.
16	Q Since I am not on that list and I appreciate	16	In an extreme example, there would be no
17	that is probably just because you don't know me very	17	state role in school finance. That doesn't occur
18	well, can you walk me through it again, the analysis	18	anyplace in the United States. To the extent there
19	that you have come to to understand why, even in the	19	are states that are closer to that end of the
20	absence of local control of school finance, one can	20	spectrum, the school administrator would probably get
21	have meaningful local control?	21	the biggest reward for managing his school inputs
22	A Well, I think this is a slightly different	22	well.
23	question, but I will try to answer that specific	23	The difference, though, between the state
24	question.	24	that allows a district to keep its marginal dollars
25	Q Thank you.	25	and a state that allows the district to keep all of
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1	A There are a variety of ways in which a school	1	their dollars is actually quite small, however. That
2	can be rewarded for having or for managing its inputs	2	is why I am saying that a state can play quite a big
2	wall One of them is that it just makes its local	2	role while still allowing there to be a lot of or

21

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- 3 well. One of them is that it just makes its local
- 4 parents happy. So, if you manage your school budget
- 5 well, parents will probably be happier because they
- 6 will see that the resources will appear to be greater,
- 7 because they will have been spent efficiently.
- 8 Parents will be pleased with the performance of the 9 school district.
- 10 It is always nicer, if you are a school
- 11 administrator, to have a lot of parents around you who
- 12 like your schools, like your district, are not
- 13 complaining and to have parents telling people in
- 14 other school districts to come and live in my school
- 15 district if you care a lot about education, because
- 16 they do things well here. That is a nice set of
- 17 circumstances for an administrator.18 It does matter whether you have local control
- 19 of inputs, because when you have local control of
- 20 inputs as an administrator, you do have a potential to
- 21 make local parents happy. You have the potential to
- 22 do other things better or worse and try to make your
- 23 parents happy. This is a very strong set of
- 24 incentives, actually.
- 25 Administrations do care about parents. In

- 3 role while still allowing there to be a lot of or
- 4 quite a lot of local control. It really depends on
- 5 what the state does when a district manages its inputs6 well.
- 7 Is there any implied punishment for managing8 inputs well?
 - In some school finance systems, there is. In
- 10 some, there is not. An example, there are some states
- 11 in which a district that manages its school inputs
- 12 well will be penalized by a school finance formula
- 13 because the state will say you are doing a good job
- 14 with less money than other districts; therefore, they
- 15 would take money away from the district and apply a
- 16 sanction for doing a good job.17 The state's role is that vo
 - The state's role is that you need to understand exactly what a state is doing and not just
- understand exactly what a state is doing and not justsome general idea of whether the state is involved ornot.
 - Q Where in that spectrum does California fall?
- 22 A California has almost complete centralization
- 23 of the total level of inputs, as I say, with the
- 24 exception of the set of districts that are in hold
- 25 harmless category. But, California does not penalize

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 districts that are doing particularly well with their inputs. It does not attempt to take money away from them, particularly. Q In your view, does California now have a high degree of local control? A Relative to other states? Q Yes. A No, I would say it has a it is in the bottom half for local control, certainly. Exactly where it is in that bottom half, I think depends on which aspect you would look at. But, no, it does not have a high degree of local control. It might even be in the bottom third among the states. Q I am not holding you to exactly where it is. What makes you say it might even be in the bottom third and the bottom find? A Because it has no local school finance really to speak of. It certainly has relatively more control of its textbooks than any other state except for the State of Texas. It has a relatively high degree of mandates about teacher certification compared to other states. So, all of those things together would, I think, put it in sort of the bottom third. Q California's relationship to accountability or to testing doesn't factor into that analysis? 	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	 state does this. I think what you meant is when a district manages its inputs. Q I did. Thank you. Is California in that category of states? A Well, in California, a district that has its property values go up does not see a change in its operations in management budget, because that is totally state controlled. Again, with the exception of the districts that are out of this school finance system, effectively. However, local bonds are still passed for facilities. They are still passed locally in California districts and there would be some reward for having property values rise. People feel better about voting for bonds when their property values have gone up, because people like their school district. So, there are some implied rewards there. Q Have you done any research as to whether that theory obtains in California? A Where the theory obtains? MS. DAVIS: Vague and ambiguous. THE WITNESS: I am not sure. BY MS. LHAMON: Q What I understand you to say is that in California, except for the hold harmless districts,
1 2 3 4 5 6 7	Page 155 A It does, but there isn't very much variation because of the "No Child Left Behind Act." All states are moving into the same area in accountability. I suppose there are states that might, in the future, exceed the provision of No Child Left Behind by a wide margin and get way ahead of the other states, but that is really not the case right now.	1 2 3 4 5 6 7	Page 157 when property values go up, it doesn't matter a lot, except that bonds still pass locally for facilities and it may be that it would be easier to get a bond passed in a district with higher property values. A In a district that is improving its property values, yes. I think there is a difference between those two things, because you could have high property

- 8 All of the states are -- they may be at
- 9 slightly different places, but they are all moving in
- a pretty similar alignment in terms of how much 10
- accountability testing sort of stuff they do. 11
- California is ahead of some states and it is also 12
- 13 behind some states. I wouldn't say there is a big 14 difference.
- 15
- Q Okay.
- Several questions ago, when you were 16
- answering, you were describing to me a variety of ways 17
- 18 the state can be rewarded for managing its school
- budget well. The second way that I wrote down was 19
- 20 that in many states, where the state has a strong
- role, but does not control the marginal dollar, the 21
- 22 administrator is rewarded if the property values rise.
- 23 For instance, it is easier to get a bond passed.
- 24 Is that, in substance, what you testified?
- 25 A Yes, although you said the state. When a

- 8 values on average and not have them improving.
- 9 Property values can be high for two reasons.
- 10 One is that your district is doing a really wonderful
- job with management and people want to move into the 11
- district. Another could be people that own a lot of 12
- 13 big homes. Those are quite different things.
- 14 What we try to isolate here, if the property 15 values improve because it is good management, is it 16 easier to pass a bond?
- The evidence appears to be yes, this is the 17
- 18 case. I think there is a lot of evidence from other
- 19 states that that is the case. Just having high
- property values, if they are not improving, does not 20
- 21 make it necessarily that easy to get a bond passed.
- 22 It is really the improvement that relates to your
- 23 schools. I am referring to evidence by Professor Jon 24
- Sonstelie. 25
 - Q Which Jon Sonstelie paper are you talking

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1	about?	1	local schools.
2	A I would have to look at that specific paper	2	Part of the idea of capitalization is also
3	title.	3	that if the reason that house values are going up is
4	Q But, he has written about his theory?	4	that local schools have managed very well, then it
5	A Yes.	5	will be easier for the local school district to get a
6	Q Then you said there is a lot of other	6	bigger budget in an area where the state does not
7	evidence from other states. What are you referring to	7	completely control school finance. That is because
8	there?	8	the reason that people like their school is that it
9	A Well, my own paper does a lot of or looks a	9	had good management and they are willing to give those
10	lot at this theory, evidence for this theory.	10	managers more money.
11	Q Let me interrupt you for a minute. I didn't	11	If you are thinking of people doing a poor
12	mean to denigrate it when I called it a theory. I	12	management, you are going to give them less budget
13	just wanted to know what the support was.	13	than if you thought they were doing a good job with
14	A There are some papers by a man named William	14	the money you already gave them. The two things are
15	Fischel at Dartmouth, but, in fact, this theory is	15	related to one another.
16	well known and has been receiving support since the	16	Q Thank you very much.
17	1950s, at least. There is work from the 1970s in	17	How does the idea of capitalization work in
18	California about this phenomena.	18	California?
19	Q You say "my own paper."	19	A In California, there is still capitalization
20	A Not All Finance is Created Equal. This	20	occurring, but it has fewer implications for school
21	theory is more generally known as capitalization and	21	finance than it has in some other states. In
22	there is a lot of empirical work on capitalization,	22	California, if the school district or school is well
23	hundreds of papers.	23	liked, it will still attract people to live in its
24	Q Don't list them all for me.	24	school attendance area. House prices can rise if
25	A I won't.	25	there is a lot of demand for a particular school or a
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Q But, actually, can you explain that to me,

1

lot of demand for a particular school district.

However, in California, because most property 2 because I had a different understanding of 2 3 centralization or capitalization. So, I am not on the 3 tax revenue is redistributed by the State or allocated 4 same page now. 4 by the State, it does not have implication for school 5 A Capitalization is the idea that property 5 maintenance operations budget. It can only have 6 values rise to incorporate local people's implications through their bonds, the ability of a 6 understanding of how valuable their schools are or it 7 7 district to raise bonds. 8 could be something else. There is other local public 8 O That is what the Jon Sonstelie research has 9 goods, but in this case, their school. 9 talked about? 10 Therefore, the property values in the 10 A There is actually a lot of research on district reflect two things, one of which is just how capitalization in California that reaches back to a 11 11 much the physical house is worth. The physical house paper by Katz & Rosen in the 1970s and there are a 12 12 13 is worth a certain amount of money just like a car. 13 series of papers. 14 The other is to reflect how much local schools and 14 Q I may be a couple steps behind you still, so other local public goods are worth and that second 15 please bear with me. 15 part is called capitalization. It might be actually 16 16 I understood you to say that your paper, not good to think about a mobile home or car for a moment. all finance equalizations are created equal, changed 17 17 18 If you could somehow take your house and 18 the landscape and that paper, I understand, has been 19 drive it into another school district, part of your published since the Katz & Rosen paper in the 1970s? 19 house's value would be the same regardless of which 20 20 A Yes. 21 school district vou drove it into, because it has nice 21 Q Is there research that built on the insights 22 bathrooms or a nice kitchen or something like that. 22 in your paper all school finance equalizations are not 23 The part that would change depending on which school 23 created equal that goes to the effective 24 district you drove your house into is called capitalization in California? 24 25 capitalization. It is capitalizing the value of your 25 A I don't think so, because there isn't a

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1	policy question right now that is out there	1	academic performance index. The state has set a
2	specifically about this. Usually people would do	2	standard for the academic performance index.
3	research specifically on California if California was	3	I think it is called the provisional target
4	doing something around changing a policy around this.	4	of eight hundred and has a potential range of between
5	Because California has not been changing any of its	5	zero and one thousand. The state is trying to get
6	policies recently, I think people will take away from	6	every school to an eight hundred at least on this
7	my paper a general understanding of what happens that	7	index and the state has various methods of intervening
8	they might apply to other states. They might study	8	in schools that fall considerably below the standard
9	California particularly if California is considering a	9	target for improvement in this academic performanñe
10	policy change in this area.	10	index.
11	MS. LHAMON: It is about two o'clock. Do you	11	For instance, if a school district does badly
12	want to take a break or keep going?	12	on the academic performance index and also not moving
13	(Discussion off the record.)	13	toward the target at a rate of five percent of a gap
14	BY MS. LHAMON:	14	between the state's academic performance and the
15	Q Does local control guarantee that every	15	target, then the state can do, I think, what is called
16	student gets inputs that he or she needs the most?	16	intermediate intervention where basically the district
17	MS. DAVIS: Vague and ambiguous and calls for	17	is encouraged to have an external evaluation done to
18	speculation.	18	come up with an action plan to apply to the state for
19	THE WITNESS: Local control is like local	19	funds to implement the action plan and so forth.
20	management. It guarantees that the local manager	20	That is the main way in which the State of
21	can let me back up.	21	California is monitoring performance. It is using a
22	Let's take two local managers, both have the	22	variety of tests and graduation rates and things like
23	same level of inputs. Let's say that one of the local	23	that to monitor performance.
24	managers is making sure that every child has the	24	Q In your view, does that system of state
25	inputs that he or she needs, so we know the total	25	monitoring adequately take into account student
		1	

1 outcomes? 1 level of the inputs are adequate. Now, we are 2 A It is as good a system as the top, say 10 or 2 interested in whether the total level of inputs will 3 3 15 percent of states right now, so it is among the translate into good inputs for every student in every 4 school. 4 best systems in the United States. It is not a system 5 5 Local control guarantees that the manager that we would probably think should be unchanged in 25 years. Twenty-five years or 20 years is a long time 6 should be able to do an effective job and efficient 6 7 job with his inputs. Whether or not he does an 7 and you could add additional measures of outcome to 8 efficient job with his or her inputs is really going 8 this system. You could end up with more holistic and 9 to be a function of the incentives that he is given. 9 more comprehensive measures of outcomes. 10 10 For a state that has been attempting to Those incentives come from two places. One is from the state, which is monitoring performance. implement accountability as California has, it has 11 11 12 actually moved quite rapidly. I wouldn't even Now, in every state, some of the incentives 12 13 come from local parents who are monitoring his 13 advocate that a state try to do 20 years of work in 14 one year. I don't even think that school districts 14 performance in a different way, because they go into the schools and see what kind of job he is doing. 15 could take in all the schools that state could monitor 15 16 Local control guarantees he has the ability to do that 16 in a prolonged run. 17 if he is a good manager. 17 Just to give an example, this state probably 18 BY MS. LHAMON: 18 does have an interest in the long run in knowing 19 Q How does the State of California now monitor 19 something about the long run of students, whether they go to college, whether they finish college degrees, 20 school performance? 20 21 A Well, this is a complex system. It uses the whether they end up with records of unemployment or 21 22 Star system of tests to weight the various tests that 22 criminality in the State of California. All kinds of 23 are given. Those tests receive different weights and 23 things. 24 24 the state builds its academic performance index then Maybe in the long run, the State of 25 the state publicizes and records each school's 25 California will be able to monitor some of these other

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1	outcomes. It is totally impractical to monitor them	1	the California system among the top 10 or 15 that the
2	right now. I think the State has moved about as fast	2	state has different expectations for different
3	as districts are able to digest.	3	populations of kids.
4	So, I wouldn't say that the system is perfect	4	A I think that is common. I think what you are
5	or that I couldn't suggest a series of improvements,	5	asking me about, what made it different from that of
6	but I wouldn't actually suggest that the State attempt	6	other states, because that is part of the No Child
7	to implement them all right now.	7	Left Behind Act. All states are doing that. It is
8	Q Why do you say that the current system in	8	certainly important in California that subgroups have
9	California is as good as the top 10 or 15 states?	9	been monitored. In fact, California was not
10	A Because there are several reasons. One is	10	monitoring two subgroups that the No Child Left Behind
11	that the state has made a real effort to define the	11	Act has made it monitor. It is not particularly out
12	curriculum that it is going to test. That is helpful,	12	in front of the states in this regard.
13	because then districts have some guidance about what	13	Q You also said that you have a list of things
14	curriculum will be tested.	14	that you think the State of California might change
15	The state has also made an effort to come up	15	about its accountability, not now, but at some point
16	with its own set of tests that are state specific. It	16	in the long run to improve its system. What are those
17	is not just using off-the-shelf tests. It is having	17	things?
18	the students take some national tests, so you can	18	A Actually the main thing that I would like to
19	continue to compare your progress to that of students	19	see is the inclusion of more long run or more long run
20	in other states. But, it is not relying solely on	20	outcomes for students. Frankly, I think that we don't
21	off-the-shelf, nationally known tests.	21	want to try and jump ahead 10 years and foresee all of
22	The state is testing a lot of grades. It is	22	the things that the State might want to do. A lot of
23	not just testing one grade or two grades, so it is not	23	the moving and accountability systems is to understand
24	as though a child can go for five grades in a row and	24	what seems like it is not being picked up and make
25	not be tested and all of the sudden he is tested.	25	sure that those things get picked up over time.

That doesn't help a school very much to find out where 1 Right now, the State's accountability system 1 2 2 the gaps are. The gaps could be second, third or does not have a particular focus on high achieving 3 fourth grade and if you don't test a child very often, 3 students. As I said, it has some. More than some 4 it is difficult. 4 other states do. In the long run, I think we'd like 5 5 The state has fought relatively hard about to see all states have some degree of focus on 6 how to compose its academic performance record. Some students who start out being proficient or perhaps 6 7 7 states still have to base their school rating on even above average in proficiency. 8 perhaps only one test or one indicator. The academic 8 It is reasonable that states not focus on 9 performance index is basically a multi indeces, multi 9 them to begin with, because they are not the most grade and I think the state has made an effort to not 10 troubled students, but I don't think they ought to be 10 just monitor the level of performance, but also totally neglected. I also think that districts that 11 11 measure improvement in performance. start off with a high level of proficiency ought to 12 12 13 Finally, there are even some provisions that 13 have some monitoring. Not just districts that start 14 apply to school districts that are high performing to 14 with a low level of proficiency. 15 Q Why is it that the districts that start out begin with. Districts that are initially high 15 performing have absolutely nothing to do in the state with high level of proficiency ought to have some 16 16 accountability system. They can stay the same every level of monitoring? 17 17 18 year. 18 A In the State of California, the State is 19 19 giving those districts a lot of their money. The In California, the state has identified ways in which they should also improve even if they start 20 State would like to know that districts are doing a 20 with a relatively high base. So, it is a relatively 21 21 good job at handling their resources there, too. well thought out accountability system. It is 22 22 The fact is, that if you start with a bunch 23 imperfect as all of the systems are, but it is 23 of kids who are very affluent or come from families significantly less imperfect than many other states. 24 who are very educated, kids would come into the school 24 25 Q You don't list among the attributes that make 25 already with a high level of performance and you'd

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1	like to see that the school is doing a good job	1	are going to write state specific curriculum.
2	improving their level of performance. The school	2	The State has some of the highest per-pupil
3	still has some work to do.	3	spending on an accountability spending of any state.
4	Q I take it that is also the same reason why it	4	It is certainly not the top five on a per-pupil basis.
5	is important in the long run for the State to begin	5	I think one has to be practical and you can only do
6	monitoring or doing a better job of monitoring the	6	things so fast and there is only so much in the
7	achievement of high achieving students?	7	universe and it had a high degree of commitment.
8	A Yes. A lot of the long run outcome would be	8	Q Excepting that point, assuming that
9	things you would be picking up. Outcomes that I think	9	California in 1988 had done all the things that it is
10	we'd care about a lot for students that are not just	10	now doing and not made changes to the accountability
11	test scores and that would reflect not just high	11	system since then, would you recommend that it change
12	achieving students, but low achieving students.	12	things today?
13	For instance, we care a lot about whether	13	MS. DAVIS: Calls for speculation.
14	someone experiences unemployment, whether someone has	14	THE WITNESS: I would think I would say that
15	the skills to be in a good occupation. That is the	15	the State should attempt to start using some of the
16	sort of thing you can study with long run outcomes and	16	other data that it has already on people in this state
17	that test scores are only going to be a partial	17	to try and monitor long run outcomes. The State
18	indicator of that. Test scores are a best quick	18	already has data on whether someone is unemployed and
19	outcome, but they are not the only thing we care	19	data on a person's occupation and income. Those are
20	about, I think.	20	things that the State has data on. It does not make
21	Q Thank you.	21	an attempt to link that data to schools.
22	Just so I understand, there is nothing you	22	Similarly, the State knows a tremendous
23	think the State of California should add now to a	23	amount about whether students go to college in the
24	system of monitoring school performance?	24	State of California, whether they graduate from
25	A I didn't write the California law, so it	25	college, what kind of financial aid they use. It

- 1 might not be exactly what I would have chosen. I
- 2 don't think there is a gaping problem right now. I am
- 3 aware of its rate of change in California's
- 4 accountability system and I think I would be wary of
- 5 adding a lot more to it right away.
- 6 In fact, if you just look at what has changed
- 7 this year as to last year, there is a fair amount that
- 8 has changed. I do think schools need time to absorb9 any standards.
- Q If California had not had such a high rate of
- change, would you have things you should think weshould add now?
- MS. DAVIS: Vague and ambiguous and calls forspeculation.
- 15 BY MS. LHAMON:

16

- Q I think my question was, in fact, unclear.
- 17 If California had not had such a high rate of
- change to its accountability system, would yourecommend any changes now?
- 20 A Well, I think, for instance, in 1988, I would
- 21 have recommended that it move in some of the direction
- 22 it has moved in. I think I would say that you need to
- 23 publish some curriculum if you want kids to be tested
- 24 on a certain set of skills. I think it would be a
- 25 good idea to write some state specific tests if you

- 1 really knows that information right now. That is not
- 2 linked to the schools. It could essentially be
- 3 linked. That is a big job that some states have
- 4 started to do.
- 5 BY MS. LHAMON:
- 6 Q Why would it be important, eventually, to
- 7 link that kind of information to the California
- 8 accountability system?
- 9 A Because I think we don't just care about test
- 10 scores. Test scores are very good indicators of many
- 11 of these other things. I don't mean to denigrate test
- 12 scores. They have a high predictive ability,
- 13 surprisingly high, and they are available soon after
- 14 the policy is implemented. You cannot find out soon
- 15 whether someone is going to graduate from college.
- 16 I think in the long run, we would like to
- 17 see, what if we saw a school that had low test scores
- 18 and everyone led a very productive life and everybody
- 19 was employed. We would want to know that. Surely it
- 20 is unlikely, but we would want to know that.
- 21 Q Do you know if California does anything now
- 22 to encourage parent involvement in schools?
- 23 MS. DAVIS: Vague and ambiguous.
- 24 THE WITNESS: Does the State?
- 25 BY MS. LHAMON:

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$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	Q I do mean the State when I say California. Thank you. A Well, I know that districts that are involved in the intermediate intervention program have a series of requirements for parental involvement in, I guess it is the action plan. Parents have to be on a committee. There are a series of parent committee meetings that have to be held. So, yes, I think California, in the case of districts that it believes are not being managed well are automatically mandating a level of, not parental involvement, because you can't force people to come to meetings, but it is mandating that parents be given the opportunity to be inv□lved. Similarly, the federal legislation I don't know whether you want to attribute this to the State or not, but the federal legislation that mandates that parents have choices in districts that don't make adequate yearly progress. So, there will be some necessary opportunities for parental involvement there, but I don't think I don't know that any state can actually do much more than create opportunities for parental involvement. It cannot force parents to be involved. Q When you talk about the schools that have	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\23\\24\\25\end{array} $	the IIUSP program provides sufficient incentives for schools to encourage parent involvement? A No one could know that yet. It is too recent. Q That is just because of the recency of the program? A You can't evaluate a program that is really not fully implemented yet. Q Is there a set period of time before someone could answer the question I just asked or does it depend on something else? A Yes, I think there is a set amount of time you have to wait until the program, all of its provisions, could have been implemented, which is a minimum of three years from the beginning of the program. Plus, you have to allow time for students to improve. In general, in education, students are not improved tremendously rapidly. You might expect to see some of the effects of this program three years after some of the policies had been implemented. So, if the program were to start in Year 1, it would have to run in a school for three years and if some of the policies were to be implemented in the third year, you might easily be in the sixth year before you could do a good evaluation. Then you have
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\end{array} $	Page 175 these action plans, are we talking about the IIUSP program? A Yes. Q Is it your understanding that the IIUSP program creates incentives for schools to encourage parent involvement? A Yes, it is a framework wherein parents must have an opportunity to be involved. It is also the case that I think most of the external evaluators would want to have parental involvement in the process. In order to get the funding, they are going to have to demonstrate they got recommendations from parents. That is the system of incentives to get parents involved. You cannot mandate that parents be involved. Q No one does. A No one can mandate parents be involved. Q I don't know how familiar you are with the IIUSP program. Are you familiar with it? A I am certainly familiar with it in the sense of knowing what its provisions are. I have not	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\end{array} $	Page 177 to wait for data, which would probably take another year. Q Okay. I would like to take a break now. (Recess.) MS. LHAMON: Back on the record. Q Are there any activities that the State of California is now involved with or engaged in concerning K through 12 education that the State shouldn't, in your view? MS. DAVIS: Vague and ambiguous. THE WITNESS: This is a difficult question, because I think there are policies that if they had not been implemented in the first place, the State could have chosen a better policy. That doesn't mean that once it is fully implemented, it is a good idea to remove it suddenly. For instance, I do not think that the State chose the best system of school finance. I don't think any school finance expert thinks the State chose an ideal system.

- 22 actually been involved in a particular school's
- 23 program.

- Q Thank you for clarifying.
- 25 Do you have a basis for evaluating whether
- an ideal system. 21
- 22 What the State does now, given that it has
- 23 had this system for a long period of time, it is a
- 24 more difficult question because the whole politics of
- 25 the situation have changed very substantially as a

			5
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1	result of the policy being implemented.	1	freedom and the state is treating everybody the same
2	So, I think yes, the State should probably	2	way. We tend to think this is not an efficient
3	adjust its school finance system, but it can't adjust	3	system.
4	in the same way it might have chosen to adjust if it	4	Those are the major things.
5	started from a cleaner slate.	5	You probably want to move toward allowing a
6	Similarly, I think that the class size	6	little more local freedom, especially for districts
7	reduction policy that was implemented very quickly was	7	that don't need very much state money. They'd have
8	probably not implemented in the ideal way. What do	8	more freedom and they'd also end up with more local
9	you do now that you have implemented it and you have	9	fiscal control and the state would be able to reorient
10	hired all these people? It is a different question.	10	its energy toward districts that are more needy
11	I think there are some adjustments to	11	districts. That is something you could do quite
12	policies that California could make, but I think	12	gradually over a period of time.
13	largely when we look at the policies in California	13	Q I think I wrote down three major problems. I
14	that are probably considered the least optimal, they	14	think you testified two major problems and then I
15	are not policies that you want to reverse overnight.	15	listed three things, so I have either combined or
16	You don't want to wipe them out. You want to try to	16	there were three.
17	adjust slowly to something you consider a better	17	I have very little incentive for local school
18	implementation to the policy.	18	spending to rise. Parent involvement is not as high
19	BY MS. LHAMON:	19	as it otherwise might be and that the State uses
20	Q You have identified school finance and class	20	resources in a way that is very much the same across
21	size reduction. Are there any other policies that the	21	the school district.
22	State of California now has with respect to education,	22	A All of this could be quite readily adjusted
23	that you think that the State should end?	23	with a law change, basically.
24	MS. DAVIS: Same objections.	24	Q What do you mean by that?
25	THE WITNESS: Not that I can think of, but	25	A Well, right now, the State does not allow
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1	there may be some.	1	districts to raise any local money. One thing it
2	BY MS. LHAMON:	2	could move toward doing is allowing districts to raise
3	Q Taking school finance, you have testified	3	local money and providing matching money for the
4	that the State should probably adjust school finance	4	poorest districts in the state, but allowing more
5	not immediately. What would you recommend that the	5	local control at the margin of the local financing.
6	State do differently?	6	That would be something that would not create
7	A Right now, there are two problems, two major	7	any more inequality in the state, but would probably
8	problems with the State system of school finance.	8	have more of a role for local participation and
9	The first is that there is very little	9	greater incentives for local parents to be involved,

incentive for local school spending to rise, because 10

you can't really raise your local school spending. As 11

a result, private schooling is probably higher than it 12

13 would otherwise be in California. The local parents

14 are not as involved as they probably would be in a system that had a larger degree of local control at 15

16 the margin, at least.

The State is using its resources in a way 17

18 that is so much the same across all districts that, in

fact, it is not focusing its energy particularly on 19

the districts. It is not focusing either its energy 20

- 21 or money on the districts that most needed help.
- 22 It is, in general, more efficient for a state
- 23 to not give every district the same amount of money,
- 24 but instead, focus on districts that need help and
- 25 allow more districts more freedom. Nobody has more

- local parents to monitor school spending. You would 10
- probably raise the local spending in the State of 11
- California and reduce private schooling. 12 13

All these things would happen gradually.

14 Q Why would allowing more local control at the 15 margins, in terms of school finance, not create more inequality in California? 16

17 Let me rephrase that.

18

How do you know that allowing more local

- 19 control at the margins would not create --
- 20 A If you wrote a formula that said everybody 21 spends however much they feel like spending, of
- course, you could have inequality. You write a good 22
- 23 formula by ensuring that all districts really have the
- same resources available to them, but that districts 24
- 25 that are more affluent are forced to use their own

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1	resources. Those are the formulas that are not	1	Q What is the formula that will ensure that
2	impossible to write. California just has a	2	districts have the same resources available, but that
3	particularly simple formula. It more or less says	3	affluent districts don't get as much state money?
4	everybody gets the same amount.	4	A The simple formula that I recommend is that
5	Q Simplicity is not entirely a virtue.	5	states look at the total income available to
6	You said that we have worked with other	6	households in a district and then they look at the
7	states to write such formulas. Who is we?	7	revenues that a district has from other sources. It
8	A Experts in school finance. Economists who	8	might have commercial property tax revenues or
9	are experts in school finance.	9	something like that. It looks at that pool of income
10	Q Did you have anybody in particular in mind?	10	as the total resources available to a district.
11	A Well, for instance, I know that a number of	11	Then the state gives per-pupil grants to
12	people at the University of Michigan helped Michigan	12	poorer districts that are funded with state funds so
13	to write its new school finance laws and I think it	13	that if all districts taxed that pool of resources to
14	had a very beneficial effect in the laws written.	14	the same degree, the same percentage, they are willing
15	I know that the State of Texas has consulted	15	to give the same percentage of their resources, that
16	quite a number of economists to try to think of a	16	the State would come up with enough money so that each
17	school finance law.	17	district could be equal.
18	Some states are, in fact, consulting people.	18	This is a system in which local districts are
19	Q Are you involved in those situations in	19	still responsible for raising that last dollar, but we
20	Michigan and Texas?	20	know that no district is required to give a very
21	A Michigan's consultation took place before I	21	disproportionate share of its income to school
22	had a Ph.D. I am involved in the Texas consultation	22	finance. So, it is a system that maintains a balance
23	and often I will just get calls from the State and	23	between local and state control.
24	talk to state representatives or the governor's office	24	You'd actually see affluent districts with
25	about school finance quite in an informal way. It is	25	basically no state aid. They would basically do it

1

2

not always testifying. 1

2 Q And the Texas involvement, in what capacity 3 are you involved in that?

4 A I am on the joint committee between the house 5

and senate and the governor to try to think about ways to revamp their school finance system so that the 6

7 current system, which is breaking down, can be

8 revitalized and made sustainable again.

9 Q What are the other states from which you have 10 received calls for consultation about school finance reform? 11 12 A Arizona, Nevada, Vermont, New Hampshire. It

13 is not unusual for me to receive a call quite 14 casually.

15 For example, that happened in New Hampshire

after the litigation concluded in that state. Most 16

states, it is normal for there to be some degree of 17

18 ongoing consideration around education about school finance. Almost always someone is thinking about

19 whether school finance should change, even if there is 20

- 21 no pending litigation.
- As far as I know, they have been thinking 22
- 23 about school finance every year since I have been
- 24 aware that they are worried about their property
- 25 taxation, so they are always thinking about it.

themselves. The state is going to be hands-off. But, poorer districts would get a lot of money from the state. They'd still have to make efforts locally at

3 4 the margins, but we think that is probably good.

5 So, they maintain a relationship between

- voters and local parents and the school district, even 6
- 7 though it may be a small share of the total they are
- 8 contributing. Still, that last dollar is their

dollar, so they need to think about whether they think 9

10 it is being well spent.

I think this is a nice formula, because it 11 12 means that even poor people feel that their local 13 school districts need to be responsible to them. But, 14 they also are not given a disproportionate burden that they somehow can't pick up, that richer people can. 15 16 This is a very simple type of formula. You can add all kinds of bells and whistles to it, but that basic 17 18 formula is one I think that works better for many states than, for instance, the system in California. 19 20 Q Are there any states that have such a formula 21 for applied school finance? 22 A Most states are someplace along the spectrum.

- 23 There are states that have systems that are more like
- 24 that. You could look at Michigan's system, which is a
- 25 little bit like that. School finance is a very

	Page 186		Page 188
1	detailed thing. Most state systems, you can't easily	1	Very special exception in the system. I am not
2	put them in a little box and say they are like this or	2	confident that actually New York City has been dealt
3	not like this, because most of them have lots and lots	3	with in a way that is very sensible.
4	of bells and whistles. There will be historical	4	Q Well, taking Michigan first, could you tell
5	things built into them that will be built into the	5	me, what are the kinds of things that concern you
6	system.	6	about educational quality based on what you know about
7	So, there are a variety of states that are	7	Michigan and its school finance system?
8	closer to that type of system. States have gotten	8	A Most of these things are not concerned about
9	there kind of accidentally through trial and error.	9	equality, per se. They have oddities that are having
10	Michigan made an effort to move to this type of	10	a greater impact over time. When Michigan implemented
11	system. It also has a lot of historical oddities	11	its system, it set a certain level of spending in 1994
12	built into that system.	12	and then it set this level of spending to grow at the
13	New York has a system that moved dramatically	13	same rate as the following types of revenues in the
14	into that direction in the 1990s. Again, there is a	14	state.
15	lot of unusual things about it. New York City is very	15	That doesn't sound like a bad system, but it
16	special.	16	doesn't allow any flexibility for districts that grew
17	So, yes, there are states that have moved	17	faster or slower than other districts. A district
18	toward systems like that, but a typical state system	18	that is growing quickly in Michigan relative to other
19	has a lot of peculiarities.	19	districts can have a problem that it doesn't have
20	Q Do you think that the Michigan and New York	20	enough money to adjust for its enrollment. That was
21	systems of school finance are well implemented with	21	probably a mistake in retrospect. It didn't become
22	respect to equality?	22	apparent immediately.
23	A The Michigan system is very equal. One of	23	An ideal system has two sides to it. It
24	the difficulties with the Michigan system is that they	24	allows districts to have local control at the margin
25	built in a lot of strange spending limits so that the	25	and the role for the state equalizing the basic

system has been very equal and some people complain 1 1 2 that it does not allow spending to grow as fast as 2 3 people like it to grow or adjust when, say a district 3 4 gets more enrollment and things like that. There are 4 5 some problems in the system, but it is certainly more 5 equal. It is equal and still has more local control 6 6 7 than California does. 7 8 Q I misspoke. I am remembering that you 8 9 testified that questions of equal educational 9 opportunity are questions of school finance. So, what 10 10 I meant to ask and didn't was if you think that the 11 11 school finance system in Michigan and the New York 12 12 13 school system are well implemented in ensuring 13 14 educational quality for the students in those states? 14 15 A I think I would say that the Michigan system 15 has been well implemented. I think that has some 16 16 problems that I could discuss with you, but I think we 17 17 18 have to always think in relative terms. Relative to 18 other states, I think it has done a good job. That 19 19 does not mean that I think there are no problems with 20 20 21 21 the system. 22 New York, I think is such a special example 22 23 that one could say that I think the system has been 23 24 well implemented in upstate New York, but New York 24 25 City is a very special sort of example in the system. 25 Page 189

- l resources that districts have. In Michigan, they more
- 2 or less decided which set of districts were going to
- 3 have a reasonably large role for local finance in 1994
- and that set of districts is unchanging over time.
- 5 Again, there is very little room for flexibility in 6 the system.

As districts change, status should probably move more into having more local control and they need less state money. They really can't change status in the Michigan system. Most of the problems are the problems having been written in the way that did not provide for the fact that circumstances would change

3 in the future and it is now 2003.

The system has been in place 11 years and, of course, some districts have changed and they no longer are the same as they were in 1994. The system did not make provisions for those types of changes. It has made more strange differences between districts.

- 9 Q For New York, you testified that the New York 0 school finance has been well implemented in upstate
- 21 New York. Putting aside New York City, because you
- 22 testified you are not confident that city is dealt
- 23 with well, do you have any concerns about the
- 24 implementation of the New York school finance system
- 25 outside of New York City?

	Page 190		Page 192
1	A It doesn't come very close to the edge I	1	appreciate your response about affluent districts and
2	talked about. It could move significantly closer to	2	I take it to mean that you think affluent districts
3	that ideal. The basis structure of the system is a	3	are going to spend what it takes for those kids,
4	reasonably good system in New York. There is no	4	because that is something they value? Is that fair to
5	indication that there are problems with the	5	say?
6	distribution of school spending in upstate New York.	6	A That is fair.
7	The total state has problems fully	7	Q For not poor and not affluent districts, the
8	implementing equal education opportunity, because New	8	districts in the middle, is there a way to ensure that
9	York City is a very big portion of the state in total.	9	there is not a free-rider problem, to ensure that
10	You can't ignore the fact that this is the part of the	10	districts that can afford to fund their schools
11	state that contains 10 million people and you have one	11	appropriate do and still have a school finance system
12	school district with over 1.2 million children. So,	12	that protects districts that can't afford to fund
13	it takes a lot of the state's total budget and	13	their schools fully?
14	probably the state does less intervention in other	14	A Right. Districts in the middle, between rich
15	parts of upstate New York.	15	and poor, generally are going to receive some state
16	I think the state has moved in the right	16	aid, just not as much as districts that are poor.
17	direction, but also it has got a very difficult	17	When the state chooses what it is spending,
18	exception and that is a lot of politicking in New York	18	what its resource targets should be for districts, it
19	on how to deal with New York City.	19	should think about what it considers to be an adequate
20	Q One of the things that you testified is	20	level of spending. Now, that doesn't mean necessarily
21	important, if you write a formula the right way, is to	21	it is going to mandate that level of spending would be
22	take care of concerns about education and equality.	22	every place. It will give school districts incentives
23	You want to write the formula by ensuring that all	23	to reach that level of spending.
24	districts have the same resources available, but that	24	My own analysis is based on the evidence that
25	the affluent districts don't get as much of the	25	when districts have adequate resources and have local

control of their last dollar, getting them to spend state's money. 1 1 2 Is that a fair characterization? 2 enough is generally not a problem. Most districts 3 3 that are very low spending either have inadequate A Yes. 4 Q How can such a formula ensure that affluent 4 resources or they have no incentives to spend. They 5 districts don't feel jealous of getting more state 5 cannot spend their local tax dollars, so they decide money or have appropriate incentives to fund their 6 6 they are not going to be in the business of paying tax 7 schools without concern about the loss of state money? 7 dollars when they are not going to be -- they cannot 8 8 see them showing up in their local schools. A Right. 9 This is an interesting trade-off. I believe 9 So, we do not see -- states seem to have a 10 that in Florida, we do not see that affluent 10 problem with local spending when they are in a form districts, if we leave them to their own devices, they that both provides adequate resources and allows local 11 11 spend an insufficient amount on children. In general, spending to stay at home on the margin. Typically 12 12 13 affluent districts are concerned about having the 13 some of those states -- I don't think states seem to freedom to control their own school and if they have a have increased spending as a share of family spending 14 14 15 lot of control of their own schools, they spend quite every year. It just does not look like they are not 15 16 a lot. 16 spending enough. Q A few moments ago, you stated that a state 17 Affluent districts in California are some of 17 18 the lowest spending affluent districts in the United 18 can write a formula to give incentives. What kind of States and that is probably because they do not have things can the state put in a formula to make sure the 19 19 very much local control. There is no reason to think districts have incentives? 20 20 21 that they would not spend more if they had more local 21 A I think I described the basics of the 22 control, but then probably all districts in California 22 formula. One of the key things a state needs to start 23 would spend more if they had local control. 23 looking at is family income in the district. Not to 24 Q I want to come back to that question, but 24 look at property values. That is one of the biggest 25 taking the inarticulately worded question before, I 25 mistakes the states make. They focus on property

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1	value.	1	Q Where in that spectrum does California fit?
2	States like California have an income tax, so	2	A The state that could probably improve
3	they know the household income of everybody in	3	dramatically. I think it would also be difficult
4	California. That information is not actually used in	4	politically, so you probably have to do it gradually.
5	that state school formula. That is a very important	5	Q For example, in Texas when you have been
6	piece of information to use.	6	advising the state as part of this committee on school
7	Q Are there any states that do use family	7	finance, are you recommending that Texas takes bits
8	income as distinct from property values?	8	and pieces from the other states' school finance
9	A Yes.	9	formula to implement a better formula in Texas?
10	Q Who?	10	A I am not really recommending anything. I
11	A New York does, for instance. Connecticut	11	have not made recommendations to the committee. I am
12	does. A lot of states us some of both. Massachusetts	12	part of the committee. We are there to consider
13	uses some household income and some property values.	13	recommendations that are made to the committee.
14	Most states that use household income use both	14	However, I would certainly use my expertise
15	property values and household income. They use a	15	on the committee to try and distinguish among
16	combination of the two. That is not actually optimal.	16	recommendations that seem to me to be wiser versus
17	I think this is a leftover part of history.	17	recommendations that seem to be less wise. I don't
18	What you really want to know is how much	18	The system that they have right now is so
19	money they have. Someone's property value is not	19	broken that almost nobody wants to keep the system as
20	necessarily a very good indicator of what resources	20	is. I think it is which system should replace the
21	they have to spend, both because of things like	21	system.
22	capitalization, which we talked about earlier, but	22	Q When answering that question of which system
23	also if you look at, say, an elderly couple might have	23	should replace that system, do you anticipate taking
24	bought a house in 1970. This house might be worth a	24	pieces of other states' systems or do you anticipate
25	lot of money. That doesn't mean they have a	25	not even looking at other states and thinking in a

1 vacuum about what is the right thing for Texas to do? 1 tremendous amount of income to spend. That is what they have to pay taxes with. Your house does not pay 2 2 A I think it has been a mistake for states to 3 taxes. You pay taxes. Your house does not write 3 copy other state systems as much as they have instead 4 checks. You write checks. It is important to look at 4 of thinking about what they should do on the basis of 5 5 starting with more of a blank slate. Most states' how much money a family actually has. school finance systems incorporate a tremendous amount 6 Q Does Michigan use family income or does it 6 7 7 use a mix of property values and family income? of historical accidents from their own states and 8 A It uses a combination of property values and 8 sometimes historical accidents from other states. actually sales tax revenues. So, sales tax revenues 9 9 Sometimes this is done for reasons that are political. 10 10 are an indicator of household income. It also uses It seems it is done because states imitate some household income. It uses all three. 11 other states' formulas. These do not usually 11 contribute to the quality of school spending or 12 Q That is not optimal, either? 12 13 A You really want to just use household income 13 efficient use of state funds in the state. Most of 14 to judge how poor a school district is, because that 14 the time, they are peculiar provisions because of 15 is ultimately the measure of how much income you have. 15 historical things. Q I misunderstood your role in Texas. The 16 Q Is there any state in your view that does 16 school funding finance right? 17 bipartisan committee of which you are part, will that 17 18 MS. DAVIS: Vague and ambiguous. 18 committee make that final decision about Texas changes 19 THE WITNESS: There are states that do school 19 in the school finance? finance better than other states. It is not an area 20 A No, it can just make recommendations to the 20 21 21 in which most states -- in fact, all states could legislature. 22 probably improve their school finance system 22 Q Who else is part of that committee in Texas? 23 substantially. Some states could improve their school 23 A I believe 30 -- I could give you a list. finance situation radically. 24 Several members from the house and many members from 24 25 BY MS. LHAMON: 25 the senate. Probably 30 people from the house and 30

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1	people from the senate.	1	MS. DAVIS: Vague and ambiguous and calls for
2	Q Are you the only person on the committee who	2	speculation.
3	is not a member of the state legislature in Texas?	3	THE WITNESS: Well, there are a variety of
4	A There are three people appointed by the	4	things that the State of California could do. I
5	governor. I am one of them.	5	actually think this type of question is very difficult
6	Q Who are the other two?	6	to answer, because in most states, part of the answer
7	A An attorney from Midland, Texas, named Jack	7	is what is politically feasible in the state. That is
8	Ladd and someone who was recently appointed whose name	8	probably the single most important piece of
9	I cannot recall, because I have not met him.	9	information to have.
10	Q Will the legislature hear views from any	10	If I were to answer that question seriously
11	other committee on school finance reform before making	11	for someone in the State of California, a policymaker,
12	a final decision?	12	one of the first things I would ask him or her is what
13	A This committee is a big committee that has	13	is going to be politically feasible, and I could run
14	several subcommittees, so there are probably 10	14	through a lot of scenarios. If it is not going to
15	subcommittees and each of the 10 subcommittees is	15	work politically, then you don't do it. I think
16	hearing its own testimony. There is a subcommittee on	16	politics are probably the main thing that would make
17	facilities and on accountability and so on and so	17	you choose between one policy and another.
18	forth. I don't know what other provisions are made	18	BY MS. LHAMON:
19	for the state, but there is a lot of testimony being	19	Q Is it your view that you don't have enough of
20	heard by the committee.	20	an understanding of what is politically feasible in
21	Q Are you familiar with the master plan in	21	California to be able to answer the question of what
22	California?	22	California should do to raise student achievement?
23	A I am not sure what you are referring to.	23	A It is my view that there are a series of
24	Q California has a master plan for K through 12	24	policies that might be useful in the State of
25	education. It has committees that compose part of the	25	California and that you would probably want to choose
	Page 199		Page 201
1 .			

plan and they have heard testimony. If you knew about 1 1 2 it, I was just going to ask if your committee in Texas 2 3 3 was a parallel. If you don't know that --4 A No. 4 5 5 O You testified earlier that you have received 6 phone calls from people in the governor's office and 6 7 at the state level from a number of states asking 7 8 questions about school finance reform; is that 8 9 correct? 9 politically feasible? 10 10 A Yes. Q Have you ever received calls from anyone in 11 11 12 California involving questions about school finance? 12 13 A I think the answer is I don't know. I get a 13 they think. lot of telephone calls and I believe that I have 14 14 received telephone calls from California state 15 15 legislators at various times. I do not recall any of 16 16 17 feasible? 17 them at this time except that I have a rather vague 18 memory of having talked to some people at various 18 19 the voters would accept. 19 points in time. I talk to many people each year about 20 20 this subject and I just don't, unless it is a 21 21 conversation that actually turns into serious 22 analysis, I usually don't recall the conversation. 22 23 Q If you were to advise the State of California 23 24 about how it should raise student achievement, what 24 25 would your advice be? 25

among them based on a careful analysis of how much the

policies would cost in the state and what would be

politically feasible. You can have a menu of policies

- out there to think about, but without having looked
- carefully at both the cost and the political
- feasibility, I think it is difficult to make a
- specific recommendation.

Q How can one go about determining what is

- A I think most legislators have a pretty good
- idea of what is politically feasible. It is not

something I am expert in, so I would ask them what

- Q Based on their assessment of what they think
- others would accept, that is the kind of determination
- that goes into determining what is politically

A What the voters would like, more than what

- - In addition, California is a very big state
- and at this point, does not have a loose budget
- situation. So, it would probably be a good idea, for
- many policy makers, to think about doing them on a
- somewhat experimental basis than gathering evidence on
- how well they work in the first couple of years.

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1	The state does not have enough money to	1	writing laws. People have to want to carry it out.
2	implement policies in a complete way and immediately	2	Q The second on your list was to make some form
3	across the state, anyway. In those circumstances, it	3	of school choice more available to kids and I think
4	is often a good idea to try an experimental version of	4	you testified to kids in very large metropolitan
5	a policy and see what the evidence is.	5	areas.
6	Q You testified that there is a variety of	6	Do you believe that the form of school choice
7	things that a state like California could do. You	7	needs to be available only to students of very large
8	would need to find out from a person asking the	8	metropolitan areas or is that something that could be
9	question about how politically feasible those things	9	made available throughout?
10	would be; is that correct?	10	A Large metropolitan areas or school districts
11	A Yes.	11	that occupy large parts of large metropolitan areas
12	Q What is on your list of the variety of things	12	are the most amenable to school choice, because people
13	California could do to raise achievement?	13	are already living in the dense environment and they
14	MS. DAVIS: Vague and ambiguous and calls for	14	are living in a very big school district that need not
15	speculation.	15	occupy the entirety of the metropolitan area. So, it
16	THE WITNESS: California could revise its	16	is simply the place where you would start and it would
17	system of school finance. That would probably be the	17	also be the place where it would have the largest
18	first thing I would talk about, because it is such a	18	impact.
19	very big thing in the state.	19	If you tell people they have school choice
20	I think it would probably have long-run	20	and they live in some rural area of California, it
21 22	impact on a variety of other things. I think it would	21 22	really is not likely to make much of a difference. If
22 23	probably be a good idea to think about how to make some form of choice more available to children who are	22 23	you have to make complicated policies, you need to
23 24	in certain very large metropolitan school districts	23 24	understand the area you are working in very well before you make the right policy decision. You want
24 25	that are not now performing very well.	24 25	to understand the cost of educating. It might be a
23	that are not now performing very wen.	23	to understand the cost of educating. It might be a
	Page 203		Page 205
1		1	-
1 2	BY MS. LHAMON:	1 2	good idea to start in an area where the plan would
2	BY MS. LHAMON: Q Those are the only two things in your list?	1 2 3	good idea to start in an area where the plan would work if it was implemented correctly.
	BY MS. LHAMON: Q Those are the only two things in your list? A I think it could probably improve the	2	good idea to start in an area where the plan would work if it was implemented correctly.Q When you testified that school choice might
2 3	BY MS. LHAMON: Q Those are the only two things in your list?	2 3	good idea to start in an area where the plan would work if it was implemented correctly.
2 3 4	BY MS. LHAMON: Q Those are the only two things in your list? A I think it could probably improve the accountability system in some ways that we talked	2 3 4	good idea to start in an area where the plan would work if it was implemented correctly.Q When you testified that school choice might not make that much difference in a rural area of
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- Q Why is that?
- 24 25 A Because you can't implement a policy by just

52 (Pages 202 to 205)

25 have to think of whether a desegregation plan is also

	Page 206		Page 208
1	there that can be implemented.	1	Q Are there any other districts in California
2	The big school districts like the L.A.	2	that you think come to mind immediately as potential
3	Unified are obviously the most obvious candidate.	3	recipients of school choice that would make good use
4	There are already some form of choice available within	4	of it?
5	the district.	5	MS. DAVIS: Vague and ambiguous.
6	So, I personally would want to study what has	6	THE WITNESS: I think all very big districts
7	already happened in the types of plans that have been	7	are probably the most appropriate for thinking about
8	implemented already. It is not as though L.A. has	8	this. So, the big districts in California, as you
9	done nothing. It has taken some action. I actually	9	know, are places like San Francisco, Oakland, San
10	want to look hard at the evidence of what has happened	10	Diego. These correspond to the big cities in
11	there before I even think about what was appropriate	11	California.
12	for the future.	12	BY MS. LHAMON:
13	Q What are the forms of school choice that are	13	Q You are referring to student population?
14	already available in Los Angeles?	14	A Student population. Not physical size.
15	A My understanding is there is a lottery, sort	15	Q The reason that a big district is likely to
16	of stratified lottery system that allows school	16	benefit from some form of school choice is just the
17	choice, but also implements a desegregation plan. I	17	shear number of schools in the district so the ability
18	am not an expert in this. I have read articles about	18	to implement school choice?
19	it and have seen the formula, but it is not something	19	A Yes, because implementing school choice would
20	I am an expert in; the L.A. Unified plan.	20	make a bigger difference in a big district. They are
21	Q When you said that Los Angeles Unified School	21	more densely populated, so it is more feasible for
22	District is one of the most obvious districts that	22	children to choose a different school.
23	could benefit from some form of school choice, what	23	In a very small district that only has one
24	was your basis for that?	24	high school, it is not clear what it means to
25	A First of all, it is one of the largest	25	implement school choice within the district, anyway,
	Page 207		Page 209
1	districts in the United States. It is simply very,	1	because there is pretty much only one high school you
$\frac{1}{2}$	very large relative to what we think is efficient for	2	can offer. The benefits are going to be smaller

- a school district.
- 4 In addition, L.A. Unified has some areas
- 5 that, some schools that are poorly performing.
- 6 Therefore, they have very little to lose. They
- 7 really, we would hope, would be able to improve and we
- 8 also think that parents should have better choices.9 Q You said "we think." Who else are you
- 10 referring to?
- 11 A When I say "we," I am also referring, in
- 12 general, to the research community on education.
- 13 Q So, there is widespread consensus in the
- 14 education community that Los Angeles Unified School
- 15 District would benefit from school choice?16 A No, there is widespread consensus on almost
- 17 nothing in the research community. Widespread
- 18 consensus implies that many people agree on something.
- 19 I'd say that it is something on which more people
- 20 would agree than on many other things, but the
- 21 education community is not uniform and some of the
- 22 parts of it are very scientific and hence, being the
- 23 end on which I operate. Some parts of the education
- 24 community are very much nonscientific in their
- 25 approach to policy issues.

- because there is pretty much only one high school you
 can offer. The benefits are going to be smaller
 unless you have developed a more complicated school
 choice system. That say ha done but we are talking.
- 4 choice system. That can be done, but we are talking 5 about as we start to add more complexity, it is a more
- 6 difficult plan to implement.
- 7 I am not saying it is terribly hard, but it
 8 certainly requires more systems. So, the place where
 9 you like to start are the places you think you could
- 10 do the most with the simplest type of plan.
- 11 Q In the discussion we have just been having12 about school choice, I take it from your last answer
- 13 that we are or that you have been referring to choice
- 14 among existing schools in an area; is that correct?
- 15 A No. I think most good choice plans should 16 allow for growth. I think it is essential to allow
- 17 for the entry and exit of new schools, so you often
- 18 start off with your existing population of schools so
- 19 that the plan starts to do something from the
- 20 beginning.
- 21 But, it does not make sense to implement a
- 22 plan that relies entirely on the existing population
- 23 of schools. You would like a new school that is very
- 24 good and very successful and makes many parents happy
- 25 to be able to enter. You would not like a plan to

	Page 210		Page 212
1	forbid that from happening.	1	money?
2	Q In the discussion we have been having on	2	A There are a variety of other state aid lines
3	school choice, are you referring to public schools or	3	in the school finance formula and they are made to
4	are you referring to non-public schools among the	4	adjust for different pupil population. There are
5	options?	5	adjustments
6	A I think it depends on how you decide to	6	The most important adjustments are for
	-	7	
7	implement the plan. If you decide to include		students who are disabled in some fashion; limited
8	non-public schools in the plan for instance, if I	8	English proficient and socioeconomical disadvantaged.
9	decide to include charter schools in the plan, those	9	We are talking about poor students.
10	are a type of public school. You have to think	10	There are a variety of minor adjustments as
11	appropriately about finances for them.	11	well. Most of the differences in spending are related
12	If you decide to include private schools in	12	to the first items I mentioned.
13	the plan, you have to decide whether they have to take	13	Q Do you know where California ranks among the
14	students by lottery. So, then you have to think about	14	states in amount of per-pupil expenditure for
15	how you are going to deal with disabled kids and	15	education?
16	whether they have to be treated the same way in	16	MS. DAVIS: Vague and ambiguous.
17	private schools.	17	THE WITNESS: Yes, I do know in the sense
18	All of these things there are a lot of	18	that I have looked at this series many times. I do
19	options open in a school choice plan. What I would	19	not have the numbers I could not give you the
20	tend to do is go to a district and say, "What is it	20	numbers right now. This is something I keep on my
21	you are trying to achieve? What concerns do you have?	21	computer when I need to look at it.
22	How much money do you have? Do you want to include	22	BY MS. LHAMON:
23	the type of schools are you worried about inclusion	23	Q Do you have an approximation? You don't know
24	of disabled kids?"	24	29th or 46th, top half or bottom half?
25	You really need to have people tell you what	25	A Usually we look at where California is
	Page 211		Page 213
1	Page 211 their goals are and then try to implement what they	1	Page 213 relative to its state household income. That is
1 2		1 2	
	their goals are and then try to implement what they		relative to its state household income. That is
2	their goals are and then try to implement what they want as opposed to impose a one-size-fits-all plan on	2	relative to its state household income. That is perhaps the more relevant measure. Cost of living in
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2 3 4 5	their goals are and then try to implement what they want as opposed to impose a one-size-fits-all plan on every district.Q We have talked at some length today about school finance. I have got some more questions and I	2 3 4 5	relative to its state household income. That is perhaps the more relevant measure. Cost of living in the State of California is not the same as the cost of living in, say Louisiana, Mississippi or Arkansas. It is not all that useful to compare just levels of per-pupil spending if we want to think
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	 their goals are and then try to implement what they want as opposed to impose a one-size-fits-all plan on every district. Q We have talked at some length today about school finance. I have got some more questions and I hope you don't mind if we turn back to a topic. Do you know if all California public schools let me say that I am excluding from this question the hold harmless. Do you know if all California public schools, including those schools, receive the same amount of money from the State of California? A No, all public school districts do not, because there are a variety of adjustments to the basic per-pupil allotment. A lot of the standards are the same, but there are a variety of adjustments. Q What do you mean when you say the basic per-pupil allotment? That is the amount that, under Serrano, is implemented in California that all schools or all school districts receive from the State except for the hold harmless schools? 	$ \begin{array}{c} 2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\end{array} $	relative to its state household income. That is perhaps the more relevant measure. Cost of living in the State of California is not the same as the cost of living in, say Louisiana, Mississippi or Arkansas. It is not all that useful to compare just levels of per-pupil spending if we want to think analytically what the state is spending. Normally we compare it to other states with similar levels of household income. California is low relative to other states with a similar level of household income and it has been since 1978. Although, before Serrano II, it was high. It has a long history of having high per-pupil spending before that. Q Which are the other states? It doesn't have to be an exhaustive list with relatively high household income. A New York, Massachusetts, Pennsylvania, New Jersey, Connecticut. Then you drop down a little bit to a series of states that have quite high, but not as high.

- Q And then what is it on top of that basic 23
- 24
- per-pupil allotment that comes from the State that changes whether all schools receive the same amount of 25

25 states, but the key group for comparison is actually

	Page 214		Page 216
1	the other quite high income states and those are the	1	spend money efficiently some states like New
2	ones I mentioned first.	2	Jersey, unless they have stronger incentives, are
3	Q Why is that?	3	perhaps spending too much, but might have better use
4	A Because they are the other very high income	4	of their money if they had stronger incentives to use
5	states in the United States.	5	that money well.
6	Q What is your basis for the statement that	6	BY MS. LHAMON:
7	California is among the highest household income	7	Q So, how would you go about evaluating whether
8	states?	8	a state is spending the right amount of money on
9	A The United States census of the population.	9	public schools?
10	It is what is generally used. We also use the current	10	A I think you really need to look at student
11	population survey, but because there is a recent	11	performance, the key thing.
12	census, we tend to rely on that until it gets out of	12	Q When you say you look at student performance
13	date.	13	to evaluate that question, a few answers ago, you told
14	Q You testified that California is low relative	14	me the best performing schools in California perform
15	to other states with similar household income in terms	15	at high level of achievement. Is it sufficient to
16	of its per-pupil expenditure. What does low mean?	16	look at that to determine whether the per-pupil
17	Does it mean it is at the bottom of the five states	17	expenditure is sufficient?
18	that you listed as a key comparison?	18	A Right. You want to look at the best
19	A Yes, it is.	19	performing schools, but not look at schools that are
20	Q Do you think that the amount of per-pupil	20	the best performing judged on the basis of just their
21	expenditure in California now is enough?	21	level of achievement. You want to look at really,
22	MS. DAVIS: Vague and ambiguous.	22	that is not how you judge whether a school is high
23	THE WITNESS: I think that question of	23	performing, because you could come in with kids who
24	whether the level of spending is adequate is a	24	come in with very good family background and still not
25	difficult question to answer. I think what one needs	25	end up with a high level of achievement.

1	to look at more is outcomes for the state.	1	When we look at a school, a high performing
2	I think California's best performing schools	2	school, we want to take account of the demographics.
3	actually are performing at a very good level of	3	When I say a high performing school, I don't mean one
4	achievement and that suggests that the amount of money	4	with high test scores. You could have a high
5	is, in fact, adequate when a school is managed very	5	performing school that actually has relatively average
6	well. It is simply not people who have this notion	6	scores if it started off with enough demographics.
7	that there is a level of per-pupil spending that is	7	Q Let me see if I understand that correctly.
8	adequate and that is going to work. It is probably	8	To evaluate whether per-pupil spending in the
9	just not the right way to think about it.	9	state is sufficient, one would want to look at the
10	Instead, I would say given the fact that	10	value added in the schools with the highest value
11	there is that the incentives for student	11	added to make that determination?
12	performance have not been very strong in California in	12	A Yes.
13	the past, it might be that the level of spending is	13	Q And that would be sufficient?
14	now about right, given the way the incentives are.	14	MS. DAVIS: Vague and ambiguous.
15	I would not be surprised that if California	15	THE WITNESS: There are many things you try
16	were to continue the accountability incentives and it	16	to look at to try to make that determination. I am
17	were to allow somewhat more local control, that school	17	not the person who is actually a big believer in going
18	spending would rise in the state. The things move	18	down this path and saying I am going to find an amount
19	together. They don't you can't just jack up	19	of money and it is going to be adequate. I don't
20	spending and expect something to happen while leaving	20	think that is the way school spending decisions get
21	everything else the same.	21	made, anyway.
22	Whether spending is effective or not depends	22	BY MS. LHAMON:
23	also on the incentives, so how the state is monitoring	23	Q I appreciate that. I am probably being
24	performance, whether the state is monitoring	24	unfair.
25	performance, whether there are local incentives to	25	You used the phrase "adequate." When I ask

55 (Pages 214 to 217)

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ļ	1	lot since 1970 and there are costs associated with	1	A It appears not, based on student performance.
ļ	2	those changes and standards.	2	Q You are distinguishing aspirational goals as
ļ	3	BY MS. LHAMON:	3	set out in state standards
ļ	4	Q These are particularly for	4	A A state can say it would like every student
ļ	5	Have standards for educating non-disabled	5	to learn trigonometry, geometry and precalculus, but
ļ	6	children also changed in a way that has increased	6	that is just a goal. If none of the schools are
ļ	7	cost?	7	implementing that or very few are, we should see costs
ļ	8	A Standards have changed. Since student	8	incurred that look like what they are implementing and
ļ	9	performance has not changed at all for the other	9	not what they are thinking about implementing.
ļ	10	students, I don't know that we can say that. We have	10	Q But, you testified earlier that the standards
ļ	11	attempted to raise the standards especially for the	11	for educating disabled students have changed since
ļ	12	inputs going into other student performance, but	12	1970. Is it your view that, in fact, disabled
ļ	13	student performance in math and science and reading	13	students are learning more in terms of performance, so
ļ	14	has not changed measurably since 1970 in the United	14	it does cost more to educate them?
ļ	15	States. It is not sensible to say it should cost more	15	A We are treating disabled students in a way
ļ	16	to raise standards in theory even if they are not	16	We are educating them in a way that is very
ļ	17	being raised in practice.	17	different and is undoubtedly more expensive. Whether
ļ	18	Q I got lost in there.	18	or not they are learning more from that method of
ļ	19	When you say it is not sensible to say that	19	education is actually somewhat difficult to test. If
ļ	20	it costs more to raise standards in theory if not	20	they are tested, they are not tested using traditional
ļ	21	raised in practice, does that mean that the standards	21	tools. It is very difficult to judge exactly how much
ļ	22	have not been raised in practice since 1970 across the	22	they are learning.
ļ	23	United States for education of non-disabled students?	23	Also, what we consider to be disabled
	24	A It appears that they have not. I think if	24	students has changed a lot in the United States over
ļ	25	you would just look at the letter of the law, you	25	this period of time. Learning disabilities have

	Page 222		Page 224
1	become a much wider category of student classification	1	mentally put those students back in their residential
2	than they were in 1970. Many of these things have	2	districts or you have to leave out those districts in
3	been changing over time.	3	some way, because it is just not comparable to other
4	I would say that most of the changes that	4	states.
5	have occurred would have led to cost increases in most	5	So, when we try to make a comparable to other
6	schools. Most of the individual education programs	6	states, California has a relatively equal level of
7	that are now recommended for students are involved	7	spending compared to other states. It is only if you
8	types of activities that are costly and that would not	8	don't reallocate those students back to their
9	have occurred in 1970.	9	districts that you see there is some very, very high
10	Q I have a technical question about the report.	10	spending districts in California that seem very
11	On Page 4, you say in Section 3.2, the second sentence	11	unusual.
12	of the first bullet, "California schools have among	12	The reason why I did not do
13	the most equal spending in the United States."	13	On Page 25, I could have taken those
14	A Yes.	14	districts out entirely and California would then have
15	Q And then on Page 25, at the top, in the first	15	been very close to the bottom and physically would be
16	line, you refer to California's high level of spending	16	much lower on this graph. It would be down toward the
17	in equality.	17	bottom. I could have tried to reallocate those
18	I would like to understand how those two	18	children back to their residential school districts.
19	sentences work together.	19	The only reason I didn't do that, I don't
20	A Okay.	20	really like to make graphs that are highly
21	California has an unusual system of spending	21	nontransparent to someone else. I would have had to
22	money on students getting special education. Some of	22	spend a few pages saying this is how I reallocated the
23	the students are allocated to special education	23	students and I don't do this for any other state. I
24	districts. These districts focus exclusively on	24	would have been creating a graph harder for anyone to
25	students with relatively very serious disabilities.	25	recreate. This graph would be relatively easy to

	Page 226		Page 228
	rage 220		rage 226
1	you didn't explain that there is this anomaly of the	1	understand the details of what happened in the
2	special education districts that throws out of whack	2	California state legislature.
3	the quality of spending?	3	Q How about the citation that says Silva and
4	A I think under Section 3.2, I am trying to	4	Sonstelie paper?
5	talk about the role that a state can play. So, I was	5	A The paper by Favio Silva, it is not actually
6	trying to focus on things that I think the state can	6	about the connection between Proposition 13 and
7	do and noting that California schools are among the	7	Serrano per se. It is about whether California school
8	most equal spending was not the main focus of this	8	spending declined following Serrano and whether it was
9	particular section. It was a note on the side so that	9	Serrano that caused this school spending.
10	people reading along would understand that.	10	I think the paper or the evidence in that
11	Q Thank you.	11	paper, although straightforward, is very reasonable.
12	Turn to Page 36, the final page of the	12	They do what you would expect a good analyst to do.
13	report.	13	There is no perfect way to know what countereffects
14	At the top of the second paragraph, it	14	there would have been, but I think they do a perfectly
15	states: "It has been shown to be a prime cause of	15	sensible thing.
16	Proposition 13."	16	Q I should have asked, you have a cite that
17	There is no unanimity of opinion about that	17	runs at the end of that paragraph. Which of those
18	view, is there?	18	cites support the opinion that Serrano has been shown
19	A Well, I don't know whether there is unanimity	19	to be a prime cause of Proposition 13?
20	of opinion about that. I know that among the experts	20	A The paper by William Fischel, Did Serrano
21	with whom I deal on school finance, there is a	21	Cause Proposition 13 in the National Tax Journal and
22	widespread agreement on that. However, I have no	22	How Serrano Caused Proposition 13. He has done more
23	doubt that like so many other things in education,	23	work on this. I think there are many other people who
24	there is controversy on all kinds of things.	24	have done work on property tax limitations generally
25	There is probably not unanimity out there in	25	who believe that the two of them are connected.

1 the world. I have not encountered anyone who says

there is research and who disagrees on that 2

3 proposition recently, although I have no doubt there 4 is someone out there like that.

5 O Have you encountered anyone out there that 6 seriously disagrees with you?

7 A No. I have not encountered anyone who

8 actually made an argument that disagrees with that

9 view. I am aware that there are probably people who

10 don't, but I don't know whether they actually have an

alternative argument. If they have one, I have not 11

- heard it articulated. 12 13
 - Q Thank you.

Have you evaluated the quality of the

research used in the citations you listed on Page 36 15

- that support the view that it is shown to be a prime 16
- 17 cause of Proposition 13? 18
 - A Yes.

14

19 Q What is your view of the quality of that 20 research?

A Well, most of it is by William Fischel, who 21 22 is at Dartmouth. I think he is a savvy political

- 23 analyst and has a very good understanding of
- California politics in the 1970s, so I think it is 24
- 25 high quality research. I think he really does

- 1 For instance, I didn't cite it here, because 2 I think this is the best work on this question, but
- 3 there is work by a man named David Figlio at the
- 4 University of Florida who has also looked at the

5 connection of school finance and property tax

6 limitation laws. He has looked across the United

- 7 States in general. Not just in California.
- 8 Q There is also not unanimity of opinion about 9 your statement on the same page that Serrano has been 10 shown to be a prime cause of low per-pupil spending in 11 California?
- 12 A I do not know of any economist who does not 13 think that, actually. I am not aware. I think many
- economists who disagree on many other things, all 14
- agree on that point. I am not aware of any 15
- 16 disagreement.

Q Do you know that there is a paper that 17 18 suggests that had California moved from a foundation

- system to a peer local system, total expenditures 19
- would have decreased on the level of 10 percent? 20

21 A First of all, actually I don't think they are

- 22 contradicting what I just said. California was not
- 23 moving from its foundation system to a system of peer
- local finance. I think the question is whether moving 24
- 25 from a system it had to a system in Serrano II

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decreased school spending. Many people think that is 1 the most effective state role in public education? 1 2 2 MS. DAVIS: Her view? true. 3 3 Frankly, I think that it is important to THE WITNESS: In Section 3.2, I say three 4 distinguish between economists who do empirical work 4 things about the effective role the state can play. 5 5 and economists who purely theorize and come to One is about ensuring that schools have relatively 6 theories of what happened. These are theorists and 6 equal level of resources. Making sure they use them 7 7 they are not involved in creating empirical evidence. efficiently. Providing resources and monitoring their 8 I think the way we tend to use work like this 8 performance and the third is providing information to 9 in economics is they propose hypotheses or propose 9 schools. 10 10 theories that you want to test with data. So, that is What is the basis of that view? a theory that I would want to test with some data. 11 11 Well, I think it is a few different things. 12 When you give. I think opinions to a state 12 One is, I am not trying to go beyond what I think 13 about policy, it is better if it is based on evidence. 13 states actually are attempting to do. I am also 14 If there is absolutely no data, no evidence, maybe you 14 thinking about what a state is actually capable of have to rely entirely on theory. In the case of 15 15 implementing if it tries hard. school finance, we have a fair amount of evidence. It 16 So, I think the state can try to ensure that 16 17 is better to rely on evidence. 17 schools have relatively equal level of per-pupil Q So, that is why you didn't refer to this spending and I think states also can monitor 18 18 theory in the paper, because it is theoretical and not performance reasonably effectively. I think states 19 19 20 based on evidence? 20 can provide schools with information that helps them 21 21 A It is also not about the Serrano system. improve achievement. 22 They also have some other assumptions that do not 22 So. I think it is a combination of what 23 23 particularly fit California well. For instance, they states want to do and what states can do and the 24 treat California school finance system as though it intersection of those two things is what I would view 24 were financed by an income tax. It is not financed by 25 25 is the most effective role states can play.

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Page 231

an income tax. It has never been financed by an 1 BY MS. LHAMON: 1 2 Q How do you go about determining what it is 2 income tax. There is no income tax finance of local 3 public schools in California and never has been. 3 the state is trying to do? 4 Therefore, extrapolating from a paper about 4 A I think we try and really infer what a state 5 income taxes to a state that really had a local 5 wants to do from its own legislation. States usually property tax system is always a big extrapolation and 6 6 state their goals for what they want to do at numerous 7 7 it is not one that I would use if I were trying to points in time in their legislation. 8 make recommendations to a state, because it is just 8 Typically a state's education provisions 9 too much of a leap of faith. 9 start off with some paragraphs about this state wishes 10 Q That is very helpful. to educate children to be good citizens and to 10 11 You do respect the quality of Fernandez and participate fully in society and so forth. They are 11 Robertson's work, don't you? usually a set of things at the beginning of the 12 12 13 A They are both very good theorists. There are 13 state's law and from that, we try to infer what the 14 different types of skills and economics is another 14 states want to do. thing. Theorists have a very important role to play. 15 15 Also, people like myself talk to state They just do not replace empirical information. 16 16 legislators a fair amount and try to find out what Frankly, I didn't think they gave the best their goals are. We try and take a state's goals from 17 17 18 policy guidance. There is a big difference between 18 people who are actually state policymakers. We don't 19 somebody who has been looking at real data and 19 try to make state's goals for them. I am not a state 20 understands what really happened and someone who gets 20 representative. 21 the hypothesis of what might happen in a world that is 21 Q How would you go about determining what a somewhat different, where assumptions are different 22 22 state is capable of doing? 23 than what was actually in place on the ground. 23 A I think that is more a question of, does the 24 Q Thank you. 24 evidence show that a state can do something if it 25 On Page 4, what is the basis for your view of 25 implements a policy effectively. I think we know that

	Page 234		Page 236
1	states have a certain capability of achieving an equal	1	some judgments. Evidence from one state is usually
2	level of resources. I think we have a clear sense	2	quite useful for understanding other states.
3	that states can monitor performance on a variety of	3	I think one of the biggest differences among
4	grounds. We know that states have implemented	4	states is that some states have different goals than
5	accountability systems.	5	other states do. States are not allowed to intervene
6	Again, these are things that when the state	6	in their local districts to which other states do.
7	can actually have some effect. It is not that it is	7	Q The description of the most effective role a
8	going to be perfect. It is not that there are no	8	state can play in Section 3.2 of your report, is that
9	costs to doing some of these things, but these are	9	specifically California or are the points that you
10	things we know the state can do. But, largely this	10	listed universal truisms for any state?
11	has to be based on evidence. Just a view of the	11	A I would say the answer to that question is
12	evidence on whether it looks like the state has been	12	someplace in between your two extremes. I wrote these
13	effective. At least some states have been effective	13	paragraphs specifically with California in mind, so
14	in trying to implement these policies.	14	there are a number of things that refer specifically
15	Q When you say there is no evidence that states	15	to California way of doing things.
16	are capable of achieving completely equal levels of	16	If I had attempted to write them in a way
17	resources without negative consequences, are you	17	that was fully general and would apply equally to
18	referring to the kind of negative consequences in	18	other states, I probably would have written them
19	California with equalized funding?	19	slightly differently. But, it is the case that most
20	A Right. So, in California, we think there	20	of these points do apply, at least somewhat, to all
21	have been some negative consequences. The problem is,	21	states. It is just that in some states, you would
22	if you want to have absolutely complete equality,	22	probably not say curriculum framework or something
23	there is no way to do that without removing all local	23	like that. That would not be something that applies
24	discretion. Once you remove that, there is some	24	well in that state.
25	negative consequences. You may want to get very close	25	It is really the use of specific words that

to that boundary without going all the way there. are geared toward California's way of doing things 1 1 2 So, that is why I said you can achieve a that I wouldn't want to just change the name of the 2 3 relatively equal level of resources, but you may not 3 state. I'd probably want to change some of the other 4 want to push that 100 percent, because that is when 4 things. 5 some of the negative consequences set in. 5 O Is there research that supports the view of 6 Q I take it from your understanding of the 6 what the most effective role California could play in 7 7 basis for the description of the state role in public education? 8 Section 3.2 of your report, that that basis is 8 A I think this is based on my judgment of a lot of evidence rather than my having written a specific 9 specific to the states that we are talking about, by 9 10 which I mean that one has to look at California to 10 study saying let me figure out what the effective role figure out what the most effective role California can California can play. It is really a judgment based on 11 11 play, one would have to look at Texas to find out what a lot of evidence. 12 12 Q What are the categories of evidence you are 13 the most effective role Texas would play? 13 14 A Different states have different 14 talking about? 15 constitutions, some of which set out different goals 15 A It is evidence on the effective inputs on for the state. Some of which impose different student performance, evidence on the effect of school 16 16 constraints on what the state can do. In addition, spending on students' performance, evidence on the 17 17 18 states have very different circumstances 18 effect of performance incentives on what schools do demographically and socioeconomically. You have to 19 and how they use their resources. Evidence on the 19 take all those things into account. effectiveness of having curriculum frameworks or other 20 20 21 types of information interventions in a situation 21 However, I think that there is a lot of 22 generality or a lot of general truths about what 22 where there is also performance monitoring. 23 states can and cannot do effectively. I don't think 23 It is evidence from just a wide variety of that part differs tremendously. You have to take 24 studies that someone like me uses to try and 24 account of the circumstances of the state and make understand the whole field of economics of education. 25 25

Page 238 So, I would particularly focus on studies that are related to the effectiveness of school inputs in school spending, the effectiveness of accountability systems and what happens when you implement a curriculum framework type of system coincidentally with an accountability system and finally studies of the effectiveness of school finance equalization legislation. Those are the types of studies that I am thinking about when I make these types of judgments. Q Thank you. I think we are at a good stopping point for the day. // // // // // // // // // // // // //	Page 240 1 2 3 4 I, the undersigned, a Certified Shorthand 5 Reporter of the State of California, do hereby 6 certify: 7 That the foregoing proceedings were taken 8 before me at the time and place herein set forth; that 9 any witnesses in the foregoing proceedings, prior to 10 testifying, were placed under oath; that a verbatim 11 record of the proceedings was made by me using machine 12 shorthand which was thereafter transcribed under my 13 direction; further, that the foregoing is an accurate 14 transcription thereof. 15 I further certify that I am neither 16 financially interested in the action nor a relative or 19 subscribed my name. 20
Page 239 1 2 3 4 5 6 7 8 9 I, CAROLINE MINTER-HOXBY, do hereby declare 10 under penalty of perjury that I have read the 11 foregoing transcript; that I have made any corrections 12 as appear noted, in ink, initialed by me; that my 13 testimony as contained herein, as corrected, is true 14 and correct. 15 EXECUTED thisday of	Page 241 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25