IN THE SUPERIOR COURT OF T	HE STATE OF CALIFORNIA
IN AND FOR THE COUNTY	OF SAN FRANCISCO
UNLIMITED JUR	ISDICTION
000-	-
ELIEZER WILLIAMS, a minor,)
by SWEETIE WILLIAMS, his)
guardian ad litem, et al.,)
each individually and on)
behalf of all others)
similarly situated,)
)
Plaintiffs,)
)
vs.) Case No. 312236
)
STATE OF CALIFORNIA;)
DELAINE EASTIN, State)
Superintendent of Public)
Instruction; STATE)
DEPARTMENT OF EDUCATION;)
STATE BOARD OF EDUCATION,)
)
Defendants.)
)

DEPOSITION OF LINDA DARLING-HAMMOND

Tuesday, March 25, 2003 Volume II (Pages 193 - 389)

Reported by: QUYEN N. DO, CSR 12447 (#03-331396)

Page 194 Page 196 1 --000---INDEX 1 2 INDEX OF EXAMINATIONS 2 LAW OFFICES OF O'MELVENY & MEYERS LLP, 3 Page 3 400 South Hope Street, Los Angeles, California EXAMINATION BY MS. KOURY 197 4 4 90071-2899, represented by VANESSA KOURY, Attorney at 5 AFTERNOON SESSION 197 5 Law, appeared as counsel on behalf of Defendant State of EXAMINATION BY MS. KOURY (Resumed) 284 6 6 California. 7 7 8 LAW OFFICES OF OLSON, HAGEL & FISHBURN LLP, --000--INDEX OF EXHIBITS 9 8 555 Capitol Mall, Suite 1425, Sacramento, California 10 DEFENDANTS' No. Description Page 9 95814-4602, represented by N. EUGENE HILL, Attorney at 17 115-page document entitled "Access to 11 Law, appeared as counsel on behalf of Defendant State 10 Quality Teaching: An Analysis of Inequality 11 Board of Education. in California's Public Schools" 198 12 12 LAW OFFICES OF LOZANO SMITH, 20 Ragsdale Drive, 13 18 85-page document entitled "Learning ... Teaching ... Leading ..." 278 13 Suite 201, Monterey, California 93940-5758, represented 14 by JUDD L. JORDAN, Attorney at Law, appeared as counsel 14 19 Two-page document bearing the Bates stamp 15 on behalf of Intervenors LAUSD. PLTF-XP-LDH 4325 through 4326, with a fax 15 LAW OFFICES OF PUBLIC ADVOCATES, INC., 16 cover sheet addressed to Professor 17 1535 Mission Street, San Francisco, California 94103, 16 Darling-Hammond from Anne Padilla of the CCTC 306 18 represented by JOHN AFFELDT, Attorney at Law, appeared 17 19 as counsel on behalf of Plaintiffs Eliezer Williams, et 18 --000---19 20 al. 20 INSTRUCTION(S) NOT TO ANSWER BY MR. AFFELDT 21 LAW OFFICES OF PUBLIC ADVOCATES, INC., 21 Page Line 22 1535 Mission Street, San Francisco, California 94103, 22 204 6 represented by JENNY PEARLMAN, Attorney at Law, appeared 23 23 as counsel on behalf of Plaintiffs Eliezer Williams, et 24 24 --000--25 al. 25 Page 195 Page 197 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA OFFICE OF THE ATTORNEY GENERAL, 1300 I Street, 1 IN AND FOR THE COUNTY OF SAN FRANCISCO 2 2 Suite 1101, P.O. Box 944255, Sacramento, California, 3 UNLIMITED JURISDICTION 3 94244-2550, represented by KARA READ-SPANGLER, Attorney --000--4 ELIEZER WILLIAMS, a minor, 5 4 at Law, appeared as counsel on behalf of Defendants by SWEETIE WILLIAMS, his 5 ----guardian ad litem, et al., each individually and on EXAMINATION BY MS. KOURY 6 7 behalf of all others 7 MS. KOURY: Q. Good morning. similarly situated. 8 A. Good morning. 8) Plaintiffs,) 9 Q. Just want to remind you that you're still 9 10 under oath. Case No. 312236 VS. 10 11 A. Yes. STATE OF CALIFORNIA; 12 Q. Do you understand that? DELAINE EASTIN, State 11 Superintendent of Public 13 And yesterday we were discussing in part the Instruction: STATE 12 14 CSR database that you received from the RAND DEPARTMENT OF EDUCATION; 15 Corporation; is that correct? 13 STATE BOARD OF EDUCATION, 16 A. Mm-hm, yes. 14 Defendants. 17 Q. Why did you look at the question of the 15 18 distribution of teacher qualifications? Let me rephrase 16 19 that. BE IT REMEMBERED that, pursuant to Notice, and 17 20 Why did you use the database to look at the on Tuesday, March 25, 2003, commencing at 9:38 a.m. 18 thereof, at LAW OFFICES OF O'MELVENY & MEYERS LLP, 275 19 21 questions of the distribution of teacher qualifications? 20 Battery Street, 26th Floor, San Francisco, California, 22 A. That database had in it some questions on before me, QUYEN N. DO, a Certified Shorthand Reporter, 21 22 personally appeared 23 teacher preparation, the kinds of courses teachers had LÎNDA DARLING-HAMMOND 23 24 taken and the kinds of credentials they held, which are 24 called as a witness by the Defendants, who, having been 25 not present in very many databases. So it was useful 25 first duly sworn, was examined and testified as follows:

1	Page 198	1	Page 200
1	for that purpose.	1	before?
2	Q. And why did you want to look at that particular issue?	2	A. Yes.
3	1	3	Q. And how many times?
4	A. That's really at the heart of my paper, the	4	A. Twice. Three times.
5	question of what kind of preparation teachers have who teach different groups of students.	5	Q. In any of those instances, were you deposed as
6 7	Q. I mark as Exhibit 17 to your deposition	6	an expert witness?
7		7	A. Yes.
8 9	transcript your expert report titled "Access to Quality Teachers: An Analysis of Inequality in California's	8	Q. How many?
9 10	Public Schools."	9 10	A. Once in New York State for a case brought by
10	(Whereupon, Deposition Exhibit 17	10	the Campaign for Fiscal Equity and once in a case brought by META, which stands for Multi-cultural
12	was marked for identification.)	12	Education and Training Associates, I think, in Los
12	MS. KOURY: Q. Could you tell me where in	12	Angeles.
13	your report you've used or cited to the conclusions or	13	Q. What was the nature of the third?
15	tables or otherwise that John Luczak conducted for you	14	A. A personal case.
16	based on the CSR database?	16	Q. With respect to the New York State case, I
17	A. Well, I believe all of the tables that mention	17	take it were you a hired expert for that case?
18	the CSR database were probably among those that John did	18	A. Yes.
19	the analyses for. And on page 38 there are Tables 2	19	Q. And were you hired by Plaintiffs?
20	and 3 use the CSR database.	20	A. Yes.
20	Q. And it's your understanding that these tables	20	Q. What was the nature of that case, just
22	were based on John Luczak's cross-tabulations of the	$\frac{21}{22}$	briefly?
23	database, the CSR database?	23	A. It was a case looking at, again, access to
24	A. I believe so, yes. Table 5 on page 44.	24	resources for students in New York State.
25	Q. That would also be a product of John Luczak's	25	Q. And did you charge a rate in that case for
	Page 100		Page 201
1	Page 199	1	Page 201
1	cross-tabulations of the CSR database?	1	your deposition testimony?
2	cross-tabulations of the CSR database? A. Yes. I'm all of them that I'm Table 8	1 2 3	your deposition testimony? A. I charged I charged for some of the
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	Page 202		Page 204
1	Q. With respect to the other case that you were	1	identity was confidential or not.
2	deposed, in the META case	2	MR. AFFELDT: To the extent that you know that
3	A. Mm-hm.	3	your identity was revealed to the other side, you can
4	Q. I take it you were hired by Plaintiffs in that	4	identify which cases those were. To the extent your
5	case as well?	5	work with the individual attorneys is not known by the
6	A. Yes.	6	other side or the public, then I would instruct you not
7	Q. Could you briefly describe the nature of that	7	to reveal those
8	case?	8	THE WITNESS: Then I
9	A. That case had to do with the unequal	9	MR. AFFELDT: comments.
10	distribution of qualified teachers to students within	10	THE WITNESS: have nothing to reveal then.
11	Los Angeles.	11	MS. READ-SPANGLER: I think that's too broad a
12	Q. Did you produce a written report in that case?	12	limitation. We had this discussion last week. If the
12	A. No.	12	case isn't ongoing, I don't think the confidentiality
13	Q. Did you testify in that case?	14	applies.
15	A. No. Case was settled.	15	MR. AFFELDT: I don't know the answer to that.
16	Q. Were you paid for your deposition testimony?	16	MS. KOURY: Q. Are you going to follow your
17	A. I don't recall. I don't think so.	17	lawyer's instruction?
18	Q. Do you recall whether you were paid for any	18	A. Yes.
19	work that you did in that case?	19	Q. If you would please just review Exhibit 17,
20	A. I don't believe I was.	20	which is a copy of your expert report in this case, and
20	Q. Do you recall Plaintiff's attorney?	20	tell me whether it contains a fair summary of all your
21	A. Peter Roos was the person who was my contact.	21	opinions that you intend to offer at trial.
22	Q. Do you know which attorneys were representing	22	A. I would guess so.
23 24	the state	23 24	Q. What do you mean by that?
24 25	A. No.	24 25	A. I don't know what opinions I might be asked
23	A. NO.	23	A. I don't know what opinions I might be asked
	Page 203		Page 205
	Page 203		Page 205
1	Q or the city?	1	to you know, what questions I might be asked to
2	Q or the city? And have you ever been hired as a	2	to you know, what questions I might be asked to respond to, but it certainly does represent the bulk of
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25

But to the extent it wasn't confidential, she's free to

answer that unless you're instructing her not to on a

broad basis without figuring out which cases her

that you relied on in forming your opinions that you 21 you don't need to reveal any confidential information.

- 22 intend to offer at trial in this case? 23
 - A. I'm not sure I understand your question.
- 24 Q. In terms of producing documents which relate

25 to the opinions that you plan on making at trial, what

	Page 206		Page 208
1	afforts did you make to identify and produce these	1	hiring.
1 2	efforts did you make to identify and produce those documents?	2	Q. I'm not sure that you can we go off the
3	A. You're talking about when we were doing	3	record for a quick second?
4	document production at the end, sending	4	(Discussion off the record.)
5	Q. Yes.	5	MS. KOURY: Could you repeat her last answer?
6	A. What I did was all E-mail correspondence that	6	(Record read.)
7	I had available in my computer that pertained to the	7	MS. KOURY: Q. I'm not sure if you if you
8	trial, I put in a folder, and any documents that were	8	understood the question that I was asking. Perhaps that
9	cited in the report were sent electronically or in hard	9	answer is to the question I'm asking, but let me repeat
10	copy.	10	it.
11	Q. Anything else?	11	My question was whether you agree that many
12	A. That's basically it. Oh, any any	12	states are currently confronted with an undersupply of
13	additional materials that were sent to me by the legal	13	credentialed instructors or teachers within their K
14	counsel in the case I sent back so that they could pass	14	through 12 public school system.
15	them back on.	15	A. Mm-hm.
16	Q. And which attorney was your contact in	16	MR. AFFELDT: Objection. Asked and answered.
17	regards to this document production?	17	MS. KOURY: Q. Was that your answer to that
18	A. John Affeldt.	18	question?
19	Q. Do you know whether can we go off for a	19	A. Yes.
20	second?	20	Q. So, in your opinion, how does the fact that
21	(Discussion off the record.)	21	more credentialed teachers there are more
22	MS. KOURY: Q. Do you know whether your	22	credentialed nationally in most states than are teaching
23	research assistant, John Luczak, produced any documents?	23	show that there's not an undersupply of teachers in the
24	A. I do not.	24	classrooms in many states?
25	Q. Did you make any efforts to coordinate with	25	A. "Undersupply" suggests there's an inadequate
	Page 207		Page 209
1	-	1	Ũ
1 2	him in terms of producing documents that you relied on		supply of individuals who are qualified for positions,
	-	1 2 3	supply of individuals who are qualified for positions, and I do think that the problem is an undersupply of
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	Page 210		Page 212
1		1	
1 2	virtually all states. Q. You stated that California is unusual with	$\frac{1}{2}$	Q. Are there any other states that you would rank in the bottom five in other words, the five worst
3	respect to proportion of uncredentialed teachers that	3	states in terms of having uncredentialed teachers
4	are teaching. Where would you rank California in terms	4	teaching in the classrooms?
5	of states?	5	A. Hawaii.
6	A. In terms of?	6	Q. Any others?
7	Q. Having proportions of uncredentialed teachers	7	A. Those are the ones that I have seen recent
8	teaching.	8	enough data about and recall.
9	A. It would be one of the two or three worst.	9	Q. And you said you've seen a few studies
10	Perhaps it is the worst in absolute numbers as well as	10	recently. Could you identify those studies?
11	proportions.	11	MR. AFFELDT: Objection to the extent it
12	Q. How are you defining "uncredentialed"?	12	mischaracterizes her testimony, which talked about data
13	A. I, in my report, define I use the term	13	as opposed to studies.
14	"underqualified" in several places as well as	14	MS. KOURY: I think her actual term was a few
15	"uncredentialed." And I define it as individuals who do	15	studies, but, nevertheless.
16	not have a preliminary or clear credential, which is the	16	THE WITNESS: There have been rankings of
17	credential that the state grants to beginning or veteran	17	states produced by or listings of the state data in
18	teachers who have met all of the standard standards.	18	this regard produced by the National Center for
19	Q. In responding to my previous question about	19	Education Statistics, using, among other databases, the
20	where California ranks in terms of having uncredentialed	20	Schools and Staffing survey database as one. There are
21	teachers teaching, were you defining uncredentialed to	21	also data that I periodically see that come from the
22	mean not having a preliminary or clear credential or not	22	National Association of State Directors of Teacher
23	having met all the standard standards?	23	Education and Certification, which has the acronym
24	A. In other states?	24	N-A-S-D-T-E-C, NASDTEC.
25	Q. In other states.	25	MS. KOURY: Q. What year were these studies?
	D 211		Dec. 212
	Page 211		Page 213
1	A. Yeah. Terminology varies from state to state,	1	A. These are data are produced kind of
2	but I would use that to mean teachers not having the	2	regularly, so I've seen data that have come out over
3	standard standard credentialing that is, the regular	3	various at various points over the last five or six
4	standard credential that the state issues to beginners	4	years.
5	or experienced teachers. I make that a distinction	5	Q. What states would you rank as the top five
6 7	because fully prepared beginners in most states receive a credential that is called "preliminary" or	6	states that are that have the best proportion or that
8	"probationary" while they complete a couple of years of	7 8	have the highest number of credentialed teachers
0 9	service.	8 9	teaching in their classes? MR. AFFELDT: Objection. Vague.
10	Q. What did you mean by "in absolute numbers"?	10	Are asking for proportion or absolute numbers?
11	A. The absolute number of credentials,	11	MS. KOURY: Q. Why don't you give me both.
12	substandard or less than standard credentials issued.	12	We can start with absolute numbers.
13	Q. And what did you mean when you said "as well	13	A. I don't carry all of these around in my head,
14	as proportions"?	14	so I feel uncomfortable trying to list rankings that,
15	A. As a proportion. That number as a proportion	15	you know, I haven't studied recently.
16			Q. Do you have an opinion as to whether there are
. ~	of all teachers.	16	
17		16 17	
17 18	of all teachers. Q. What other you mentioned California would be either the second or third worst state in this		five states that you would point to and say, These five
	Q. What other you mentioned California would	17	
18	Q. What other you mentioned California would be either the second or third worst state in this	17 18	five states that you would point to and say, These five states are doing a good job at getting credentialed
18 19	Q. What other you mentioned California would be either the second or third worst state in this regard. What other states are within those three?	17 18 19	five states that you would point to and say, These five states are doing a good job at getting credentialed teachers in their classrooms and have credentialed
18 19 20	Q. What other you mentioned California would be either the second or third worst state in this regard. What other states are within those three?A. I said it would be among the two or three	17 18 19 20	five states that you would point to and say, These five states are doing a good job at getting credentialed teachers in their classrooms and have credentialed teachers in their classrooms?
18 19 20 21	Q. What other you mentioned California would be either the second or third worst state in this regard. What other states are within those three?A. I said it would be among the two or three worst states. Typically, in the last few studies I've	17 18 19 20 21	five states that you would point to and say, These five states are doing a good job at getting credentialed teachers in their classrooms and have credentialed teachers in their classrooms? A. I have an opinion about the credentialing

- 24 has traditionally had very high proportions. So those
- 25 would be contenders.

classrooms, but I would have to really look at data tobe sure that they were in the top, you know, five in

6 (Pages 210 to 213)

	Page 214		Page 216
$ \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\\21\\22\\\end{array} $	 some ranking system. Q. I just want to make sure I'm asking the right question, and you're giving me the answer to the question I'm asking. I'm not asking whether you've reviewed the credentialing requirements of other states, at least not yet. Do you have an opinion as to whether there are a few states out there that have a higher number of credentialed teachers in their classrooms? And when I say higher, meaning they're doing a good job of having credentialed teachers in their classrooms. A. Yes, I do have some views about states that are doing a good job of getting and I'm going to use the term here well-qualified teachers in their classrooms as well as credentialed because the credential standards of different states and the terminologies they use do vary. And so my opinion is based on knowledge of that as well. Q. What states are those? A. I think those states would include and here I'm using to define the states, those that have a credentialing system that has high standards for the 	$ \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\\21\\22\\21\\22\\21\\22\\22\\22\\22\\22\\22\\$	 programs. They had a process of evaluating requests for less than fully credentialed teachers that was rigorous and included encouraging and assisting districts to find credentialed teachers. Q. Anything else? A. That's what I'm remembering at this time. Q. What about Minnesota; did you review the efforts that they made to get credentialed teachers in their classrooms or have you reviewed? A. Yes. And I did refer in my report to some of the ways by which they manage and monitor the credentialing status of teachers. Q. Is there anything aside from what's in your report that you would identify as efforts by Minnesota to get credentialed teachers in their classrooms? A. I think probably not mentioned in my report is the fact that, like Wisconsin, they do have a substantial number of teacher education programs in the state that are supported to in their efforts to
22	credentialing system that has high standards for the	22	Q. Have you reviewed Connecticut's efforts to
23	credential and does a good job of getting teachers who	23	obtain or get credentialed teachers teaching in their
24	meet those standards into a large proportion of	24	classrooms?
25	classrooms or close to all classrooms. Those would	25	A. Yes.

1 include states like Wisconsin, traditionally Minnesota, 1 2 2 Connecticut. 3 3 I'm trying to think if there are others I 4 would -- those would certainly be among the states that 4 5 I would -- would point to. These are states that, even 5 when they issue a temporary credential, have a fairly 6 6 7 7 high standard for even that kind of credential as well 8 as a very high standard for the standard credential. 8 9 Q. I'm sorry. Did you say anything after 9 10 Connecticut, any other states after Connecticut? 10 11 A. I don't think so. 11 12 Is that the last one I mentioned? 12 13 THE REPORTER: Yes. 13 14 MS. KOURY: Q. Have you reviewed what efforts 14 Wisconsin makes in terms of trying to solicit and get 15 15 credentialed or qualified teachers in their classrooms? 16 16 A. Not in the last couple of years, but a few 17 17 18 years ago I did. 18 19 Q. Meaning five years ago? 19 20 A. Yeah, probably about five years ago. 20 21 21 O. What were their efforts in that regard? 22 A. They have a substantial -- at that time, they 22 23 had a -- they have a substantial number of teacher 23 fields. 24 education programs in the state and had reasonable 24 25 supports for the production of teachers in those 25

Q. How recently?

A. Quite recently. In the last couple of years, I co-authored a report that looked at Connecticut's teacher education policy history over the last decade and a half.

Q. What efforts do you think -- or what efforts have Connecticut made in that regard?

A. Those are also detailed in my report and

- 9 summarized there and are in documents that were, I
- 10 think, passed on to you.
 - Q. Are there any efforts --

2 MR. AFFELDT: Wait. I think she was still answering.

MS. KOURY: Q. I'm sorry. Were you finished?

A. I was going to give a brief summary, but

- 6 suggest that it's partial. And those efforts included
- 7 increasing teacher salaries and equalizing salaries
- 18 across districts; raising standards for teacher
- education so that teachers were better prepared;
- 20 ensuring mentors for all beginning teachers; rigorously
- 21 enforcing credentialing standards; and creating
- subsidies for the preparation of teachers in shortage
 - $\frac{1}{2}$ Inclus.
- Q. Are there any other efforts that Connecticut
- has made that are not articulated in your report and

	Page 218		Page 220
$ \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} $	 that you have not now just testified to that you know of? A. The long report that I used that I cite in this report goes into more detail about a wider range of efforts that are summarized in my testimony a moment ago. Q. And I take it that for all the efforts that you articulated and that are addressed in your report for Wisconsin, Minnesota and Connecticut, do you have an opinion let me rephrase that. Do you have an opinion as to the effectiveness of Minnesota's efforts to get credentialed teachers in their classrooms? A. I'm not sure what you mean by, Do I have an opinion? Q. Sure. You stated that you've reviewed Minnesota's efforts to get credentialed teachers in their classrooms, and you articulated what those efforts were or are. Do you have an opinion as to whether or not those efforts are effective? A. Yes. Q. You think they are effective? A. Yeah. I think that, in general, they have been effective. Q. And with respect to your testimony about 	$ \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} $	 for the credential from time to time and in various ways. They have hired a have expanded the use of a both alternative various kinds of alternative certification statuses and temporary and emergency permits. They've hired large numbers of inexperienced and untrained teachers and have an extremely high attrition rate. Q. What about their efforts to get credentialed teachers in their classrooms; are you aware of any efforts in that regard? A. There have been moments where they have had some subsidies for preparing teachers, but I don't know the extent to which those have some of them have come and gone. I don't know which ones may have been continuous. Q. Any other efforts by Texas? A. Not that I can recall at this time. Q. With respect to your opinion that Texas is one of the worst states in terms of having uncredentialed teachers teaching English language learners? A. The studies I've seen from Texas suggest that there are large numbers of uncredentialed teachers
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\end{array} $	Page 219 Connecticut's efforts in getting credentialed teachers in their classrooms, do you think that those efforts have been effective? A. Yes, I do think they have been effective. Q. And the same question for Minnesota. Do you think that their efforts been have effective? A. You just asked me about Minnesota. Q. I'm sorry. I skipped Wisconsin. Wisconsin? A. Yeah. The efforts that I had reviewed at the time I had reviewed them had effective. I would have to revisit data to be sure they're still having the same outcomes. Q. Have you reviewed the efforts that Texas has made in order to deal with their shortage of credentialed teachers in classrooms? A. Not in great detail. Q. Do you know what efforts they've made in dealing	$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\end{array} $	Page 221 teaching English language learners. Q. Have you reviewed Louisiana's efforts to obtain credentialed teachers teaching in their classrooms? A. I have not. Q. So you don't have an opinion as to whether or not Louisiana's efforts have been effective in terms of trying to deal with their shortage of credentialed teachers? A. Well, if they were effective, they wouldn't have so many credentialed [sic] teachers, so I guess the my opinion would be that they haven't been very effective. I don't know what they've tried to do. Q. What about with Hawaii; have you reviewed Hawaii's efforts in terms of dealing with its shortage of credentialed teachers in classrooms? A. I'm aware of some of the policy history in Hawaii, but I have not studied that.

8 (Pages 218 to 221)

	Page 222		Page 224
$ \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. I do not use the word "shortage" or "undersupply." Q. Why is that? A. Because that suggests, in labor-market terms, that there is an inadequate number of individuals available to take certain kinds of jobs. In in fact, the case in in many instances seems to be that there is an adequate number of people available, but there are not for various reasons, they're either not hired when they are available or they are not willing to present themselves to particular districts at the wage levels or working conditions that pertain in those districts. Q. How do you define or how do you term the notion that there are a high number of uncredentialed teachers in classrooms? A. I think that would be a good way to say it. Q. Okay. Would you agree that there are a high number of uncredentialed teachers teaching in classes within certain subject areas or within certain subject areas or within certain subject areas or within certain subject areas? MR. AFFELDT: Objection. Vague as to what state we're talking about. MS. KOURY: We're talking nationally. THE WITNESS: Can you restate the question? 	$ \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 224 and in many states, in mathematics. Less so in science. Science has been a state a case where sometimes there's shortages in some subfields of science and other times there are not. And the measurement of credentials in science is particularly problematic, so it's hard to make a bald statement about it. Q. Would you agree that California's high number of credentialed uncredentialed teachers in those subject areas, in particular in math, is typical of the national numbers in terms of the national level of uncredentialed teachers in math classes? A. No. It's it's worse. Q. And in terms of math, how much worse is California than the national average? A. I would have to review actual statistics to see what the differentials are right now. Q. Is that something that you have reviewed in the past? A. Modi if you had to rank California with respect to shortages of or not having or having high numbers of uncredentialed teachers in math classes, how would you rank it in terms of the 50 other states or the other states or not a to the solution of the solution of
	Page 223		Page 225
1 2 3 4 5 6 7 8 9 10 11 12 13 14	MS. KOURY: Q. Sure. Would you agree that, speaking nationally, that there are higher numbers of uncredentialed teachers in certain subject areas? A. Yes. At various points in time in various places, there have been differentials by subject area in the numbers of uncredentialed teachers or undercredentialed. Q. For example, there's been higher numbers of uncredentialed teachers teaching special education; is that correct? A. Yes. That has often been the case in many places. Q. So California is typical of the national population in that regard?	1 2 3 4 5 6 7 8 9 10 11 12 13 14	 this) well below the average both in the proportion of teachers without credentials in mathematics and the proportion of teachers who had not completed a major in mathematics. Q. Would you agree that California currently is confronted with an undersupply of credentialed teachers within its K through 12 public school system? A. I would not necessarily agree with that. Q. And that is because of the term "undersupply"? A. Yes. Q. Based on your prior testimony about why you wouldn't use that term; is that correct? A. Right. Q. Would you agree that currently California is

population in that regard? 14 15 A. I would not say typical, because the extent to which it's the case is larger in California than in most 16 other places. There are states that have been able to 17 18 have adequate number of teachers for special-education students also. 19 20 Q. With respect to shortages -- I'm sorry. With respect to high numbers of uncredentialed 21 teachers teaching in math and science, has it been your 22 23 experience that, nationally speaking, there have been 24 higher numbers in those subject areas?

A. That would be the case, on average nationally

Q. Would you agree that currently California isfaced with a high number of uncredentialed teachers inits K through 12 public school system?

A. When you say "faced with," it sounds as though there are no choices, that that's the only way that the schools could manage themselves. But, in fact, there are -- one isn't really faced with large numbers of uncredentialed teachers if one chooses to hire uncredentialed teaches even when one might have the option to hire teachers who are credentialed.

Q. What is your opinion as to the cause of thehigh number of uncredentialed teachers in California?

	Page 226		Page 228
$ \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. Well, I go into that in great detail in my report. Q. Could you give me could you either point me exactly where in your report or give me a summary of your opinion? A. Yeah. Let me point to it so that we're all Starting on page 55 and going for about 20 pages are a set of factors that I point to that are reasons for the hiring of large numbers of underqualified teachers. That goes from page 55 through 71, and then continues with some additional discussion of class size reduction on page 72, which is another reason for the hiring of uncredentialed teachers. Q. Is there anywhere else in your report that that discusses your opinion with respect to the causes of California's high number of uncredentialed teachers in the California public school system? MR. AFFELDT: Objection. The report speaks for itself. I mean, it's over a hundred pages long. MS. KOURY: I'm well aware of that. Thank you. MR. AFFELDT: Do you want her to go through all of it? MS. KOURY: Q. Let's start on page 55. The first cause mentioned on page 55 is noncompetitive 	$ \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. With respect to the question that I am asking, What about California as a whole; do you think the beginning salaries for teachers as a whole are competitive? MR. AFFELDT: Objection. Vague and ambiguous. Competitive to what? MS. KOURY: Competitive compared to other states. THE WITNESS: The average salaries in beginning teachers' salaries in California now are more competitive with other states than they were several years ago because of some recent increases. But they are still, when adjusted for cost of living, not adequate not competitive particularly in the low-wage districts with what teachers would earn in other states or other districts. MS. KOURY: Q. Have you reviewed the state's efforts in terms of raising beginning teachers' salaries in the last couple years? A. I've been aware of some of those efforts, yes. Q. Are you aware of some of those efforts, yes. Q. What efforts in particular are you aware of? A. Well, there were are you talking about both
23	Thist cause mentioned on page 55 is noncompetitive	23	A. wen, there were are you tarking about both
	Page 227		Page 229
$ \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} $	 teacher salaries. Is that still your opinion? A. Yes. Q. Could you review the first paragraph and just let me know when you have? A. Okay. Q. Is that still your opinion today? A. Well, the general point made in No. 1, "Noncompetitive teacher salaries that are also substantially unequal across districts," is a point that I would say is still my opinion today. The actual figures on salaries will have changed with more recent data, but there are still districts that have noncompetitive salaries that are inadequate. Q. With respect to just beginning salaries, do you have an opinion as to whether or not California's beginning salaries for teachers is competitive? A. The point I make here and elsewhere is that the issue for the hiring of uncredentialed teachers in specific districts, those that have the high proportions, is the competitiveness of their specific teachers' salaries within their labor markets. Q. I'm asking you a different A. So so it's not relevant to make a judgment about California's salaries as a whole with respect to the question you're asking. 	$ \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 those questions when you say "what efforts" or the benefits question? Q. Let's start with benefits. (Cell phone rings.) MS. KOURY: Q. You were telling me about the state's efforts in terms of benefits. A. A couple of years ago, there was a piece of legislation that gave tax benefits to teachers as a sort of to reduce their tax responsibilities for state tax. So that would be one benefit that I'm aware of. Q. Any others? A. That's the first thing that comes to mind. Q. So as you sit here today, you don't you can't think of any other benefits that you've reviewed in terms of the state? A. Changes in I don't recall any at the moment other than that. Q. What about efforts with respect to raising salaries, beginning teachers? A. There was the bill a couple of years ago known as the O'Connell bill that raised created a minimum teacher salary and tried to give incentives to districts to meet that salary. Q. Any other efforts that you're aware of? A. I think that's the major one.

Page 230		Page 232
Q. Do you have an opinion as to whether the	1	report you discuss that.
tax-benefit effort was effective?	2	A. Discuss what?
A. I do not.	3	Q. Here in Table 11 (correct me if I'm wrong) you
Q. Do you have an opinion as to whether raising	4	identify specific districts or schools within districts.
the beginning or attempts to raise the beginning	5	Actually, is there anywhere else in your
salaries for new teachers was effective?	6	report where you discuss and identify schools within
A. I think that it was a step in the right	7	districts that, in your opinion, don't have competitive
direction and partiality effective, but did not was	8	salaries given the other schools in that district?
not designed or structured to take account of the	9	A. I don't
differences in cost of living across the state or the	10	MR. AFFELDT: Objection. That
inequalities in salary schedules that create the	11	mischaracterizes the report.
problems in the districts that tend to have higher	12	MS. KOURY: I wasn't trying to characterize
proportions of uncredentialed teachers.	13	the report.
Q. You mentioned earlier that there are	14	Q. (By Ms. Koury) But anyway, is there anywhere
low-income districts. Perhaps I am mischaracterizing	15	in your report where you identify and she can repeat
what you said. I'm sorry. Districts that have very low	16	the question if you're unclear as to the question.
wage for teachers.	17	A. If I understand the question to be, Are there
A. Mm-hm.	18	places in the report where I identify specific districts
Q. And you think that's problematic; is that	19	that have low wages relative to their local labor
correct?	20	market? I don't believe there are other places in the
A. Yes. There are the relevant way to	21	report where I do that.
	0.0	0 01

characterize the wages is their competitiveness or level 22 Q. Okay.

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23 with respect to other districts in their local labor

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market and other wages in their local labor market. 24

Q. Could you identify which districts you're

A. However, I would cede to the report itself in case there is a place where I mention another district.

25 Q. But as you sit here today and having reviewed

Page 231

referring to? 1 2 A. There are a thousand-some districts across the 3 state of California. What I do review here is the range 4 of adjusted salary differentials in the state, and there 5 is a very large differential when you adjust for local county wages in the salaries offered by districts across 6 7 the state. 8 Q. You just referenced your report. Where in 9 your report do you do that? 10 A. Okay. Probably somewhere in this 15 pages or

so that we're looking at. Page 57, Table 11. So, for 11 example, a low-salary district, when you adjust salaries 12 13 for county wages, the wages in their local counties 14 would be Alum Rock and Santa Clara County or Gilroy 15 Unified. 16

Q. Is there anywhere else in your report that you discuss this? 17 18

- A. That I discuss what?
- 19 Q. The districts that you just testified about
- 20 which compared -- have noncompetitive salaries compared to the other schools within their district? 21
- MR. AFFELDT: Objection. The report speaks 22 23 for itself.
- 24 MS. KOURY: Q. I'm not asking you to speak 25 for the report. I'm asking you to identify where in the

Page 233

- 1 your report recently, you can't think of anywhere else?
- 2 A. I do not remember another place where I
- 3 mention districts by name.

4 Q. Do you have an opinion as to whether the state

5 is taking any affirmative action to cause the high level

- of uncredentialed teachers in teaching classes -- in 6
- 7 classrooms in the public school system?

8 MR. AFFELDT: Objection. Vague as to 9 "affirmative action."

- 10 THE WITNESS: What do you mean by that? 11
- MS. KOURY: Q. Has it taken any actions, in 12
 - your opinion, that have caused the high number of

13 uncredentialed teachers in classrooms? 14

- A. "Cause" is a strong word. There are actions that I detail on this -- in this section of the report
- 15 between pages 55 and 72 that have contributed to the 16
 - state of the current labor market in California.
- 17 18 For example, the way in which class size 19 reduction was implemented contributed to the hiring of 20 uncredentialed teachers because of the speed and manner 21
- in which it was implemented. 22
- Q. Any other? Anything else? 23
 - A. Again, indicating that "cause" is a very
- 24 strong word, I suggest that policies that encourage the
- 25 overreliance on high-attrition pathways into teaching

Page	234
I age	23-

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гage	230

	Page 234		Page 236
1	have probably contributed to the large number of	1	rather than putting resources into increasing incentives
2	uncredentialed teachers in the state because there have	2	to attract qualified teachers.
3	been more incentives to enter teaching without	3	It turns out that emergency hires have very
4	preparation, which produces or contributes to high	4	high attrition rates, which then creates a revolving
5	attrition than there are have been incentives to become	5	door of people into and out of teaching.
6	prepared to teach, which enables lower attrition.	6	Q. Would you agree that regular certification
7	Q. Anything else?	7	standards vary widely across states?
8	A. Those are the ones that I remember at this	8	A. They vary less now than they once did, but
9	moment.	9	there is still a lot of variation across states in what
10	Q. Can we take a quick break? Restroom break.	10	the credential asks people to do.
11	MR. AFFELDT: Sure.	11	Q. And what do you base your opinion on?
12	(Whereupon, a break from 10:41 to	12	A. My knowledge of certification systems across
13	10:49 was taken.)	13	the states.
14	MR. AFFELDT: Back on the record.	14	Q. And have you studied the requirements, the
15	THE WITNESS: I'm reminded by my counsel about	15	credentialing requirements or certification
16	an error I made yesterday in my testimony that I would	16	requirements, in any other states besides in California?
17	like to correct, which is that I made a statement	17	A. Yes.
18	looking at one of the E-mails that Megan Auchincloss was	18	Q. What states have you studied?
19	involved in one of the studies, there was another Megan	19	A. Well, I've looked at the general requirements
20	who was involved in the study, and Megan Auchincloss,	20	across all the states as represented in the NASDTEC,
21	who was a lawyer, was not involved in that study.	21	N-A-S-D-T-E-C, manuals' certification.
22	MS. KOURY: Q. Did you know the woman	22	Q. In your opinion or do you have an opinion
23	Megan's last name that was involved with the study?	23	as to which states have the most rigorous requirements?
24	A. I can't remember. I think I just remembered	24	A. There are two ways to think about the rigor of
25	that the list of authors. There was a long list of	25	requirements. One is the rigor of what the the level
	Page 235		Page 237
1	authors, so	1	of standards the teachers have to meet in order to meet
2	authors, so Q. Thank you for that clarification.	2	of standards the teachers have to meet in order to meet a credential. The other is the rigor with which
2 3	authors, soQ. Thank you for that clarification.A. Yes.	2 3	of standards the teachers have to meet in order to meet a credential. The other is the rigor with which standards are enforced.
2 3 4	authors, soQ. Thank you for that clarification.A. Yes.Q. What did you mean by the overreliance on or	2 3 4	of standards the teachers have to meet in order to meet a credential. The other is the rigor with which standards are enforced. On the first criterion, I would include, as
2 3 4 5	authors, soQ. Thank you for that clarification.A. Yes.Q. What did you mean by the overreliance on or I'm sorry. That California's policies encourage the	2 3 4 5	of standards the teachers have to meet in order to meet a credential. The other is the rigor with which standards are enforced. On the first criterion, I would include, as states with fairly rigorous standards, those that
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	Page 238		Page 240
1	credential to a substantial degree, in what areas does	1	A. I mentioned some of those earlier, and those
2	it not meet those standards?	2	included Connecticut and Minnesota and Wisconsin as
3	A. The subject matter requirements in California	3	places that I have looked at within the last few years.
4	do not require a major in the field to be taught, but	4	There are certainly others that would join that number
5	there is a set of courses that are specified for	5	if I had an opportunity to review materials.
6	approved subject matter programs that are, nonetheless,	6	Q. As to your first definition of rigorous, in
7	reasonably rigorous, reasonably comprehensive when they	7	terms of the requirements to get a credential, do you
8	are fully met.	8	have an opinion as to where Texas would rank?
9	The problem in California is that there are	9	A. I haven't reviewed Texas's requirements
10	many other pathways into teaching that don't meet the	10	recently. At one time, they I would have rated them
11	rigorous standards that are set for the regular	11	as fairly low in their requirements because they had put
12	credential.	12	a cap on the number of education courses students could
13	Q. But with respect to requirements to receive a	13	take at the undergraduate level without requiring the
14	credential	14	additional graduate-level preparation that would have
15	A. A regular credential, California would be	15	ensured that candidates got the courses they were no
16	among the more rigorous states.	16	longer getting in the undergraduate program. But I have
17	Q. Could you tell me what you meant by your	17	not revisited the current state of their credential
18	second definition of rigorous, which is the level that	18	requirements in the last couple of years.
19	the credential is enforced?	19	Q. So, as far as you know, in the last couple of
20	A. The extent to which those standards are	20	years I'm sorry.
21	enforced. That is, the extent to which candidates are,	21	As far as you know, currently that may not be
22	in fact, required to meet the standards and how many of	22	case?
23	them are required to meet the standards.	23	A. Yeah. I just don't know. I would need to go
24	Q. I'm sorry. I'm still not clear on what you	24	back and review it.
25	mean by that. Do you mean in terms of	25	Q. To the extent that you or I'm sorry.

1 1 A. The extent to which a state is willing to Taking into consideration your prior review of 2 2 allow teachers to teach without having met the standards Texas's credentialing requirements, do you have an 3 3 through substandard credentials or permits or waivers. opinion as to whether or not Texas -- the credentialing 4 MR. AFFELDT: Just so it's easier on the 4 requirements of Texas are comparable to California? 5 5 reporter, if you could let Miss Koury finish her A. I would have to review their requirements to 6 question before you respond. 6 see if they are. 7 MS. KOURY: It's a very unnatural way to talk. 7 O. Well, with respect to your prior review of the 8 THE WITNESS: I know. 8 requirements of Texas, you indicated that a couple years 9 MS. KOURY: Q. Other than Kentucky, can you 9 ago you did review the credentialing requirements of 10 10 think of any other states that you think are -- have a Texas: is that correct? A. Mm-hm. rigorous requirement for the extent to which they're 11 11 12 enforcing their credential requirements? And I think I 12 Q. Keeping that review in mind, do you think that 13 just misstated what you said again. 13 they are comparable to California credentialing 14 A. Yeah. That was not what I was mentioning 14 requirements? 15 Kentucky for. 15 A. The prior credentialing requirements of Texas Q. Okay. What were you mentioning Kentucky for? were not comparable to the current credentialing 16 16 A. I was including them as a state that had been 17 17 requirements in California. 18 increasing the rigor of its standards along with many 18 Q. Why is that? 19 A. At the time I looked at Texas's requirements, 19 other states. 20 Q. For its credential requirements in general? 20 they did not require the breadth of education coursework A. Right. For what it requires of those who 21 21 that is required in California. They did not require a 22 secure a credential, a regular credential. 22 fifth year of graduate study, which has been required in 23 Q. What states would meet -- or what states, in 23 California until this past year, when there was a -- an option added to allow a induction program to substitute 24 your opinion, have a rigorous requirement for enforcing 24 25 their credentials? 25 for that fifth year.

	Page 242		Page 244
1	Q. And was your review of Texas of the	1	Q. How would you define a good teacher?
2 3	credentialing requirements of Texas, was that at about 2000 2001?	2 3	A. I don't know, because "good" has many meanings
3 4	A. I hesitate to set a date. It would have been	4	to many people. If I were do you want me to define it as I would for a parent or a school district
4 5	sometime in the last four years.	5	administrator or for a state official? Because all of
6	Q. Would you agree that states differ	6	those would mean that one would look at the question
7	substantially in their entry requirements to teacher	7	differently.
8	education?	8	Q. Do you think perspectives of a good teacher
8 9	A. In their entry requirements to teacher	9	from all those persons or entities that you just
10	education There is some differential, but over the	10	enumerated would be different?
11	last 15 years, most states have adopted minimum	11	A. I think that people would have to use
12	standards for entry into teacher education that include	12	different measures at different levels of aggregation.
12	either a basic skills or basic skills type of test or	13	Q. In your opinion, what do you think or how
13	a minimum grade point average or both.	14	would you define a good teacher?
15	Q. When you say in the last couple years	15	A. I really need you to give me a sense of from
16	A. Over the last 15 years, most states have done	16	which perspective. From a parent's perspective?
17	that.	17	Q. No. As an expert in the field of education's
18	Q. How else do you define entering into teacher	18	perspective, how would you define a good teacher?
19	education other than a basic educations test?	19	A. I think a good teacher I'm going to talk
20	A. Admission to teacher education is what I	20	about this at the level of the individual teacher, and
21	believe you were asking about, and that's usually a	21	then we can talk separately, if you want to, about how
22	decision that a college has to make about whether they	22	one would then get some ways of estimating or measuring
23	can admit someone to a teacher education program either	23	those qualities if you want to talk about it in a policy
24	within the undergraduate curriculum or	24	sense.
25	post-baccalaureate. And most states have required	25	A good teacher is one who has an adequate
	-		-

1

either a basic-skills test for that purpose or a minimum

1

2 grade point average or both. I'm not sure if I 2 is, a flexible understanding of that content that allows 3 3 them to represent the ideas that they're trying to understand what else you're asking. 4 Q. So given that testimony, do you not agree that 4 convey in a variety of ways that can be accessed by the 5 states differ substantially in terms of their entry 5 students that they are teaching; who has a knowledge of 6 the children they're teaching in terms of their requirements for teacher education? 6 7 A. I think there are some states that are 7 development, how they learn, both how children tend to 8 outliers with respect to having lower standards than 8 learn similarly and also how some -- also about 9 others, but I think most states are much more similar 9 differences in how children learn. 10 Furthermore, a good teacher has knowledge of 10 than different at this point and much more similar than they were 15 years ago. how to meet specific learning needs of particular 11 11 12 Q. In your report, you appear to equate a good individual children or subpopulations of children they 12 13 teacher with a credentialed teacher. Do you equate 13 need to teach -- for example, English language learners; 14 those terms? 14 for example, students with a range of special education A. No. And I explicitly state in my report that 15 needs. 15 16 a credential is a proxy for a variety of attributes that 16 A good teacher understands how to work are found to be associated with more effective teaching. productively with families of the children and 17 17 18 Q. So, is a credentialed teacher one component of 18 understands the ways in which -- the context within 19 a good teacher? 19 which the student is living and growing up may influence 20 their general health welfare and learning. And such a 20 A. That's not how I stated it. What I suggested 21 21 is that the credential is the legal basis on which the teacher is also committed to the welfare of their 22 state monitors teacher quality. And the credential in 22 children they teach and willing to put forth the effort 23 California does represent many of the attributes that 23 that it takes to teach that child effectively. research has found to be associated with greater teacher 24 Q. Is that it? 24 25 effectiveness. 25 A. That's good enough for a start.

Page 245

knowledge of the contents that they're teaching -- that

	Page 246		Page 248
1	Q. And could you tell me the definition of a good	1	of student achievement is needed to understand how much
2	teacher from a policy standpoint, which you referenced	2	student learning has gone on.
3	or referred to earlier?	3	Q. And the basis of this opinion, with respect to
4	A. Well, policy makers have to try to understand	4	the question of whether good teachers impact student
5	what to do about securing good teachers by using by	5	achievement, the basis of your opinion in that regard is
6	both encouraging teachers to have undertaken certain	6	set forth in your report. Is that accurate?
7	experiences that might prepare them to be good and by	7	A. I'm not sure I understand the question.
8	using certain measures of whether they have learned	8	Q. Sure. With respect to my previous question as
9	certain things that will enable them to be, quote, good,	9	to whether you had an opinion let me rephrase that.
10	unquote. So I think that the ways in which policy	10	With respect to my previous question as to
11	makers create expectations about the basic knowledge and	11	whether or not, in your opinion, good teachers impact
12	knowledge of content that teachers have about their	12	student achievement, the answer that you gave me and
13	knowledge of students' learning and development and how	13	your opinion in that regard, is that set forth in your
14	to teach a range of students and about their	14	expert report?
15	dispositions and interactions with students which come	15	MR. AFFELDT: Objection. Vague and ambiguous.
16 17	from observing teachers in student-teaching or induction context are all reasonable and appropriate ways of	16 17	MS. KOURY: Q. Did you understand what I'm saying?
17	evaluating the potential goodness or effectiveness of	17	A. Not entirely.
19	teachers who are hired or are credentialed.	19	Q. Okay.
20	Q. Do you think I think I probably know the	20	A. I'm
21	answer to this, but do you have an opinion as to whether	21	MS. KOURY: Could you Court Reporter, could
22	a good teacher as defined from the individual as the	22	you read back my question? I think it's a few questions
23	individual teacher impacts student achievement?	23	back about good teacher impact on student achievement?
24	A. Does the good teacher impact student	24	(Record read.)
25	achievement? Is that your question?	25	MS. KOURY: Q. I asked you whether, in your
	Page 247		Page 249
1	Page 247	1	Page 249
1	Q. Yes.	1	opinion, good teachers impact student achievement, and
2	Q. Yes.A. Yes, I think that good teachers have an effect	2	opinion, good teachers impact student achievement, and you gave me an answer for that; is that correct?
2 3	Q. Yes.A. Yes, I think that good teachers have an effect on student let me use the word "learning," initially,	2 3	opinion, good teachers impact student achievement, and you gave me an answer for that; is that correct? A. Yes.
2 3 4	Q. Yes.A. Yes, I think that good teachers have an effect on student let me use the word "learning," initially, which is reflected to greater and lesser degrees in	2 3 4	opinion, good teachers impact student achievement, and you gave me an answer for that; is that correct?A. Yes.Q. With respect to your answer to that question,
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So I'm simply qualifying the use of the termof "student achievement" to suggest that a good measure

15 (Pages 246 to 249)

25 influences of those measures on both teacher ratings of

	Page 250		Page 252
1	effectiveness and student achievement measures that are	1	credential and student achievement that include
2	used in a variety of studies.	2	Goldhaber & Brewer. I'll just kind of use the reference
3	Q. And in looking at student achievement	3	list as a reminder.
4	measures, your report doesn't attempt to qualify those	4	Q. Sure.
5	measurements, does it?	5	A. That include Bradshaw & Hawk no, I'm sorry.
6	A. Not not to a large extent.	6	Hawk, Coble & Swanson; that include Strauss and Sawyer
7	Q. This is a slightly different question than I	7	with respect to performance on teacher certification
8	asked before.	8	test; that include Ferguson's 1991 study of performance
9	Do you have an opinion about whether	9	on a teacher certification test in Texas.
10	credentialed teachers impact student achievement?	10	I'm not sure I can remember them all off the
11	A. I review in my report the research on the	11	top of my head. I think the report is clear about where
12	extent to which some large-scale studies find a	12	it where it makes these claims, so I don't want to be
13	correlation between teachers' credentials or performance	13	limited by my memory here.
14	on particular credentialing tests and their student	14	Q. You can take as much time as you need in terms
15	achievement, and I do report a number of studies that	15	of reviewing the report.
16	find that correlation.	16	A. Okay.
17	Q. Thank you. But my question is, Do you have an	17	Q. And, also, to be clear, I don't mean to limit
18	opinion as to whether credentialed teachers impact	18	you to your report either. If you know of any other
19	student achievement?	19	studies, feel free to mention them.
20	I understand what your report sets forth and	20	A. Okay. On page 20 of the report, there is a
21	it speaks for itself, but to the extent that you have an	21	section that is headed "National Studies," and it says:
22	opinion on that, could you tell me?	22	"Studies using national data and other
23	A. About whether credentialed teachers	23	state data sets have found significant
24	influence	24	relationships between teacher certification
25	Q. Impact student achievement.	25	measures and student achievement at the levels

1 1 A. Yes, I would say I do. of the individual teacher," et cetera. 2 Q. And the basis for your opinion is set forth in 2 So all of the studies referenced there would 3 3 be studies that together provides some evidence about your expert report? 4 A. Yes. 4 the links between teacher certification and student 5 O. Are you able to cite any studies that 5 achievement. specifically address the link between a teaching 6 6 On page 15 there's a section headed 7 7 credential and student achievement? "California Studies" that says: 8 A. Yes. There are a number of those. 8 "Several recent studies in California have 9 Q. Could you identify from your report which 9 pointed to strong relationships between studies actually show a link between a teaching 10 measures of teacher qualifications and student 10 11 credential and student achievement? achievement," and then goes on to mention 11 12 A. So when you say a link -- I'm going to answer 12 certification status, and then reviews some studies 13 that question, but I just want to clarify that the 13 that include Betts, Rueben, & Danenberg; Fetler; 14 studies that are evaluated here are of two kinds. One 14 Goe; and then individual testimonies. 15 are correlational studies that control for a variety of 15 Q. Are you relying on the individual testimonies variables and look for predictions or correlations as evidence of the connection or a link between student 16 16 achievement and teacher certification? between certain characteristics of teachers and student 17 17 18 achievement. So, I'm -- I'm going to use that -- that 18 A. No, not with respect to that question. as the response to the word "link." And the other 19 MR. AFFELDT: Are you still answering? 19 studies use matched comparison samples. Just because 20 THE WITNESS: I'm done. 20 21 "link" is a nontechnical term. I want to be sure we're 21 MR. AFFELDT: Okav. 22 on the same wave length. 22 MS. KOURY: Q. Out of these studies that 23 Q. Okay. 23 you've identified, are any of them national studies --24 A. So I would point to studies that looked at the in other words, not looking at one particular state, but 24 sort of giving a national perspective on the issue? And 25 correlations between a teacher's possession of a 25

	Page 254		Page 256
$ \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've A. I just said that there was a section called "National Studies" on page 20, so all of the ones that are listed there under "National Studies" are national studies. Q. And with respect to studies that identify California, would those be limited to the ones that you stated are on page 21? MR. JORDAN: 15. THE WITNESS: Page 15. MS. KOURY: Q. Other than what's on page 15, are there any other studies dealing with California that you're aware of that show a link between student A. Those are the ones I would Q show a link between student achievement and certification? And your answer was? A. Those would be the primary ones I would be relying on. Q. Of the studies that you've identified, which do you consider to have method I'm sorry. I'm going to have methodologically sophisticated, would you consider to be methodologically sophisticated? A. How are you defining "methodologically sophisticated"? Q. Do you have an understanding as to what that 	$ \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} $	 all of these studies are of one of those two types. Q. In your opinion, do all of these studies are all of these studies, in your opinion, methodologically sophisticated then? A. I find that a problematic question because each of these studies has different strengths and weaknesses as a study, both with respect to the sample that they're looking at or the methods that are used for analysis. A strong study has, you know all studies have a strong study has both the variables you'd like to look at, defined the way you'd like to look at them, on a sample that is relevant to the question and takes into account some of the issues that might affect the the inferences you can draw from the outcomes and uses analytic techniques that have controls. And I would say, on those grounds, every study has strengths and every study has weaknesses. Q. When performing your work or when performing work for this case, you reviewed a lot of research into the link or I'm just going to use the term "link" between teacher quality and student achievement; is that correct? A. Yes. Q. And did you take into consideration the
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 24 25	<text><text><text><text><text><text><text></text></text></text></text></text></text></text>	$ \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 257 quality of the studies that you were looking at? A. Yes. I did not report or rely on, for a overall inference, studies that were so lacking in controls or so deficient in the database that I felt that you could not draw any inference from them could not properly draw an inference from them could not properly draw an inference from them. Q. In your review of the research, did you come across such studies in other words, that were so lacking in controls or so lacking in their variables? A. There are always studies in the world that one yes, that don't meet those standards. Q. In reviewing your research, how do you assess the quality of the study? How do you determine whether it's so lacking? A. Well, I just gave a long discussion of the variables that one would look at, so I'd kind of like to refer to that, which has to do with the nature of thewhether the sample is reasonably selected, and whether the study includes some controls for other variables of that might influence the results. Q. In determining whether or not to rely on a study, is it your practice to ensure that that standard is unet, the standard that you just articulated? A. There the term "rely on a study" suggests

	Page 258		Page 260
1	that one would draw a conclusion about the general	1	MS. KOURY: Q. If you could identify studies
2	general knowledge base in a field based on, like,	2	that you've cited in your report that you would find to
3	individual studies. But, typically, what one is trying	3	be of high quality.
4	to do is look across a variety of studies, each of which	4	A. Okay. This is going to be a long answer.
5	has strengths and weaknesses and see whether there is	5	MR. AFFELDT: And your question goes to all
6	some reliable inferences, a cross-study.	6	the studies in her report?
7	So, for example, in medical research, you'll	7	MS. KOURY: Actually, no.
8	often find single case studies published in journals or	8	Q. (By Ms. Koury) Let me in the context of
9	cases of eight or nine patients. You wouldn't rely on	9	your research, showing a link between teacher quality
10	that study for a judgment about how to change the	10	and student achievement.
11	standard of care for all patients with that disease, but	11	A. Teacher qualifications and student
12	you might use that study along with other studies as	12	achievement
13	part of a database about research on which you would	13	Q. Right.
14	rely in total for a broader conclusion.	14	A I assume is what you meant.
15	Q. In all of the reports that you've just cited	15	Q. Yes.
16	to earlier, in your opinion, have strengths and	16	MR. AFFELDT: Teacher certification and
17	weaknesses in terms of the quality of their research; is	17	student achievement?
18	that true?	18	MS. KOURY: No. Teacher qualification and
19	A. I wouldn't use the word "quality." I would	19	certification, which, I think, is a little broader than
20	use the word "features" of the study.	20	credentials.
21	Q. Okay.	21	THE WITNESS: I mean, I can answer this
22	A. People all researchers do the best they can	22	question by going by study by study and saying what
23	with the databases they have. And some sometimes the	23	aspects of the study are useful, but we, you know, would
24	quality of the analysis may be fine, but the database	24	be a few hours to kind of go through each of these
25	itself is you know has some limitations	25	studies and say in what ways they represent reasonable

1 Q. Which of the studies cited in your report, in 1 designs. your opinion, have very high quality in terms of how you 2 2 MS. KOURY: Q. And that wasn't my question. 3 just defined that? I'm sorry. Not quality, but the 3 My question is if there's any studies that you can point 4 term that you just used. 4 to that, in your opinion, are of high quality. And if 5 5 MS. KOURY: Can you repeat her last answer? you can't, that's --A. I can point to studies that are of reasonably 6 (Record read.) 6 MS. KOURY: Q. Using your term "features of 7 7 high quality based on the design features we've talked 8 the study," which studies that you cite in your report 8 about. And then I'd have to explain in what ways they 9 that you think have the best features of their study? 9 have some, you know, reasonable features of high 10 A. The best features of their study ... It's 10 quality. kind of like an apples -- and I don't know if you're 11 11 O. Okav. 12 asking ---12 A. It's just not a simple answer, but I -- we can Q. I'm going to go back to the term "quality" as 13 13 do that. we defined it much earlier. 14 So, I'm going to start --14 15 Which of the studies that you rely on in your 15 (Whereupon, an unidentified report or that you cite to in your report would you 16 16 individual briefly enters and exits the deposition room.) consider to be of high quality? And if there are none, 17 17 18 that's fine. But if there are some that you consider 18 THE WITNESS: I'm going to start with Betts, high quality, I'd like you to identify those. 19 Rueben & Danenberg's (2000) study of -- by the Public 19 MR. AFFELDT: Objection. Asked and answered 20 Policy Institute of California, that looked at 20 21 and vague and ambiguous. 21 predictors of student achievement across 7,000 22 MS. KOURY: I think we both know that 22 California schools, which is a reasonable -- reasonably 23 particular question wasn't asked, but anyway ... 23 well-designed study because it both used a regression 24 MR. AFFELDT: She's given you a long approach that could control for some features of student 24 25 definition of "quality" and also qualified. 25 characteristics like student poverty and could look at a

	Page 262		Page 264
1	variety of indicators of teacher qualifications	1	are not fully certified and to look at gains and
2	including their level of education, the different kinds	2	achievement. So that was a reasonably well-controlled
3	of degrees that they had and their certification status.	3	study for those reasons.
4	In California there are no databases that allow you to	4	The work by Ed Fuller, looking at schools in
5	do that with links to student achievement at the	5	Texas, was able to control for both experience levels of
6	individual level. So this was done at the school level,	6	teacher and poverty levels of students in looking at the
7	which is a reasonable research decision for that kind of	7	influences of the proportions of certified teachers on
8	analysis.	8	student achievement on a couple of different achievement
9	Similarly, Mark Fetler's study in 1999, which	9	measures in Texas.
10	was a school-level analysis of test performance in	10	Ron Ferguson's study of 900 Texas school
11	California high schools, controlled for both student	11	districts was able to control for several measures of
12	characteristics such as student poverty and also	12	student background and a pretty good range of district
13	controlled for test participation rates, which is	13	characteristics in looking at measures of teacher
14	important to do, and looked at several indicators of	14	qualifications and was one of a relatively few studies
15	student of of teacher qualifications.	15	that had actual scores on on a licensing examination
16	The study by Laura Goe, looking at	16	as one of the indicators along with master's degrees and
17	relationships between school scores on California's	17	experience and was able to link that to a couple of
18	academic performance index, which looked at the	18	different measures of student achievement in both
19	relationship between for 6,400 schools, which is a	19	mathematics and reading. So, given that data set, it
20	good-sized sample of the schools in the state, was also	20	was a reasonably well-controlled and high-quality study.
21	able to control for some of the characteristics of	21	A similar study by Strauss & Sawyer in North
22	students, quite a number of those, as well as	22	Carolina was able to control for a variety of both
23	characteristics of teachers' qualifications. The API	23	student characteristics and district resource
24	rankings are not the cleanest measure of student	24	characteristics and family factors as well as several
25	achievement, but it is a measure that is used for policy	25	measures of teacher qualifications, including scores on
	Page 263		Page 265
1	in the state of California. Colities assessable study	1	a taa ah ay aantifi aati ay ay ay that na aaaynaa aayyanal

in the state of California. So it's a reasonable study
 to look at the predictors of those rankings, and it was
 reasonably well-designed.
 The study by Goldhaber and Brewer in 2000,
 which used sample teachers from the National Educational

6 Longitudinal Studies of Students, was a well-designed

7 study in -- and in terms of having both controls for

8 various measures of student demographics that might

9 influence achievement and having gain scores for

10 individual students, the ability to look at performance

11 in the past vis-a-vis their performance at a point in

12 time as well as characteristics of their teachers. It

13 had the advantage of being a national data set. It also

14 had the disadvantage of having different credentialing

15 because it's a national data set having the definition 16 of certification be different across the states. So.

17 like any other study, it has strengths and weaknesses,

- 18 but overall it's a well-designed study given the data
- 19 set available to the authors.

20 The study by Hawk, Coble & Swanson that's

- 21 cited in 1985 used a matched comparison design,
- 22 something that's called a quasi-experimental design,
- 23 which had teachers matched by years of experience and
- 24 their school settings. I was able to compare fully
- 25 certified teachers in mathematics against teachers who

1 a teacher certification exam that measures several

- 2 different kinds of teaching knowledge and to link those
- 3 to measures of student achievement on the state
- 4 examinations in North Carolina.
- 5 A study by ... I've got to move ahead in
- 6 the ... study by David Monk in 1994, using the
- 7 Longitudinal Study of American Youth, which is a
- 8 national data set, was able to look at teachers' content
- 9 preparation and their preparation in subject matter
- 10 methods courses as well as other indicators of
- 11 qualifications, degrees and experience and link those to
- 12 student achievement, including gains in student
- 13 achievement. And it was a well-designed and reasonably14 controlled study.
- 15 Study by Angrist and Lavy in 1998 was able to 16 look at matched comparison samples of teachers in
- 17 schools who received -- or did not receive certain kinds
- 18 of professional development training and then link that
- 19 to student achievement gains, having controlled for
- 20 aspects of student characteristics through the design of
- 21 the comparison sample and to look at gains in
- 22 achievement.
- 23 A study by Harold Wenglinsky, using data from
- 24 the National Assessment of Educational Progress, was
- 25 able to control for several characteristics of students

	Page 266		Page 268
1	that might influence achievement and to look at the	1	of high quality or reasonably high quality?
2	relationships between dimensions of teachers' training,	2	A. I think I would say I don't have an opinion,
3	types of content and professional coursework they'd had	3	because I would want to review it in order to have a
4	and student achievement.	4	well-grounded opinion.
			Q. And with respect to Sanders and Rivers (1996),
5	I'm going to stop there and reserve the right	5	
6	to find other studies at a later time.	6	do you have an opinion as to whether the methodology
7	Q. I understand.	7	used in that report is of high quality?
8	MS. READ-SPANGLER: Could we take a short	8	A. I would say the same thing; I would want to
9	break?	9	review it before I rendered an opinion on that.
10	MS. KOURY: Yeah. Go off the record.	10	Q. Would your opinion would be same for Hanushek
11	(Whereupon, a break from 11:44 to	11	(1992) report?
12	11:58 was taken.)	12	A. I'm trying figure out are you on a
13	MS. KOURY: Q. Dr. Darling-Hammond, you also	13	particular page in the
14	cite to the William Sanders to to William Sanders in	14	Q. No, I'm not. Do you want me to
15	some reports. Let me actually specify which ones. The	15	A. Did you want me to look in the reference list,
16	Sanders and Horn 1994 report.	16	because there's
17	A. Mm-hm.	17	Q. Sure. I can tell you where you cite to these
18	Q. You're familiar with that report, are you not?	18	reports if that would help you in your
19	A. Yes.	19	A. That would help my recollection.
20	Q. Do you have an opinion as to whether or not	20	Q. I believe the Hanushek (1992) report
20	that particular report is of reasonably high quality?	20	A. And it's cited where?
21 22	A. It's not one of the ones that tries to link		
		22	Q. Maybe I don't have that one.
23	teacher qualifications to student achievement. It's	23	MS. READ-SPANGLER: 27.
24	simply looking at the degree of variability that can be	24	THE WITNESS: Page 27.
25	explained by the teacher per se without reference to	25	MS. KOURY: Q. It's in the first full
	D 1/7		P 140
	Page 267		Page 269
1	Page 267 various aspects of the teacher.	1	Page 269 paragraph.
1 2	various aspects of the teacher. I would really need to review the study to	1 2	Ū.
	various aspects of the teacher.		paragraph.
2	various aspects of the teacher. I would really need to review the study to	2	paragraph. A. I would want to review the report before I
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25

THE WITNESS: I -- I have read that one more

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 24 25	Page 270 recently and but I would want to review it before I made a definitive statement about it. But my recollection is that there that study did include controls for aspects of student background characteristics that would be important to control for. So my recollection is that it had it was reasonably well controlled, but I would have to confirm that by revisiting the study. MS. KOURY: Q. And on page 14 of your report you cite to Rivkin, Hanushek and Kain (2000) report. Do you have an opinion as to the quality whether that report had a high quality in terms of methodology? A. Let me check. Are you talking about Rivkin, Hanushek and Kain? Q. Yes. I'm sorry. Did I misstate that? A. I think you had the order of the authors Q. Yes. Rivikin, Hanushek and Kain. A. I would want to review the methods to recall what they were for that report. Q. Are you familiar with actually, do you have an opinion about whether, in studying the link between teacher certification and student achievement, it would be useful to look at student achievement gains? A. I want to use the word "correlation" rather than "link."	$ \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 272 by looking at those specific data sets in order to A. I'm sorry. Which data sets? Q. You mentioned that you would have to look at student achievement I'm sorry student data sets; is that correct? MR. AFFELDT: I believe she said local data sets. MS. KOURY: That's the word I'm looking for, local data sets. Q. (By Ms. Koury) How would you look at local data sets to see whether there's a correlation between teacher certification and student achievement? A. You'd have to get permission from a local district to use a data set and probably link their personnel files for teachers, which give you the name and qualifications of each teachers. Link those files to the students they've taught, and then have available the repeated test scores of or other measures of student learning of those students linked to the teachers and their files revealing their, you know, qualifications that you were interested in looking at. Q. Have you attempted to do that at all? A. In California? Q. Yes. A. No.
	Page 271		Page 273

1	Q. Okay. Correlation.	1	Q. In other states, have you?
2	A. It can be helpful to look at student	2	A. I yes, in New York.
3	achievement gains when evidence about those is	3	Q. How recently was that?
4	available. When evidence is not available, it is and	4	A. I have a data set now from New York City that
5	it's most useful to do that when you have longitudinal	5	has links between student achievement and teacher
6	data about the same students, not gains as measured from	6	characteristics.
7	two different cross-sectional samples. When that's not	7	Q. What advantages do you see in terms of finding
8	available, it's important then to have the kind of	8	or determining whether what advantages do you see in
9	controls I talked about before, which include such	9	reviewing local data sets such as what you just
10	things as measures of student or family income,	10	testified about in order to determine the correlation
11	sometimes race, ethnicity or language background.	11	between teacher certification and student achievement?
12	Q. Is that evidence available in California in	12	A. Advantages over what?
13	order to conduct a study correlating certification and	13	Q. As opposed to other studies which look at
14	student achievement by looking at student achievement	14	cross-sections or I should say any other studies that
15	gains?	15	don't look specifically at the longitudinal gains of a
16	A. Student achievement gains can be looked at if	16	student, that individual student?
17	you look at local data sets. There's not, as far as I	17	A. The problem let me respond to your question
18	know, a state data set that allows you to look at	18	about cross-sections versus longitudinal, because that's
19	individual student achievement gains and link those to	19	a specific question.
20	measures of teacher qualifications at the individual	20	When you have evidence about student
21	teacher level.	21	achievement that is, an aggregated data set, an
22	Q. Looking at student data sets, how would you do	22	average of a bunch of students (for example, scores at a
23	that?	23	point in time) and then you look at another point in
24	A. How would you do what?	24	time and have an average set of scores for a group of
25	Q. How would you look at student achievement gain	25	students, there may be changes in the group of students,

	Page 274		Page 276
1	so you're not actually looking at a real gain score.	1	for such things as free or reduced-price lunches, which
2	You're looking at scores that generally represent two	2	is a poverty measure.
3	different groups of students.	3	Often, it may include such things as parent
4	The advantage of having longitudinal data is	4	education; may include such things as family status (one
5	that it allows you to look at the same students over	5	or two parents or presence of parents in the home);
6	time and and look at changes that are occurring for	6	might include such things as community in which the
7	those students. There are still issues with looking at	7	student lives; might include such things as language
8	longitudinal student achievement scores.	8	background.
9	For example, if you have a test that has a	9	Q. In your opinion, based on your review of
10	it's a fairly minimal test. It has a ceiling effect.	10	various studies and your own research, what percentage
11	I'm not even getting into the quality of different	11	would you attribute to home and family factors in terms
12	tests. But putting that issue aside, some students,	12	of impact on student achievement?
13	even though they're learning a lot more, will not show	13	A. It really varies from study to study and
14	gains in achievement even if measured longitudinally,	14	depends on how many other and what kinds of other
15	because the test doesn't they're already near the top	15	variables are in the given estimates.
16	of the distribution, and the test doesn't allow you to	16	Q. What do you mean by that, depends on what
17	see the gains that they've made.	17	other variables are in the estimates?
18	So even looking at longitudinal students'	18	A. The more relevant variables if you're
19	achievement has its limitations. But under conditions	19	looking at, for example, regression studies, the more
20	where those you know, depending on the nature of the	20	relevant variables you have in your data set that you
21	achievement test used and what it's measuring and how	21	can look at (for example, if you have a study that has a
22	you're looking at student gains, it can be helpful.	22	large number of measures of student background
23	Q. Why haven't you looked at local data sets in	23	characteristics and family and community characteristics
24	order to determine whether or in order to study the	24	and a small number of measures of school inputs or
25	correlation, if any, between student achievement and	25	measures of school inputs that are very remote proxies

1

- teacher certification in California? 1
 - A. I've been busy.

2

- 3 Q. Is there any other reason?
- 4 A. One would have to get, you know, permissions
- 5 to do that, and I don't know whether those would be easy
- 6 or difficult to do. I don't know whether I've seen any
- 7 studies that have done that. So I don't know whether
- 8 there would be difficult -- in -- in California, so I
- 9 don't know whether there would be difficulties in doing 10 that.
- Q. How important are family and home factors, in 11 12 your opinion, on student achievement? Let me rephrase 13 that.
- 14 How big of an impact, in your opinion, do home 15 and family factors have on student achievement?
- A. Most studies find that home and family factors 16 do have a substantial effect on measures of student 17 18 achievement.
- 19 Q. Just for purposes of being clear, how do you define home and family factors? 20
- 21 A. Well, studies define them differently
- 22 depending on what's available in their data sets. But,
- 23 typically, they would include measures of socioeconomic
- 24 status such as family income, sometimes defined as
- 25 proportion of students or whether a student is eligible

- for what makes a difference in schools), then you're
- 2 likely to find that home and family factors account for
- 3 a greater share of the variation in student achievement.
- 4 If, on the other hand, you have a large number
- 5 of measures of school inputs and those include measures
- 6 that are good proxies for resources or inputs that 7
- matter, then you would find that they account for a 8
- greater share of variation in student achievement, and 9
- the home and family factors may account for a smaller 10 share of the variation --
- Q. Do you know --11
- A. -- explained by the equation. 12
- 13 Q. Sorry about that. 14
 - A. That's okay.
- 15 Q. Do you know of any studies that actually have 16 taken into account, as you put it, a good amount -- or a 17 good measure for school inputs?
- 18 A. I think that the studies I mentioned earlier
- 19 by Strauss and Sawyer and by Ferguson are studies that
- had some reasonably good measures of school resources 20
- 21 and inputs. The study by Harold Wenglinsky that I
- 22 mentioned earlier had pretty fine-grained measures of
- 23 school inputs in the form of teacher qualification
- 24 variables. So those would be examples. 25
 - Q. Do those studies purport to show the impact of

	Page 278		Page 280
1	home and family factors on student achievement?	1	Figure 1?
2	A. Yes. All of them had measures of home and	2	A. This figure, I believe, is sort of just a
3	family factors on student achievement. And I believe,	3	graphic representation of a finding from a single study
4	in each case, each of those authors addressed the	4	by Ron Ferguson. It says "900 Texas districts," so I
5	question of the relative contributions to explain	5	assume that's the study that's being referenced. Let me
6	variations in student achievement accounted for by home	6	just double-check. Yes.
7	and family or community factors and by school factors.	7	So in that particular study, given the
8	MS. KOURY: Can we go off the record?	8	particular regression equations that were run in this
9	(Discussion off the record.)	9	particular representation of one of the findings, this
10	MS. KOURY: Q. Mark as Exhibit 18 to your	10	is a a way of representing sort of for a lay audience
11	deposition transcript is a document titled "Learning	11	what that study found. But different studies will find
12	Teaching Leading " and bears a Bates stamp	12	different amounts of variation accounted for by
13	PLTF-XP-LDH 03748 through 3833.	13	different factors, so And it looks like okay.
14	(Whereupon, Deposition Exhibit 18	14	Leave it at that.
15	was marked for identification.)	15	Q. I understand that different studies account
16	MS. KOURY: Q. Could you just review just	16	for different factors. Do you have an opinion, based on
17	generally review this exhibit for me and let me know	17	your review of different studies, on what on the
18	when you've had an opportunity to do so?	18	percentage that you would allocate in terms of the
19	A. Okay.	19	impact that home and family factors have on student
20	Q. Are you generally familiar with this document?	20	achievement and taking into consideration any studies
21	A. Yes, I am.	21	that you in terms of if you've reviewed studies
22	Q. Could you just briefly describe the nature of	22	that take into more take into account variables
23	this document?	23	let me back up and ask another question.
24	A. This is a report of the Professional	24	Do you think it's important in determining the
25	Development Task Force, the California Professional	25	impact of student achievement to take into account

1

11

12

25

Development Task Force that I served as a member of a 1 2 couple of years ago.

3 Q. Generally speaking, what was your role in 4 producing this report?

5 A. I was the co-chair of the task force, but the report was written by the staff assigned to the task 6 7 force.

8 Q. Were you involved in reviewing the report 9 before it was completed?

A. Yes. Although the version that was published 10 I did not review just -- I did not review the final 11

version before it came out with the final changes. 12

13 Q. Could you turn to page bearing Bates stamp 14 3761?

15 A. Mm-hm.

16 Q. And looking specifically at Figure 1 on that

page, do you have an opinion as to whether the breakdown 17

18 of impact on student achievement as portrayed in Figure

1 is -- or I should say, Is the breakdown of factors 19

- affecting student achievement as portrayed in Figure 1 20
- 21 consistent with your opinion?
- 22 A. My opinion with respect to what?
- 23 Q. Let me ask it a different way.
- 24 Do you agree with the breakdown of factors
- 25 impacting student achievement as they're portrayed in

Page 281

2 there are inputs for student measurements that some 3 studies take into account. 4 A. By "inputs for student measurements," do you 5 mean measures of student characteristics? Q. I didn't mean that. I meant -- you said 6 7 earlier that certain studies have good measures for 8 school inputs. Do you think that's important in

numerous variables? In other words, you mentioned that

- 9 determining what factors contribute to student
- 10 achievement?
 - MR. AFFELDT: Objection. Vague and ambiguous.
 - MS. KOURY: Q. What was your answer?
- 13 A. My answer is if you mean -- let me just say
- 14 what I think is important. See if it's what you're
- 15 trying to ask.
- 16 That in trying to understand the influences on
- student achievement, it is important to have good 17
- 18 measures of school inputs. I believe that's what you
- 19 were asking. And if that's what you were asking, my
- 20 answer would be yes. You would get a better
- 21 approximation of what influences student achievement the
- 22 better your measures are of both school inputs and other
- 23 influences --24
 - Q. Have you --
 - A. -- that might be unique to the individual

Page 284
1 accounted for a greater share of the explained variation 2 in student achievement than the combined student 3 characteristic variables. And he did calculate, in 4 effect, size, and that is cited in my report. 5 Q. When you refer to "combined student 6 characteristic variables," is that taking into account 7 home and family factors? 8 A. Yes. Some of yes. 9 Q. With respect to his finding in that regard, do 10 you agree with his conclusion? 11 A. I don't I don't believe he misstated his 12 findings. I agree that he probably stated his findings 13 accurately, yes, to given what he did and what data 14 set he had. 15 Q. Do you have an opinion as to the percentage 16 of actually, I'm going to cut myself off and break 17 for lunch. 18 MR. AFFELDT: Okay. 19 (Lunch recess taken from 12:31 to 12 oOo 12 AFTERNOON SESSION 13 EXAMINATION BY MS. KOURY (Resumed) 14 MS. KOURY: Back on the record.
Page 285
 A. I did. Thank you. Q. I just want to remind you you're still under oath. A. Mm-hm. Q. Did you review any documents while you were at lunch? A. No. Q. Could you turn to page 14 of your expert report, which is Exhibit 17? A. Page 14? Q. 14. A. Okay. Q. In the first full paragraph, your report states that actually, your report indicates that intern certificates with teachers teaching on emergency permits and waivers and all these adjunct categories of credentials do not meet the state subject matter competence standards nor have they and then, quote: " studied or demonstrated proficiency in standards-based methods of teaching subject matter, methods of teaching reading" Could you just review that portion of the paragraph and let me know when you've had an opportunity to?

Page	286
1 age	200

	Page 286		Page 288
1	Q. Yes.	1	credential I defined as a preliminary or clear
2	A. Okay.	2	credential.
3	Q. Is this still your opinion today?	3	Q. Is it still your opinion that intern and
4	A. Yes.	4	pre-interns don't receive classroom support from veteran
5	Q. And to the extent that your opinion in that	5	teachers?
6	paragraph I'm sorry.	6	A. That's not what I stated in my report. I
7	Your opinion as reflected in that paragraph on	7	believe I stated daily classroom supervision or
8	page 14, in the first full paragraph, apply equally to	8	something something like that.
9	teachers with intern credentials; is that correct?	9	Q. With respect to page 14 of your report, in the
10	A. I'd have to go back and reread the previous	10	first full paragraph, the last sentence:
11	page to see what I meant by "none of these." So I can	11	"None of the alternative credentials
12	take a minute to do that?	12	requires that teachers have had the
13	Q. Of course.	13	opportunity to work under the direct daily
14	A. Yes.	14	supervision of a practicing veteran teacher
15	Q. And what do you base your opinion on?	15	available to demonstrate effective
16	A. Review of the state credentialing	16	strategies," is that still your opinion?
17	requirements.	17	A. Yes.
18	Q. And how recently have you reviewed the state's	18	Q. And that's your opinion with respect to
19	credentialing requirements with respect to intern	19	pre-interns and interns?
20	credentials?	20	A. Yes.
21	A. Probably about a year ago.	21	Q. Do you think it's important for pre-interns
22	Q. And on page 13 you state that interns are not	22	and interns to receive daily service or I'm sorry
23	required to meet all subject matter requirements, which	23	daily supervision from a practicing veteran teacher?
24	you've listed on page 12 of the report, prior to	24	A. Yes.
25	admission in the program. Is that still your	25	Q. What do you mean by "daily supervision"?
	Page 287		Page 289
1	opinion today?	1	A. The custom in when people meet
2	A. Yes. There's a footnote there, Footnote 10,	2	student-teaching requirements in teaching, which is
3	which notes that:	3	okay, which is the standard requirement, it is that one
4	"Interns may be issued a credential if	4	is placed in the classroom of a practicing teacher's who
_		_	

- 5 they've completed 80 percent of an approved
- 6 subject matter program, rather than the entire
- 7 program. [They're] expected to satisfy the
- 8 remaining requirements ... while they are
- 9 serving as interns."
- 10 So the point at which an intern has to have
- 11 satisfied the full subject matter requirement is not
- 12 prior to the issuance of the credential but sometime
- while holding the credential, at the time I reviewed therequirements.
- 15 Q. And in Footnote 9 of your report, which is on
- 16 page 12, you refer to intern certificates as a
- 17 "substandard" credential. Is that still your
- 18 opinion today?
- A. Footnote 9 doesn't use the word "substandard,"
 does it? Ah, yes, it does, at the very end of the
 sentence. Yes.
 Q. What did you mean by "substandard"?
- 23 A. Less than standard.
- 24 Q. What do you mean by "standard" then?
- 25 A. As I said earlier, the standard standard

- is placed in the classroom of a practicing teacher's who 5 models teaching behaviors, observes and critiques and 6 oversees the teaching of the student teacher and plans 7 lessons with them, looks out for problems, addresses 8 those problems as they arise. That's important because 9 people learn to teach in part by seeing good teaching and being coached and critiqued in their teaching and 10 having oversight for the good of the students in the 11 decisions that they make about their plans and treatment
- decisions that they make about their plans and treatmentof students.
- Q. How long do you think interns and pre-internsshould receive the daily supervision from a veteranteacher?
- 17 A. I think all teachers ought to receive a kind 18 of coached introduction to teaching. And the amount of 19 time that a person might need could vary, but there's 20 some evidence that sort of the norm -- let me put it 21 this way: The norm across the states is that one would 22 have at least the equivalent of a semester of supervised 23 student-teaching. Some states have increased that to as much as a year based on evidence that that enables 24 25 teachers to become more proficient. Some of the better

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	Page 290		Page 292
	C C		-
1	programs in California or the more intensive programs	1	intern programs have raised concerns about the
2	have a full year of student-teaching.	2	lack of support interns receive."
3	Q. Do you have an understanding as to what	3	So my point was that there are some
4	preservice hours means?	4	high-quality internship programs, but not all internship
5	A. I don't know what you're referring to.	5	programs appear to be high-quality with respect to the
6	Q. With respect to credentialing requirements,	6	amount of mentoring and support that the interns
7	are you familiar with the term you used for preservice	7	receive.
8	hours. Does that sound familiar to you?	8	Q. And is that still your opinion today?
9	A. It sounds like it's a term that needs to be in	9	A. Yes, I guess you could say it is.
10	context. I don't know. Hours of what? I don't know if	10	Q. Okay. And other than the report to which you
11	I used that term in the report.	11	cite, and specifically McKibbin's report, do you have
12	Q. Actually, could you just turn to page 41?	12	any other research or studies that you rely on in
13	A. Okay.	13	drawing your opinion that some internship programs have
14	Q. 42.	14	raised concerns of the lack of support?
15	A. 42?	15	MR. AFFELDT: Objection. The report speaks
16	Q. Yeah.	16	for itself.
17	A. Okay.	17	MS. KOURY: Q. I'm not asking you about the
18	Q. Can you review the paragraph the last	18	report. I'm asking you, other than what's in the
19	paragraph on page 42 which starts "Although some	19	report, if you have any other studies or research that
20	universities" and continues through the quote the end	20	you rely on in drawing that opinion.
21	of your quote on page 43?	21	A. I do, in the report, cite other studies on
22	A. My quote or McKibbin's quote?	22	that point about internship programs.
23	Q. McKibbin's quote, which you cite.	23	Q. Could you point to me where in your report
24	A. Okay. I've read that quote. I didn't see the	24	MR. AFFELDT: I'm not sure she finished her
25	term "preservice hours." Was that supposed to have	25	answer.

0. No. 1 1 MS. KOURY: Oh, I'm sorry. 2 2 A. Okay. THE WITNESS: I said I'd be glad to point to 3 3 Q. Are you familiar with this particular quote? some of those that are easily findable. 4 A. Yes. 4 MS. KOURY: Great. 5 Q. And is this still your opinion? 5 THE WITNESS: And I have read other things 6 A. Well, it was McKibbin's opinion that I was about some intern programs in California that may or may 6 7 not be cited in the report. Probably not everything 7 quoting to. 8 Q. Do you agree with Mr. McKibbin -- with 8 I've read is cited. 9 McKibbin's portrayal as reflected in this quote? 9 I do cite to two studies that were recently 10 done by the California State University systems that 10 A. I have no reason to doubt the veracity of what he said about the programs he looked at, at that point were surveys of graduates, and they're cited under the 11 11 authorship of California State University, which found 12 in time. 12 13 Q. What is your opinion as reflected in this 13 that interns felt less well-prepared than fully, particular paragraph, and in -- I should say more 14 standardly prepared graduates. 14 15 broadly -- on this page? 15 MS. KOURY: Q. Are those the 2002 reports MR. AFFELDT: Objection. Vague and ambiguous. 16 16 that you're referring to? Her opinion about what? A. I believe so. And the reports by Shields, et 17 17 18 MS. KOURY: Q. What is McKibbin pointing at 18 al., for the -- by -- who work for the Stanford in this particular quote or -- let me ask you a 19 Research Institute and conduct the studies for the 19 different question. 20 Center for the Future of Teaching and Learning, are also 20 21 21 Why did you quote him here? cited here with reference in part to their analysis of 22 A. Well, the preceding sentence says: 22 the preparation of interns. 23 "Although some universities and districts 23 That's what I recall at the moment. 24 have developed high-quality internship 24 Q. Do you know what, if anything, the CCTC is 25 programs ... recent evaluations of California 25 doing or has done to provide more oversight over these

	Page 294		Page 296
1		1	-
1	programs?	1	certification or licensure requirements waived
2	A. Within the last few years, the intern programs	2	on an emergency, temporary, or provisional
3	that were not subject to review or approval by the CCTC	3	basis; Holds a minimum of a bachelor's degree;
4	have been put under a greater level of review. So there	4	and Has demonstrated subject area competence
5	is some greater review capacity on the part of the CCTC	5	in each of the subjects academic subjects
6	for intern programs.	6	in which the teacher teaches in a manner
7	Q. Anything else?	7	determined by the State and in compliance with
8	A. That's what I can think of at the moment.	8	Section 9101"
9	Q. And how did you make that determination in	9	So, those are the major requirements. There
10	terms of what efforts the CCTC has done?	10	are additional statements in the law about beginning
11	A. I just keep up with the CCTC reports.	11	teachers and veteran teachers, et cetera.
12	Q. To the extent that the CCTC has taken on	12	Q. And do you know who decides whether
13	greater review capacity of these programs, is that	13	California's compliant with the NCLB requirements?
14	reflected in the studies that you cited?	14	MR. AFFELDT: Objection to the extent it calls
15	A. Well, the CSU reports were done in 2002, so	15	for a legal conclusion.
16	they're very recent. They're had just been published	16	MS. KOURY: Q. You can answer that.
17	at the point that I finished the report. So they're	17	A. My understanding is that each state must make
17	they presumably include and they were studies of	17	a proposal to the U.S. Department of Education, and the
18		18 19	
	recent graduates, so they presumably include some of the		U.S. Department of Education will make decisions about
20	effects of the recent efforts of the CCTC.	20	whether the proposals are adequate. The decision about
21	Q. Are you familiar with the requirements of "No	21	compliance with the law could, I believe, also include a
22	Child Left Behind" or the No Child Left Behind Act?	22	determination of whether The Department is fairly
23	A. Yes.	23	enforcing the law, and that might be a matter that would
24	Q. What is your familiarity with it?	24	be that would go beyond the department.
25	A. I've read the act and reviewed it.	25	Q. Do you know whether the U.S. Department of
	D 205		D 207
	Page 295		Page 297
1	Q. Anything else? Any sort of discussions or any	1	Education has determined whether California's
2	other sort	2	requirements for intern certificates meets its
3	A. I've had discussions with other people about	3	definition of highly-qualified teachers?
4	it, yes.	4	MR. AFFELDT: Objection. Calls for a legal
5	Q. And do you have an understanding as to how it	5	conclusion.
6	defines highly-qualified teacher?	6	MS. KOURY: Q. You can go ahead and answer
7	A. I do have an understanding.	7	that.
8	Q. What is your understanding of that?	8	A. My most recent understanding is that the
9	A. I'd like to have the text in front of me if	9	department of education was the I I am aware that
10	I because there's, actually, a very long passage in	10	statements were made by individuals within the
11	terms of how it's defined with some and's and or's that	11	Department of Education that seemed to be suggesting
12	make a difference in how people might interpret it. But	12	that programs like internship programs might be viewed
		12	as meeting the standard of the laws. They were reading
13	in general, from my memory, the definition of		
14	"highly-qualified" states that teachers in fact, I	14	that standard.
15	have I quote some of it in here, so let me just find	15	MS. READ-SPANGLER: Just to clarify, when you
16	it rather than trying to do it from memory.	16	say Department of Education, do you mean California or
17	MR. AFFELDT: Top of page 76.	17	U.S.?
			THE WITNESS: U.S.
18	THE WITNESS: Thank you. Okay.	18	
19	So, at the top of page 76, this is quoting	19	MS. KOURY: Can you repeat her answer, please?
19	So, at the top of page 76, this is quoting	19	MS. KOURY: Can you repeat her answer, please?

- who: Has obtained full state certification as 22
- 23 a teacher or passed the State teacher
- 24 licensing examination and holds a license to
- 25 teach in the State, and does not have

27 (Pages 294 to 297)

- 21 MS. KOORY: Q. So assuming that interns in
 22 California meet the "highly qualified" definition as
 23 articulated by the NCLB, would you still think that
- 24
- California interns were substandard? 25
 - A. Yes.

24 enable students to learn the curriculum and standards required to the them by the state." 24 Left Behind Act and the California constitutional standard, whatever it would be. 25 Page 299 Page 301 1 MR. AFFELDT: "Required 'of them' by the state." 25 3 MS. KOURY: Of them by the state. 26 4 Q. (By Ms. Koury) Is that still your 26 5 opinion today? 6 6 A. Yes. 2 7 Q. What did you mean by "the constitutional standard"? 9 9 A. The California Constitution requires a uniform 10 system of education and has an equal protection element 11 to it. And to the extent that the state has defined 12 what qualified teachers are, then the constitutional standard of equal protection would seem to me to require 13 access to that standard of qualification. 20 Why not? 16 Q. Assuming that interns in California meet the 15 NCLB, do you think that intern certificates violate the constitutional standard to which is referred on page 78? MR. AFFELDT: Same objections. 11 11 THE WITNESS: Son've got a law passed by the 14 A Yeah. 14 12 kinds of law in there. You've got a law passed by the 20 THE WITNESS: Son' Each for America recruits, 20 24 <		Page 298		Page 300
1MR. AFFELDT: "Required 'of them' by the state."1MS. KOURY: Q. Do you know if the U.S.3MS. KOURY: Of them by the state.2Department of Education has determined whether teachers trained and admitted into the Teach for America program meet the "highly qualified" requirements of the NCLB?4Q. (By Ms. Koury) Is that still your opinion today?A. Yes.5opinion today?A. Yes.7Q. What did you mean by "the constitutional standard"?A. The California Constitution requires a uniform9A. The California Constitution requires a uniformB. Q. Why not?9A. The California Constitution al to it. And to the extent that the state has definedB. Q. Why not?9A. The California weet the tastate has definedM. And to the extent that the state has defined11to it. And to the extent that the state has definedMaterica program have, when they exit that program, not11to it. And to the extent that the state has definedMaterica program have, when they exit that program, not12that every student should then have full and equal access to that standard of qualification.116Q. Assuming that interns in California meet the1517"highly qualified" definition as articulated by the1618NCLB, do you think that intern certificates violate the to ostitutional standard to which is referred on page 78?1720MR. AFFELDT: Same objections.1121THE WITNESS: You've got a lot of different t221022kinds of law in there. You've got a law pass	$\begin{array}{c} 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ 22\\ 23\\ 24\\ \end{array}$	 Q. Do you think that they violate the constitution in terms of A. Whoa. I have no way of knowing that. Q. Really? Okay. A. I mean, that's a legal opinion. MR. AFFELDT: I'll object to the extent it calls for a legal conclusion, and it's also ambiguous as to which constitution you're talking about. MS. KOURY: Q. Why would you think I'm sorry. With respect to your previous answer that it would still be substandard, why do you think it would still be substandard. A. I think I defined "standard," and interns do not meet the same standards as those who receive a standard credential. I'm using the same definition I used earlier. Q. Turning to page 78 of your report, read the first sentence for me, if you would, under the heading "Standards and Benchmarks." For the record, it states: "Ultimately, the constitutional standard requires that every student have full and equal access to qualified teachers who can enable students to learn the curriculum and 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	has its own constitution. So I don't think there's a necessarily, a relationship between a definition accepted for No Child Left Behind and the standards for education under the California Constitution. MS. KOURY: Q. So do you have an opinion one way or the other whether assuming that interns meet that definition under the NCLB as defined by the U.S. Department of Education whether that standard, the intern standard, would violate the California constitutional standards which you set forth on page 78 of your report? MR. AFFELDT: Objection. MS. KOURY: She can repeat that if you couldn't follow it. THE WITNESS: I'm sorry. What's your objection? MR. AFFELDT: Calls for a legal conclusion. THE WITNESS: Do you want to repeat what the question was? (Record read.) THE WITNESS: Okay. So I'll say again that I don't see any necessary relationship between the U.S. Department of Education's interpretation of the No Child Left Behind Act and the California constitutional
 U.S. Congress, interpreted (with some contention) on the in the view of some Congress people by the U.S. training, have not obtained full state certification in any state that I'm aware of. 	25 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	standards required to the them by the state." Page 299 MR. AFFELDT: "Required 'of them' by the state." MS. KOURY: Of them by the state. Q. (By Ms. Koury) Is that still your opinion today? A. Yes. Q. What did you mean by "the constitutional standard"? A. The California Constitution requires a uniform system of education and has an equal protection element to it. And to the extent that the state has defined what qualified teachers are, then the constitutional standard of equal protection would seem to me to require that every student should then have full and equal access to that standard of qualification. Q. Assuming that interns in California meet the "highly qualified" definition as articulated by the NCLB, do you think that intern certificates violate the constitutional standard to which is referred on page 78? MR. AFFELDT: Same objections. THE WITNESS: You've got a lot of different kinds of law in there. You've got a law passed by the U.S. Congress, interpreted (with some contention) on	$ \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} $	 standard, whatever it would be. Page 301 MS. KOURY: Q. Do you know if the U.S. Department of Education has determined whether teachers trained and admitted into the Teach for America program meet the "highly qualified" requirements of the NCLB? A. I do not know. Q. Do you think it does? A. No, I do not. Q. Why not? A. Because teachers trained in the Teach for America program have, when they exit that program, not demonstrated either that they meet the standard for a full credential (which they do not in any state), full certification as it's defined in NCLB Was the question about whether they meet the NCLB standard or whether they meet the another standard? Q. The NCLB. A. Yeah. MR. AFFELDT: I'll object again as calling for a legal conclusion. THE WITNESS: So, Teach for America recruits, when they finish the several weeks of Teach for America training, have not obtained full state certification in

	Page 302		Page 304
1	standard or I'm sorry.	1	waiver of requirements is a reasonable definition for a
2	Using the definition of the constitutional	2	qualified teacher. I would not call it a highly
3	standard which you've expressed and as the term is set	3	qualified teacher. I would call it a minimally
4	forth on page 78 of your report, do you think that	4	qualified teacher. But as a definition of a minimally
5	teachers on teaching through Teach for America	5	qualified teacher, I think it's reasonable, as I read
6	violate that constitutional standard?	6	it.
7	MR. AFFELDT: Objection. Calls for a legal	7	MS. KOURY: Q. Could you turn to page 75 of
8	conclusion.	8	your report, please and review paragraph the second
9	THE WITNESS: I'm also unclear about what	9	paragraph in that?
10	how what you mean by an individual violating the	10	A. Second full paragraph, "in large part"?
11	constitutional standard.	11	Q. Yes.
12	MS. KOURY: Q. To the extent that you're	12	A. Okay.
13	making objections about drawing a legal conclusion, my	13	Q. I'm sorry. It's probably the first full
14	questions are based on the legal conclusion which you've	14	paragraph, "As pressure for improving."
15	drawn in your report on page 78 regarding the	15	A. Mm-hm. Yes, okay.
16	constitutional standard and what it requires.	16	Q. In particular actually, is that still your
17	So my question is simply, Having that	17	opinion today with respect to pre-intern credentials and
18	definition in mind, which you set forth on page 78, do	18	the requirements for pre-intern credentials?
19	you think that a teacher teaching through the Teach for	19	A. Yes.
20	America program violates that constitutional standard?	20	Q. On what do you base your opinion with respect
21	A. I think that a	21	to pre-intern credential requirements?
22	MR. AFFELDT: Same objection.	22	A. I cite to a particular report of the CCTC,
23	THE WITNESS: Yeah. I'm I'm also wondering	23	which is the report from which I got those that
24	whether an individual violates the standard or whether	24	characterization of the requirements.
25	the districts or state that hires them violates the	25	Q. And was that your last review of the CCTC
	Page 303		Page 305

1	standard. I'm just trying to be precise about what	1	requirements for a pre-intern credential?
2	you're asking about	2	In other words, the 2001 report, is that the
3	MS. KOURY: Sure.	3	most recent information that you have with respect to
4	THE WITNESS: what you're asking.	4	pre-intern credentials?
5	I do not think that a Teach for America	5	A. That's the most recent report I reviewed for
6	teacher who has only the Teach for America training that	6	that specific purpose, yes.
7	they received prior to entering the classroom meets the	7	Q. Could you please turn to page 41 of your
8	definition of a qualified teacher, which is what I'm	8	report? And the last paragraph of that page states:
9	referring to in that statement on page 78.	9	"Finally, concentrations of under-prepared
10	MS. KOURY: Q. What is your opinion, if	10	teachers create a drain on schools' financial
11	you or do you have an opinion of the NCLB's	11	as well as human resources. For example,
12	definition of qualified teacher?	12	emergency permit teachers have a high
13	MR. AFFELDT: Objection. Vague. And	13	attrition rate: According to CCTC statistics,
14	objection to the extent it calls for a legal conclusion.	14	just over 40 percent leave the profession
15	MS. KOURY: Q. You can answer that.	15	within a year"
16	A. What was the question? Can you restate the	16	Is that still your opinion today?
17	question?	17	A. That statistic is from data compiled in
18	Q. Do you have an opinion as to whether the	18	1996-97 that was made available to me in 1998. There's
19	NCLB's definition of "highly qualified" teacher is a	19	usually a lag between data availability and and the
20	good one?	20	year it's for. I would have to see the more recent
21	MR. AFFELDT: Same objections.	21	statistics to know if that still holds.
22	THE WITNESS: I think that the statement in	22	Q. Have you reviewed any more recent statistics
23	the law, interpreted as I understand the law to read,	23	on that issue?
24	which is that it requires full state certification and	24	A. I have seen some other statistics upon
25	the demonstration of subject area competence without the	25	about emergency permit teachers, but I would not rely on
	v 1		

	Page 306		Page 308
1	them without going back to you know, to the documents	1	sent it to me after we had a conversation in which she
2	themselves.	2	wanted to share with me what the attrition data looked
3	Q. Is it your recollection that the statistics	3	like.
4	that you've recently reviewed are different from the	4	Q. You also mentioned that there are other more
5	statistics cited here in your report?	5	recent data that you've reviewed that discusses the
6	A. They were similar.	6	attrition rate of emergency permit teachers. Could you
7	Q. So, as far as you know as far as you're	7	identify what that data is?
8	aware, this statistic is still accurate today, in your	8	A. I saw some which I think was the last data
9	opinion?	9	I saw. I've had conversations with researchers from SRI
10	MR. AFFELDT: Objection. Asked and answered.	10	who have been doing ongoing examination of teacher
11	MS. KOURY: Q. You can answer that.	11	issues in California. And, actually, there there's a
12	A. I refer back to what I said. I don't know	12	couple of pieces of data, one of which I would not rely
13	whether it's accurate, but I have seen more recent	13	on, and and I think it may have even been something
14	statistics that look similar.	14	similar cited on the CCTC web site, which looked at
15	Q. Okay.	15	attrition based on the proportion of teachers with
16	MS. KOURY: Could we take a two-second off the	16	different kinds of credentials who remained in STRS data
17	record?	17	set, which is the State Teacher Retirement Data Set.
18	MR. AFFELDT: Mm-hm.	18	After looking at that, the SRI people
19	(Discussion off the record.)	19	discovered that being in the state retirement data set
20	MS. KOURY: Q. Mark to your deposition	20	is not a good indicator of whether you've left teaching,
21	transcript or attach Exhibit 19, which bears it's a	21	because you can stay in that data set even when you've
22	document bearing the Bates stamp PLTF-XP-LDH 4325	22	left teaching. So those those data, which exist and
23	through 4326.	23	I think I recently saw cited on the CCTC web site, are
24	(Whereupon, Deposition Exhibit 19	24	not a good indication of attrition. But in another
25	was marked for identification.)	25	conversation with the folks at SRI, I believe I looked

	Page 307		Page 309
1	MS. KOURY: Q. Could you just review that for	1	data that was similar to this in terms of actually
2	me and let me know when you finish?	2	staying in the classroom. And my recollection is that
3	A. Okay.	3	those were similar, although I don't remember the exact
4	Q. For the record, this is a document with a fax	4	figure, but they were comparable. This is in
5	cover sheet addressed to Professor Darling-Hammond from	5	conversation about different ways of looking at
6	Anne Padilla of the CCTC.	6	attrition.
7	Are you familiar with this document?	7	Q. Was it just conversations that you had with
8	A. I am.	8	SRI researchers or was it data that you actually
9	Q. And the enclosure of this document, which is a	9	reviewed from the SRI researchers?
10	one-page document titled "CCTC Emergency Permit	10	A. They had some data that they were looking at.
11	Persistence Data" dated 1996-1997	11	Q. And how recent was that data?
12	A. Mm-hm.	12	A. The conversation was about a year ago. The
13	Q. It states in the first line that this is an:	13	data were probably within a year prior to that.
14	"Internal data compiled by CCTC,	14	Q. Other than the conversations with the SRI
15	Certification and Waivers Division, 1/9/98, on	15	researchers and the data that you reviewed from them and
16	first time Multiple and Single Subject and	16	Exhibit 19, is there any other data or research that you
17	Long Term Emergency Permits 1996/97 based on	17	rely on in drawing your opinion that attrition rate is
18	subsequent activity of permits."	18	just over 40 percent for emergency permit holders after
19	Is this the document on which you relied in	19	a year?
20	order or on which you rely in determining that	20	A. That particular statistic I cite only to this
21	there's a 40 percent attrition rate?	21	one thing, obviously, that but in my opinion, that
22	A. It is the document cited there, yes.	22	emergency credential or unprepared teachers have high
23	Q. And how did you obtain this document?	23	attrition rates, I rely on those data as well as some
24	A. From Linda Bond, who is who works for the	24	national data, which find similar kinds of high
25	California Commission on Teacher Credentialing. She	25	attrition rates for teachers without credentials.

	Page 310		Page 312
1	Q. As to the national data, what are you	1	data. And the person I don't recall who it was she
2	referring to?	2	talked to, but the person she talked to said they were
3	A. There are studies that have been published by	3	not aware of more recent data at the time that question
4	the National Center for Education Statistics, using the	4	was raised.
5	Baccalaureate and Beyond Data Set.	5	Q. When was that effort made?
6	Q. Could I interrupt you and just ask, Does that	6	A. Probably about a year and a half or so ago. I
7	particular study address the attrition rate of emergency	7	mentioned that I had seen a statistic on the CCTC web
8	permit holders in California?	8	site recently which mentioned something about attrition
9	A. It's national, so it includes but is not	9	rates, but I deemed that particular statistic to be
10	limited to California. That's with respect to the	10	unreliable because it used as a measure of attrition
11	statement I just made about other national studies that	11	the whether the person continued to appear in the
12	I rely on for the general conclusion about the attrition	12	state retirement database, which is not the same as
13	rates of unprepared teachers.	13	having left the classroom.
14	I'm trying to see if that's cited in here so I	14	Q. What do you mean by that?
15	can give you an exact citation. Henke, Chen & Geis is	15	MR. JORDAN: I'm sorry. I missed the
16	the is the citation for that particular study. And I	16	question.
17	have more recently seen some analyses from the Schools	17	MS. KOURY: I just asked, What do you mean by
18	and Staffing survey database that were reported in a	18	that?
19	report that was issued since this paper was written.	19	MR. JORDAN: Oh.
20	Q. Anything else?	20	THE WITNESS: I saw, in scanning some reports
21	A. That's what I can recall right now.	21	quickly on the CCTC web site, a statistic at one point
22 23	Q. Okay. Looking at Exhibit 19 on page 4326	22 23	within the last year that made some inferences about attrition rates of teachers with different kinds of
	where it states "intern data compiled by CCTC," what was your understanding as to what was meant by that?	23 24	credentials. But it used, as the measure of attrition,
24 25	A. What was meant by "internal data compiled by	24 25	data about whether the individuals were still still
23	A. What was mean by memar data complied by	25	data about whether the marviduals were still still
	Page 311		Page 313
1	CCTC"?	1	had records in the State Retirement System database.
2	CCTC"? Q. Correct.	2	had records in the State Retirement System database. It turns out I had learned previously from the
2 3	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this	2 3	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar
2 3 4	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is	2 3 4	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether
2 3 4 5	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC.	2 3 4 5	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because
2 3 4 5 6	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable	2 3 4 5 6	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can
2 3 4 5 6 7	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data,	2 3 4 5 6 7	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're
2 3 4 5 6 7 8	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a	2 3 4 5 6 7 8	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that
2 3 4 5 6 7 8 9	CCTC"?Q. Correct.A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC.Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that	2 3 4 5 6 7 8 9	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public
2 3 4 5 6 7 8 9 10	CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do?	2 3 4 5 6 7 8 9 10	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position.
2 3 4 5 6 7 8 9 10 11	CCTC"?Q. Correct.A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC.Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do?A. Yeah. Often administrative data are the most	2 3 4 5 6 7 8 9 10 11	 had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report?
2 3 4 5 6 7 8 9 10 11 12	 CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do? A. Yeah. Often administrative data are the most accurate data available for questions like this when 	2 3 4 5 6 7 8 9 10 11 12	 had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report? Under the heading which is numbered 6, "Overreliance on
2 3 4 5 6 7 8 9 10 11 12 13	 CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do? A. Yeah. Often administrative data are the most accurate data available for questions like this when you're looking for a specific statistic about a 	2 3 4 5 6 7 8 9 10 11 12 13	 had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report? Under the heading which is numbered 6, "Overreliance on Pathways into Teaching," the third sentence in
2 3 4 5 6 7 8 9 10 11 12	 CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do? A. Yeah. Often administrative data are the most accurate data available for questions like this when you're looking for a specific statistic about a particular fact. 	2 3 4 5 6 7 8 9 10 11 12	 had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report? Under the heading which is numbered 6, "Overreliance on Pathways into Teaching," the third sentence in states:
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2 3 4 5 6 7 8 9 10 11 12 13 14 15	 CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do? A. Yeah. Often administrative data are the most accurate data available for questions like this when you're looking for a specific statistic about a particular fact. Q. What do you mean by "administrative data"? 	2 3 4 5 6 7 8 9 10 11 12 13 14 15	had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report? Under the heading which is numbered 6, "Overreliance on Pathways into Teaching," the third sentence in states: "As noted earlier, the CCTC reports said
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	 CCTC"? Q. Correct. A. My understanding from Linda Bond was that this was calculated from the certification database that is maintained by the CCTC. Q. In your opinion, is it generally acceptable for experts in your field to rely on this type of data, which is contained in Exhibit 19, in drawing a conclusion about an attrition rate such as the one that you do? A. Yeah. Often administrative data are the most accurate data available for questions like this when you're looking for a specific statistic about a particular fact. Q. What do you mean by "administrative data"? A. Administrative data is data maintained by administrative agencies such as the CCTC. It it is the place in California the possibly the only administrative agency that maintains data about individual credentials and credentialing holders. 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	 had records in the State Retirement System database. It turns out I had learned previously from the researchers at SRI, when they were looking at similar questions, that that is not a good measure of whether someone has left teaching or left the classroom, because you can stay in the state retirement database you can continue to be in the retirement database even if you're working as a researcher at SRI or some place like that or leaving teaching for another kind of public employment position. Q. Could you turn to page 65 of your report? Under the heading which is numbered 6, "Overreliance on Pathways into Teaching," the third sentence in states: "As noted earlier, the CCTC reports said that about 40 percent of emergency credentialed teachers in California leave within a year and two-thirds leave before gaining a credential."

- 23 its attrition rate for emergency permit holders?
- A. We did actually make one inquiry, one of my research assistants, about whether there was more recent
- 24 CCTC which is contained in Exhibit 19? A. That's the exhibit we just looked at?

1	Q. Yes.	1	comparable or better way.
2	A. The portion of the sentence you just read	2	Q. Could you turn to page 69 of your report. If
3	two sentences. The portion of the first sentence that	3	you want to stop and call at any point
4	deals with the statistic 40 percent does relate to the	4	A. I'm okay for now.
5	same exhibit, Exhibit 19, that we were talking about.	5	Q just tell me. Okay.
6	Q. Where does the estimate of "two-thirds leave	6	On page 69 of your report, it states that:
7	before gaining a credential" come from?	7	" California has had no procedures for
8	A. Personal correspondence with Linda Bond. That	8	ensuring that districts engage in efficient
9	was her statement. That's cited earlier.	9	recruitment strategies, hire fully certified
10	Q. Do you know where that citation is to your	10	teachers when they are available, or maintain
11	personal communication with Linda Bond?	11	a well-functioning personnel system."
12	A. It's probably in the page we were just talking	12	Is that still your opinion today?
13	about a few minutes ago. Do you remember what that was?	13	A. For the most part. Although, you know, over
14	Q. Yes, I do. Page 41.	14	the last few years, the there may over the last
15	A. It's on in that Footnote 24.	15	couple of years, there may have been some additional
16	Q. Did she explain to you what she based that	16	efforts made to improve this, but at the time this was
17	conclusion on, that two-thirds of emergency permit	17	written, it was my opinion. And I would say, for the
18	teachers do not receive full teaching certification?	18	most part, it is still my opinion.
19	A. The CCTC's records in which they track when	19	Q. What additional efforts have been made by the
20	they were tracking the progress towards a credential of	20	state since the time that you wrote this report?
21	emergency permit holders.	21	A. There have been analyses of district
22	Q. Do you know whether there's any study or as	22	recruitment strategies done by FCMAT, which is an
23	opposed to internal compilation which you have and was	23	acronym that, I believe, is F-C-M-A-T, although I'm not
24	contained in Exhibit 19, do you know whether there's any	24	sure that there'd been whether there'd been follow-up
25	formal studies that's been set forth by the CCTC	25	procedures to ensure that the results of those studies
	5		r
	Page 315		Page 317
1		1	
1	exploring this issue?	1	have been implemented from a state perspective. It
2	A. Published study?	2	is as I said, it's conceivable that may have happened
3	Q. Yes.	3	in the recent year or so.
4	A. I do not. I have not seen such a study, which	4	Q. Anything else?
5	is why I relied on the internal documents.	5	A. That's all that I had in mind.
6	Q. Is it generally acceptable for experts in your	6	Q. Could you turn to page 71 of your report? In
7	field to rely on communications when drawing conclusions	7	the first paragraph on page 71, your report states that
8	about statistical findings such as attrition rates?	8	"the CCTC relies on the attestations of the district
9	A. Quite often people rely on administrative	9	when evaluating the requests." It goes on to say to
10	records, absolutely, that are conveyed in personal	10	hire persons on emergency permits, and that the, quote,
11	correspondences when they're not published. We expect	11	CCTC does not review the districts' processing of
12	public agencies to be honest and to make their data	12	applications. And you also say, quote:
13	available.	13	"Nor does the [CCTC] take any action to
14	Q. To the extent that there is a publication that	14	check on the veracity of district claims when
15	sets forth that information from that agency, would that	15	a district requests a waiver of teachers'
16	override, in your opinion, an internal compilation?	16	credentials"
17	MR. AFFELDT: Objection. Vague.	17	Is that still your opinion today?
18	THE WITNESS: Yeah.	18	A. That is yes, that is still my opinion. But
19	MS. KOURY: Q. Do you not have an opinion on	19	I but my most recent evidence about that is the
20	that?	20	citation that is made there and the Swofford deposition.
21	A. It would depend on whether the publication	21	Q. Is that your is that what you rely on
22	answered the question in a comparable or better way.	22	exclusively, is this Swofford deposition for that
23	Q. And if it did?	23	opinion?
24	A. If it did, you would use a published	24	A. Yes. That's what I said there.
25	published piece if it answered the same question in a	25	Q. Other than what's articulated in your report
			32 (Pages 314 to 317

	Page 318		Page 320
$ \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 your citation to the Swofford deposition, are you aware of anything more that the state is doing with respect to those issues? A. To which issues? Q. The issues articulated in that on page 71 in the top paragraph through the end of page 71. MR. AFFELDT: Objection. Compound. MS. KOURY: Sure. Q. (By Ms. Koury) If you would go ahead and review page 71 for me. A. Okay. Q. Starting with "no accountability system like this exists in California" through the end of page 71. A. Okay. And the question I'm reading it for is? Q. Do you know of any other efforts that the state is making to address the issues which are articulated on this page? A. Okay. MR. AFFELDT: Objection. Compound. Go ahead and review the page. THE WITNESS: I've reviewed the page andMS. KOURY: Q. Actually, I'm going to stop you because I'm going to break down the question for you. A. Okay. 	$ \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} $	 efforts beyond those listed in my report. Q. On page 70 of your report, you reference and discuss Connecticut and Minnesota's processes in connection with or accountability system and the procedures they have in place. Do you think that California should adopt the system used in Connecticut as articulated on page 70 of your report? A. Each state is different, so what each state could or should do might vary. I think that there are general approaches used in Connecticut that are salutary and ought to be considered as approaches for California. They would not necessarily be implemented in the same way. The agency structures are different. The authorities for various actions are more are more distributed in California than in Connecticut. So, the policy ideas from any other state would have to be adapted to be adopted in California, to be implemented in California. Q. The approaches that you mentioned that California should consider, are those approaches articulated on page 70 of your report Connecticut's approaches? A. I don't know that they're all on page 70. I'd have to
1	Page 319 Q. First, are the opinions reflected on page 71	1	Page 321 Q. Keeping in mind the particular issue that's
2	still your opinions?	2	articulated in these
3	A. They are.	3	A. Yeah. The
4	Q. And do you know of any other state efforts	4	Q Section 9 of your report, which says "Lack
5 6	that are in place to review district recruitment strategies other than what you set forth in your expert	5 6	of accountability for ensuring the hiring of qualified teachers when they're available."
7	report?	7	MR. AFFELDT: And I'll object as compound and
8	A. To review district recruitment strategies?	8	overbroad.
9	Q. Correct.	9	MS. KOURY: Q. Keeping that issue in mind,
10	A. No. I think that the ones I'm aware of are	10	the issue that's articulated in Section 9 of your

10 A. No. I think that the ones I'm aware of are 11 mentioned in my report.

Q. Do you know of any other state efforts to
review districts' applications for emergency permits
other than what's articulated in your report?

A. I do not know of other efforts beyond what'slisted in my report.

Q. Do you know of any other state efforts toreview districts' applications for waivers other thanwhat's in your report?

A. Review districts' applications for waivers ...
When you talk about the state, I assume you're talking

here about the CCTC, which has the authority for that

23 and is discussed in my report.

Q. Yes.

24

25 A. And the answer is that I do not know of

10 the issue that's articulated in Section 9 of your

- 11 report, do you think that the approaches, Connecticut's
- 12 approaches, that California should consider are

13 articulated on page 70 of your report?

14 A. This is a very brief summary of what

15 Connecticut does. Obviously, if one wanted to implement

16 some of those approaches, you'd need more detail that's

17 cited in the footnotes. But the general approaches are

18 worth considering, yes.

19 Q. Do you know whether the State of California or

20 the CCTC in particular has considered these approaches?

A. There are many approaches listed here. Do we want to go one by one? How should I ...

23 Q. Do you know whether the State of California

- 24 has considered any of those approaches that are
- articulated in that first full paragraph on page 70?

Page	322

	Page 322		Page 324
$ \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. Some of these are issues that have been taken up in California in one way or another. For example, the question of reciprocity, which I mention in the second sentence under Connecticut, is a question that's come up in California, and it's handled differently in Connecticut and in California. Connecticut on the question of the role of tests in that process has been considered in both states. It's handled differently if California than in Connecticut. The both states have a version of temporary credentials, so California has certainly considered how to use temporary credentials. They're managed differently in the two states. My point is that many of these are generic categories of policy that have been considered in California, as they have been in Connecticut and and other states, but they are not necessarily managed in the same way or the decisions are not the same within those categories. Q. And you think the way Connecticut has managed these particular policies is better than the way California has? A. Well, that's a very global statement in the plural. There are aspects of what Connecticut has done	$ \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. Why doesn't California use a Praxis test? A. I don't know how they made that decision. Q. Do you know whether they considered it? A. At one point, they used the Praxis tests one of the Praxis tests in conjunction with the state test. So instead of having one subject matter test, California had two subject matter tests, both of which had to be passed by individuals who didn't have a subject matter waiver. Now, my understanding is that that was the belief, that each of them was measuring something somewhat different than the other. Q. And do you think that California should use the Praxis test in other words, allow teachers to qualify if they pass the Praxis test? A. I think that's a you know, a kind of decision that ought to be considered. If the if one is in a situation where one assumes that all of the vacancies in the state will be filled by people who are trained within the state, it makes more sense to have a state-specific set of tests that are readily available to be taken only by people within the state. But if you're in a situation as an import state rather than an export state for teachers, it makes sense to think about ways to facilitate the movement of teachers into your
	Page 323		Page 325
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Page 323 that have been much more effective than what California has done, yes. Q. Which particular aspects do you think are more effective? A. Okay. I think that the way Connecticut has handled reciprocity has allowed more teachers to experience reciprocity more easily. The use of national tests like the Praxis test by Connecticut allows teachers to come from any part of the country and if they've already taken the Praxis test in another state, they then no longer have to revisit that requirement. The ability of Connecticut to enforce pretty rigorous requirements for a temporary license or a permanent license or a professional license is also supported by the fact that Connecticut has salary policies that allow it to be particular in terms of	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Page 325 state from other states. That's one way that some states make that possible. There are other ways. Some states will grant a reciprocal license to graduates from other states who have come from an NCATE-accredited university. So having the Praxis test is not the only way to facilitate that. Q. Do you think California is an import state or an export state? A. Right now it's probably not an import state. But to the extent that California wants to have access to a broader range of it gets relatively few of its teachers from out of state (about 5,000 a year). But to the extent that it wanted to be able to have access to more teachers, it would need to become more of an import state. MS. READ-SPANGLER: Do you want to take a

- of these policies have enabled Connecticut to do somethings more easily than they've been done in California.

- of Minnesota's system that you think California shouldconsider? Keeping in mind that we're discussing in

	Page 326		Page 328
1	particular the lack of accountability for ensuring the	1	make a demonstration that when vacancies are filled by
2	hiring of qualified teachers when they're available.	2	teachers who are not fully qualified, that they have
3	A. I'm going to review what I said about	3	made adequate efforts towards recruitment and that no
4	Minnesota before I answer that question.	4	hireable better-qualified teachers were available to
5	Q. In particular you're reviewing the second	5	take those positions.
6	paragraph on page 70?	6	And by hireable, I mean to suggest that (as is
7	A. Mm-hm.	7	the case in other states) if a person has a credential
8	MR. AFFELDT: By the way, that's N-C-A-T-E.	8	but has bad job references, for example, or, you know,
9	She said NCATE in her answer.	9	was in some way inadequate, that that does would not
10	THE WITNESS: Okay. I think that the way in	10	mean they would have to be hired, that that would be a
11	which Minnesota has a system for districts filing annual	11	basis for not having to hire a person just because they
12	reports and the state has a system for following up with	12	have a credential, but that a system like those in place
13	districts on the basis of their annual reports is a	13	in the states we've just talked about ought to be put in
14	useful system that ought to be considered. I think that	14	place so that that kind of determination can be made and
15	the way in which both Minnesota and Connecticut handle	15	that kind of enforcement can be pursued.
16	requests for exceptions to the licensing rules on a	16	Q. On page 80 of your report, if you would please
17	case-by-case basis, which is common in most states, is	17	flip to that page. Under the paragraph numbered 2
18	a an important way to handle the question about	18	A. Mm-hm.
19	waiving state certification requirements.	19	Q. It states:
20	It might seem to California difficult to	20	"Expand investigatory power and capacity
21	imagine doing that on a individual person-by-person	21	of appropriate state agencies to enforce the
22	basis at this point because of the extent to which	22	state's credentialing standards and prevent
23	wholesale waivers have been granted. But it ought to be	23	the hiring of uncredentialed teachers where
24	a goal for at least those districts where there have	24	qualified, credentialed teachers are
25	been continuous problems to ensure that the law is	25	available."

1 Is it still your opinion today that that's enforced with respect to the hiring of teachers in the 1 2 something you think is necessary for California? 2 order by which their credentials are ranked -- that is, 3 3 the most qualified teachers before the less qualified A. Yes. 4 teachers. 4 Q. And as far as you know, that's not the current 5 Q. In your opinion, does California have a system 5 affair of things? for filing an annual report with respect to applications In other words, as far as you know, the CCTC 6 6 7 7 for emergency permits and waiver and a system of doesn't have that authority right now? 8 following up with those reports? 8 A. Does not have adequate -- well, what my 9 A. Reports are filed requesting waivers, if 9 statement here says is "investigatory power and 10 that's what you're referring to. But there does not 10 capacity ... to enforce." And I still -- that is still my belief. I also refer here to "appropriate state seem to be a very well-developed system for following up 11 11 agencies," which might go beyond the CCTC, depending on to be sure that the most qualified teachers are hired 12 12 13 and that teachers who are underqualified are making 13 how it was configured. progress towards their credentials or leaving when more 14 Q. This is a good breaking point if you want to 14 15 qualified teachers are available. 15 take a 10-minute break. Q. What kind of follow up, in your opinion, is A. Good. I was just kind of thinking that. 16 16 necessary by California or by the CCTC with respect to 17 (Whereupon, a break from 2:54 to 17 18 this particular issue? 18 3:10 was taken.) 19 A. This particular issue being? 19 MS. KOURY: Q. Would you please turn to 20 Q. Following up with applications by the 20 page 80 of your report? 21 A. Okay. 21 districts for emergency permits and waivers. 22 22 A. I think there ought to be a review -- I talk O. And --23 about this in my report, so I want to, first, reference 23 A. I have a version that has two page 78's. 24 that the report is -- does treat this issue. And what I 24 MR. HILL: Mine does too. 25 think is required is a system by which districts would 25 THE WITNESS: But it's okay because there's a

	B 220		D 222
	Page 330		Page 332
1	79 and there's an 80.	1	" there are no certified individuals in
2	MS. KOURY: I actually did my own copying, and	2	this field currently holding non-teaching
3	I only have myself to blame.	3	positions in the district who could be
4	Q. (By Ms. Koury) Is there a page 80?	4	reassigned in lieu of hiring an uncredentialed
5	A. Yes, there is.	5	teacher."
6	Q. Okay. Great. If you could read the paragraph	6	Is this still your opinion?
7	that starts at the sort of the middle of the page,	7	A. Yes.
	10		
8	"as other states do, require all districts applying for	8	Q. What do you mean by "certified individuals
9	emergency permits and waivers to demonstrate that" and	9	holding non-teaching positions in the district"?
10	just let me when you've had an opportunity to read it.	10	A. There are many credentialed people who are
11	A. Okay.	11	credentialed as teachers who hold nonteaching positions
12	Q. Is this still your opinion today?	12	in and that can sometimes reach a fairly sizable
13	A. Yes.	13	proportion of the total staff in a district.
14	Q. And do you think that California should adopt	14	Q. What do you base that opinion on?
15	the recommendations that you set forth in this	15	A. Statistics I've seen about the assignment of
16	paragraph?	16	individuals in in districts.
17	A. I yes, in the context of the broader set of	17	Q. And that's specific to California school
18	recommendations that I make. I would not allege that	18	districts?
19	any single recommendation would in and of itself be	19	A. California and other, yes. So who would that
20	sufficient.	20	be?
20		20	
	Q. Leaving aside the third point that you make in		Q. No. That wasn't my question, but could you
22	this paragraph, which is actually numbered 3, leaving	22	identify the statistics you're referring with respect to
23	that sentence aside, do you know are you aware of	23	California school districts?
24	anything that the state is doing with respect to the	24	A. I'm thinking there are two kinds of statistics
25	first and second items that you list, which, for the	25	that I've seen. There are statistics at the district
	Page 331		Page 333
	Page 331		Page 333
1	record, are requiring:	1	level that I've seen for a number of statistics that
2	record, are requiring: " districts applying for emergency	2	level that I've seen for a number of statistics that show the sometimes it's called certificated staff,
	record, are requiring: " districts applying for emergency permits and waivers to demonstrate an		level that I've seen for a number of statistics that show the sometimes it's called certificated staff, that include people assigned to administrative and
2	record, are requiring: " districts applying for emergency	2	level that I've seen for a number of statistics that show the sometimes it's called certificated staff,
2 3	record, are requiring: " districts applying for emergency permits and waivers to demonstrate an	2 3	level that I've seen for a number of statistics that show the sometimes it's called certificated staff, that include people assigned to administrative and
2 3 4 5	record, are requiring: " districts applying for emergency permits and waivers to demonstrate an adequate search has been conducted [and that]	2 3 4	level that I've seen for a number of statistics that show the sometimes it's called certificated staff, that include people assigned to administrative and supervisory and teaching and other positions that include credentialed teachers who are assigned to
2 3 4 5 6	record, are requiring: " districts applying for emergency permits and waivers to demonstrate an adequate search has been conducted [and that] there are no suitable, qualified individuals who have applied for the position"	2 3 4 5	level that I've seen for a number of statistics that show the sometimes it's called certificated staff, that include people assigned to administrative and supervisory and teaching and other positions that include credentialed teachers who are assigned to nonteaching positions. And then there are some state
2 3 4 5 6 7	 record, are requiring: " districts applying for emergency permits and waivers to demonstrate an adequate search has been conducted [and that] there are no suitable, qualified individuals who have applied for the position" A. And the question is 	2 3 4 5 6 7	level that I've seen for a number of statistics that show the sometimes it's called certificated staff, that include people assigned to administrative and supervisory and teaching and other positions that include credentialed teachers who are assigned to nonteaching positions. And then there are some state data that show total numbers of staff and staff assigned
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	Page 334		Page 336
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 recently. Large nu were reassigned to teaching positions of the district that Q. Is that forc A. I don't kno reassignment. I do Q. In your stu district, were the p positions given the position and/or qu A. I don't kno the an, obviously, y Q. Right. So A. But they w about whether to t reassigned. There choices among point have the authority of people in these assignment of perside A. The San D 	 a, I know I did a study in San Diego mbers of central-office personnel school-level and classroom-based as part of the management decisions can be done. ed reassignment then? w if you would call it forced on't know that they called it that. dy of the San Diego school ersons that were in nonteaching option to either take a teaching t? w they were given yeah, I you always have the option to quit. far, yeah. ere yeah, they were given options ake positions to which they were to be there were, in some cases, some sitions to be posted. But the districts to say, We're going to have X-number positions and X-number of people in I to make decisions about the 	$ \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} $	 teaching positions, some of which might have been other school-level positions. My general point is that it is possible for districts to reassign staff, and that's just one example. Q. Do you have an opinion as to whether California should have a law mandating districts to impose this type of reassignment procedure? A. I don't know that I don't have a opinion that that's the an essential thing to do. It's one idea to create incentives for districts to seek out, recruit aggressively, and higher qualified people, but it's not the only thing or necessarily the most important thing that a district would do. Q. Do you know whether any other school districts other than the San Diego district has imposed these type of reassignment procedures? A. Lots of districts do reassignments at various points in time for various purposes. It's not an unusual thing to do. Q. With respect to asking persons that are holding nonteaching positions to teach? A. In the 30 years I've been in education, there's been various periods of budget cuts and staffing changes and so on. I've seen lots of districts do a
 3 the study of a num 4 report that is availa 5 co-author on that i 6 Center for the Study 7 the University of W 8 reviewed and is ab 9 There are off 10 other members of p 11 There are other rep 12 about the San Dieg 13 on that same web s 14 McLaughlin [PHO) 15 looking for authors 16 Q. In San Dieg 17 they reassigned? 18 A. I don't have 19 substantial number 20 Q. Estimate? 21 A. Yeah. Mon 22 Q. In other work 	to do you know how many positions the exact number, but it was a More than five? e than a hundred. rds, they reassigned persons g positions to over a hundred teaching	$ \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 337 variety of kinds of reassignments to of individuals who were teachers back to teaching positions or of individuals from central offices to schools or across different categories. Q. Could you review the next paragraph on that page where it starts "Monitor the Annual Teacher qualification index" and just let me know when you've had an opportunity. A. Okay. Q. Is that still your opinion? A. Yes. Q. And it's still your opinion that the state of California should consider doing this? A. Yes. That it should be considered, yes. Q. Are you aware of anything that the state is doing in this regard? In other words, here in this paragraph you state that that the state that: "For schools and districts that exceed the maximum aggregate level of underqualified teachers, the State should impose closer scrutiny, including independent verification of facts regarding reasons for the unavailability of credentialed teachers,

	Page 338		Page 340
1	waivers, or pre-internships."	1	that employ 20 percent or more of its staff on emergency
2	Are you aware of anything that the state is	2	permits for four years, would that be an appropriate
3	doing in this regard?	3	standard to use in determining which districts exceed
4	A. The for school districts that have large	4	maximum aggregate level of underqualified teachers?
5	numbers of underqualified teachers, the state has	5	A. Yes. I specify on page 79 that I think that
6	authorized through legislation and implemented through	6	would be appropriate in the short run while a
7	the FCMAT agency an audit procedure for imposing closer	7	comprehensive remedy is being implemented. Ultimately,
8	scrutiny on districts that have large numbers of	8	the standard should be more rigorous than that.
9	underqualified teachers. I am not aware of any efforts	9	Q. Meaning what?
10	that the state has made to evaluate reasons	10	A. Meaning that the as I propose elsewhere,
11	independent verification of the facts regarding reasons	11	the state ought to be setting a goal to eliminate
12	for the unavailability of credentialed teachers before	12	emergency permits and waivers and to move teachers, you
13	approving emergency permits, waivers or pre-internships.	13	know, fully into preliminary and clear credential
14	Q. The legislation that you just referred to,	14	status.
15	with respect to FCMAT, do you know when that was passed?	15	Q. What do you mean by, quote, including
16	A. In the last few years.	16	independent verification of facts regarding reasons for
17	Q. Is that discussed in your report?	17	the unavailability of credentialed teachers, end quote,
18	A. The FCMAT reports are discussed in my report.	18	in the second-to-last paragraph of page 80?
19	Q. But that particular issue that you raised with	19	A. Earlier I referenced the statements that Sam
20	respect to the legislation for FCMAT to review this in	20	Swofford, the director of the CCTC, made about the fact
21	this regard, is that in your report?	21	that the CCTC takes district attestations on face value
22	A. I'm not sure if I mentioned the specific	22	about their hiring practices and outcomes. So by
23	legislation.	23	"independent verification of facts," I mean a
24	Q. What do you mean by in this paragraph, what	24	verification by an agency other than the district, which
25	do you mean by, quote, exceed the maximum aggregate	25	might include the CCTC or it might include the

1	level of underqualified teachers?	1	Department of Education or FCMAT, depending on what
2	A. There is no maximum aggregate level right now,	2	agency was given responsibility of doing that.
3	but I proposed earlier on page 79 some potential	3	Q. Would you be a proponent of having the state,
4	benchmarks that could be used, and those benchmarks are	4	whether it be the CCTC or some other agency, review the
5	stated under No. 1 on page 79. The first of those is	5	districts' recruitment efforts to make certain that they
6	these are short-run kinds of benchmarks that could be	6	were sufficient in terms of reviewing, for example,
7	considered. First says that:	7	their efforts to post job positions, attend job fares,
8	"No school (or track in schools with	8	and et cetera?
9	year-round multi-track schedules) should be	9	A. I think that would be not an unreasonable
10	allowed to have more than 20 percent of its	10	thing to do, but the slip between a couple and the
11	teachers lacking full preliminary or clear	11	the slip between the cup and the lip that is to say,
12	certification."	12	the implementation problems usually occur
13	That would and then the second point says:	13	post-recruitment, although recruitment can be part of it
14	"Low-performing schools should be	14	in the hiring procedures: when people are hired, how
15	prohibited from having more than the state	15	expeditiously they're hired, et cetera. And so, those
16	average proportion of teachers without	16	would be the areas where I think scrutiny would be
17	preliminary or clear credentials."	17	important.
18	Then on the third point on the top of page 80,	18	Q. If the state followed up with targeted
19	I suggest that there ought be required evidence of	19	districts, who, for example, employ 20 percent or more
20	annual progress using a Teacher Qualifications Index.	20	of its staff on emergency permits for four years in a
21	So, those standards are the ones I refer to when I later	21	row to determine if they improved the number
22	talk about the maximum aggregate level of underqualified	22	credentialed teachers, do you think that that would be
23	teachers.	23	an adequate step in implementing some sort of
24	Q. If the state or in particular the actually,	24	independent verification?
25	if the state paid closer scrutiny to those districts	25	MR. AFFELDT: Objection. Vague and ambiguous

Page 342 Page 344 as to "adequate." 1 1 sorry. 2 THE WITNESS: Should I go ahead and answer? 2 That California-trained teachers leave at a 3 3 MS. KOURY: Q. Yes. higher rate in California than other -- let me rephrase 4 A. I think it would be a useful thing for the 4 that. 5 state to do, to be following up with those districts, 5 A. Who's leaving? Is that the question? 6 6 O. Yes. absolutely. 7 O. On page 80, could you review the last 7 A. Teachers who teach in California (they may or 8 paragraph that continues on to the top of page 81 and 8 may not have been trained in California) -just let me know when you've had an opportunity to do Q. Thank you. 9 9 10 10 A. -- appear to be higher -- appear to be leaving so? A. Okay. teaching (that is what I mean by attrition rates) at 11 11 O. Is it still your opinion that the state higher rates than elsewhere in the nation. 12 12 13 should: 13 O. And what's the source for that conclusion? 14 "Conduct a full and complete state audit 14 A. I go on to describe a study by Mark Fetler. 15 of school hiring needs and district hiring Let me see if I can find it here. 15 policies in schools or districts that 16 16 At the bottom of that page, I compare: "National data from the Schools and 17 repeatedly hire large numbers of 17 underqualified teachers"? 18 Staffing Teacher Follow-up Surveys 18 19 suggest[ing] ... about 30 percent of beginning A. Yes. 19 20 Q. Are you aware of anything the state is doing 20 teachers leave teaching within five years, 21 in this regard other than what you've already testified 21 [and] survival rate data through 1995 22 to? 22 indicated that about 40 percent of 23 California's beginning teachers leave within 23 A. Well, in terms of what I go on to say later in the paper, which I may not yet have testified to, there 24 that time frame." 24 is a set of audits that are conducted by FCMAT. But as 25 Q. And that's referring to the Fetler report? 25

Page 343

I note, there appears not to be a clear follow-up 1 mechanism for those audits. 2 3 Q. You just referenced what you go on later to 4

say in your report. Are you referring to FCMAT?

A. Yeah. In the -- in the subsequent sentences.

Q. Okay. Are you familiar with SB837?

A. I might be, but I don't know it by that

8 number.

5

6

7

9

10

Q. Okay.

A. If I do know it.

Q. Could you turn to page 53 of your report? On 11

page 53, in the first full paragraph, you state that: 12

13 "Teachers prepared for teaching in

14 California often leave the state or enter

15 other careers when they confront the realities

of salaries and working conditions, and 16

attrition rates appear to be higher in 17

18 California than elsewhere in the nation." 19 With respect to the last portion of the

sentence, "attrition rates appear to be higher in 20

California than elsewhere in the nation," what does that 21

- 22 mean?
- 23 A. Teachers' rates of leaving teaching is what I 24 mean by attrition rates.
- 25 Q. That California teachers trained in -- I'm

A. Yes.

1

5

- 2 O. Do you know whether the CCTC has any
- 3 statistical data on this issue?
- 4 A. On the issue of attrition?
 - O. Yes. Of teachers in California.

A. I mentioned earlier that I recently saw a --6

- 7 something on the CCTC web site that had some data about
- attrition, that was measuring attrition on the basis of 8
- whether a teacher's records disappeared from the State 9
- 10 Teacher Retirement System database. And as I mentioned
- earlier. I don't think that's very accurate, a very 11
- 12 accurate measure of attrition.
- 13 Q. Is that the only --
- 14 A. That's the only thing I have seen more
- recently than what I've cited in this report about 15
- teacher attrition from the CCTC. 16
- 17 O. What about statistical data from the
- 18 California Employment Development Department; have you
- 19 reviewed any information --
- A. I have not reviewed that, and I'd have to see 20

21 it to know.

- 22 Q. And any information from the Public
- 23 Policy Institute of California?
- 24 A. I've looked at several reports of PPIC. If
- 25 there's a particular report, I'd have to be refreshed in

	Page 346		Page 348
$ \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} $	 my memory about that. Q. In drawing this conclusion about California's attrition rate as articulated on page 53, did you look at or review or rely on the PPIC A. I did not for the statement, obviously, or I would have cited them. MR. AFFELDT: Just have to make sure that Miss Koury is allowed to finish her question. THE WITNESS: I'm sorry. I'm getting tired. MS. KOURY: Q. The next sentence reads that: "Based on several sources of data, a reasonable estimate of current entry rates of California-trained teachers into California schools is between 70 and 85 percent, a figure that is similar to entry rates for individuals graduating from teacher education programs nationally." And you cite you have a footnote at the end of that sentence, but it's unclear to me well, let me ask you this: What are the sources of data that you used to come up with this estimate? A. Well, the sources are listed in Footnote 42, and they include a CCTC study in 1999 which found that more than 90 percent of graduates from California institutions sought jobs, and of these, more than 	$ \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} $	 that you just listed are accurate? A. Well, all these numbers are estimates based on various data points, and so I have no reason to believe they are Q. Not accurate? A not accurate. There are there's another estimate that has come out more recently from the CSU study that that's cited here that suggest that the rate of entry might be even a little higher for CSU graduates. Q. With respect to the CCTC (1999) survey that you cited, how did you obtain that document? A. Oh, I don't remember. Q. It provides statistical data on the rate of entry of California-trained teachers; is that correct? A. Yes. Q. And why did you rely on that document? A. It was available, and understanding that these are and it seemed like it was a reasonable piece of work. And understanding that these are all estimates, I looked at several studies in order to get a sense of the range of estimates, which is what one does in cases like this. Q. Do you know if the CCTC generally gathers this type of information?
1 2	Page 347 90 percent took jobs in teaching, which would give a rate that was somewhere in the vicinity of 80 or	1 2	Page 349 A. My understanding is that they have periodically funded studies, survey-based studies, but

rate that was somewhere in the vicinity of 80 or 2

- 85 percent of the total, which was similar to that of an 3
- 4 earlier study by Tierney, Dennis Tierney, which I cite
- 5 there.

6 Then I note that the Legislative Analysts

7 Office estimated entry rates somewhat lowered, around

8 70 percent, which was the lower bound of the range I

- 9 mentioned above. And then I go on to suggest that these
- are probably reasonable rates because they are 10
- comparable to rates that are found elsewhere in the 11
- nation, and I give those national data. But the 70 to 12
- 13 85 percent is based on the CCTC study and the Tierney 14 study.
- 15 Q. In other words, did you take an average of
- those two studies -- the findings of those two studies 16 17 to come up with that rate?
- 18 MR. AFFELDT: Objection. Asked and answered. 19 MS. KOURY: Q. You can answer that.
- 20 A. No. I noted that one study estimated -- oh,
- 21 in the Legislative Analysts Office. I'm sorry. There
- 22 are three studies, and those studies provide estimates
- 23 that range between about 70 and 85 percent, and I stated 24 that range.
- 25 Q. Do you know whether the numbers in the sources

- periodically funded studies, survey-based studies, but 3 that they don't do this on an annual basis.
- 4 Q. Have you made any efforts to determine whether 5 the CCTC has anymore or has any recent information 6
- regarding the entry rate of California-trained teachers? 7 A. Yes. This was the most recent study available
- 8 from the CCTC through the time I completed this report.
 - Q. Which was when?

- 10 A. This was published in 1999, and my report was
- completed in 2002 -- early 2002. 11
- 12 Q. You indicate that the CCTC's 1999 survey
- 13 response rate was low. Did you investigate to see why 14 that was? Or do you know why that was? I'm sorry.
- 15 A. A lot of these kinds of surveys don't have --
- 16 that is, surveys of recent graduates from teacher
- education institutions, that kind of thing -- unless it 17
- 18 comes from the district or the teacher education
- 19 institution itself, often have relatively low response
- 20 rates because it's hard to track people down and hard to
- 21 get them to respond. And often state agencies don't
- 22 have a lot of money to do follow-up to track down
- 23 missing addresses and so on. So I assume it was some
- 24 combination of those kinds of factors. 25
 - Q. Assuming that -- actually ...

Pa	Page 350 Page 352
 A. That's why I gave a range of estimates, because each of the studies, you know, has its ow limitations. Q. In the next sentence in the same paragraphy your report states, quote: "Among those who do not accept jobs in California after they graduate, some unknown number leave the state to teach elsewhere, some pursue additional studies and enter teaching later and some choose other occupations altogether." Leaving aside your comment regarding the figure of nationally delayed entrants, what is the source of your conclusion with respect to Califor graduates? A. I'm not sure I understand your question. How do we know that this is what people with respect to your comment that of: " those who do not accept jobs in California after they graduate, some unknown the state to teach elsewhere, some pursue additional studies and enter 	1or "do not accept jobs in California after they graduate2 leave the state to teach elsewhere, some pursue3additional studies and enter teaching later, and3some choose other occupations altogether?5A. The Boe et al., study is referencing the6specific statement that nationally delayed entrants7comprise almost one-third of new hires. And,8presumably, there are some teachers in California who9pursue additional studies and enter teaching later, like10that, although I'm not inferring a proportion that11necessarily will apply to California.12Q. In the next paragraph, your report states13that, quote:14"Survival rate data through 1995 indicated15that about 40 percent of California's16beginning teachers leave within that time17frame."18The time frame that you're referring to is19five years; is that correct?20A. I believe so, yes.21Q. You cite Fetler's 1997 report, "Where have all22opinion here? I'm sorry. Let me rephrase that.
 Pa occupations altogether"? A. Right. So those are all the choices that are available. And I personally know individuals who had done each of those three things as well as the fact that most studies that look at, you know, teachers, look for those if you're looking at the state labor market, look at those three categories of choices that individuals might make. Q. So there's no particular reports that you were relying on in A. No, nothing. MR. AFFELDT: Other than those cited in the report already. THE WITNESS: Right. MS. KOURY: Q. Meaning just cited, in general, there's no particular reports that you would identify to support that proposition? MR. AFFELDT: Objection. The document sp for itself. She cites at least one report in the middle of that sentence. MS. KOURY: That's why I was asking the question. Q. (By Ms. Koury) This report that you cite in the middle of that sentence, the Boe et al., 1998, doe: 	hat4A. Because it was the only survival-rate studyfor5that I could find, at that time, that looked across6cohorts. And I noted that the rate may have changed in7recent years, but no more-recent data were available to8me to evaluate that.9Q. Does the Fetler report survey teachers? Is it10a survey of teachers?11A. I don't remember the report. I think it was12a my recollection is that that was state record data,13where they were tracking cohorts of teacher records and14finding out how many people remained in the teaching15in teaching positions rather than a survey.16Q. Do you know if the CCTC has any statistical17data on the attrition rate of beginning teachers18meaning teachers who have just been teaching for one19year?20MR. AFFELDT: Objection. Asked and answered.21MS. KOURY: Q. I don't believe I mean, you22can still answer that.23A. They have data that I cited elsewhere about24the rates of we looked at this what they call

	Page 354		Page 356
1	emergency permit teachers, which allow you since	1	And so based on what one will tend to do
2	people on emergency permits have to renew their permits	2	is, to figure out whether an attrition rate is likely
3	annually, it's possible to know if they're still	3	increasing or decreasing, is to try to look at the
4	teaching in the state based on whether they renew their	4	composition of the teaching force in part as one of the
5	permit. I don't know that they have attrition-rate data	5	ways to evaluate whether a attrition rate in a given
6	other than that for all beginning teachers, including	6	time frame likely holds or has changed.
7	those who would not necessarily have to renew their	7	Q. You don't have any data, though, actually
8	permit annually.	8	showing that the rate of attrition for new teachers in
9	Q. Assuming that the CCTC had a more recent	9	California has increased, do you?
10	report on teacher attrition rates for beginning	10	A. I don't. Other than what's already cited that
11	teachers, would you have any reason to believe that that	11	we've already discussed.
12	information would be inaccurate?	12	Q. And what did you mean by "unprepared teachers"
13	MR. AFFELDT: Objection. Lacks foundation.	13	in this sentence?
14	Calls for speculation.	14	A. Teachers who have not had teacher education,
15	MS. KOURY: Q. In your opinion as an expert?	15	preservice teacher education.
16	A. We talked earlier about some data that I	16	Q. Your report goes on to say:
17	recently saw about	17	"California data show that uncertified
18	Q. On the web site? I'm sorry.	18	teachers leave at a very high rates about
19	A. Yes, on the web site, about attrition rates	19	40 percent within the first year thus
20	that I found potentially problematic because of the way	20	increasing the annual demand for replacement
21	it tried to guess who might have attritted from	21	teachers and reducing the total supply."
22	teaching. So it would depend on the report as to	22	Is that still your opinion?
23	whether I would find it a useful indication of attrition	23	A. Yes. As we've discussed, that is my opinion
24	rates or not.	24	based on the statistics that I cited for that the
25	Q. Next your report states that, quote, a rate	25	sources I cited for that statistic.
	Page 355		Page 357
1	well In the last full paragraph of page 53, your	1	Q. And here you with respect to the term
2	report states:	2	"uncertified teachers," what do you mean? Is that
3	"Survival rate data through 1995 indicated	3	A. Uncredentialed. The same meaning as
4	that about 40 percent of California's	4	uncredentialed.
5	beginning teachers leave within that time	5	Q. And you would include intern credentials,
6	frame, a rate that may have increased in	6	pre-intern credentials, emergency permits and waivers;
7	recent years with greater hiring of new	7	is that correct?
8	teachers and individuals who are unprepared,	8	A. In this sentence, I'm referring to teachers on
9	groups that traditionally leave teaching at	9	emergency permits or waivers.
10	higher rates."	10	Q. In the next paragraph, also on page 54, your
11	Looking only at the latter half of that	11	report states, quote:
12	sentence, starting with "a rate that may have increased	12	"Teachers and administrators in a number
13	in recent years," is that still your opinion?	12	of schools attended by plaintiffs report
14	A. Yes.	13	turnover rates of 50 percent or more annually,
14	Q. And on what do you base that opinion?	14	causing great disruption to the educational
16	A. There are a number of studies that have found	16	process."
17	that certain categories of teachers leave teaching at	17	Other than the deposition testimony that you
18	higher rates than others. Going back to work that was	18	cite to, do you have any other source of data to support
	done at the DAND Componentian looking at the U shared	10	that opinion?

- done at the RAND Corporation, looking at the U-shaped 19 19
- curve and teacher attrition -- or new teachers leave at 20
- higher rates than mid-career teachers who leave at lower 21
- 22 rates than teachers who are retiring, and several kinds
- 23 of studies that have found higher rates of attrition for
- 24 individuals who are unprepared, some of which we have
- talked about already. 25

- cite to, do you have any other source of data to support that opinion? 20 A. I cite to the testimony of those teachers and administrators. That's what I'm referring to. 21 22 Q. So there's no other data that you would turn
- to and say that that data supports the notion that the 23
- 24 turnover rates are 50 percent or more annually? 25
 - MR. AFFELDT: In those schools?

	Page 358		Page 360
1	MS. KOURY: Or in any school district let	1	MS. KOURY: Q. First full paragraph of that
2	me rephrase that.	2	page, the third sentence down:
3	THE WITNESS: The sentence means exactly what	3	"Whereas there are about 300,000 K-12
4	it says, and I rely on the reports of teachers and	4	teaching jobs in California, by one estimate
5	administrators that I cited.	5	there are about 1.3 million individuals who
6	MS. KOURY: Q. Okay. So what do you mean by	6	hold teaching credentials in the state."
7	"in a number of schools" then? How many schools are you	7	And you cite in Footnote 37 personal
8	referring to?	8	communication with Michael McKibbin, CCTC consultant.
9	A. I don't recall the exact number, but there	9	A. Mm-hm.
10	were there were several, at least two of which I	10	Q. Could you tell me about that communication to
11	quoted here.	11	which you refer to?
12	Q. Other than the two schools which you've cited	12	A. What do you want to know about it?
13	to here, are there any other schools that are included	13	Q. Well, why is it that you cite him with respect
14	in this number of schools?	14	to the finding that there is 1.3 million individuals who
15	A. I, frankly, don't remember how many there	15	hold teaching credentials in the state?
16	were.	16	A. Why do I cite him? Because he said it. I'm
17	Q. I'm sorry. I don't understand what you mean	17	not sure I'm understanding the point of your He is
18	by that.	18	familiar with the credentialing system there. He was
19	Do you remember	19	present as a CCTC representative at a meeting of the
20	A. I reviewed a lot of I'm sorry. I didn't	20	California Professional Development Task Force, which
21	mean to interrupt.	21	was the context in which he made the statement about
22	Q. That's okay.	22	1.3 million credentials in the database in in the
23	A. I reviewed the testimony of a lot of teachers	23	credentialing database.
24	and principals, and a number of them reported these kind	24	Q. Did you contact him for purposes of learning
25	of turnover rates, but I do not remember the exact	25	how many individuals in California hold teaching

credentials? 1 1 number. 2 Q. If other teachers and principals reported a 2 MR. AFFELDT: Objection. Asked and answered. 3 turnover rate of 50 percent or more and you had reviewed 3 THE WITNESS: Yeah. I just answered that he 4 them, wouldn't you have cited them in your report? 4 made that statement in a meeting. 5 A. Not necessarily. There's an overwhelming 5 MS. KOURY: Q. I'm sorry. I think I ... A. A little tired. 6 amount of data and paper in this case. One has to make 6 7 7 some selection. Q. Thank you. 8 Q. The two deposition transcripts to which you 8 A. You could do the Coke and coffee thing. 9 cite, these were not the only two deposition transcripts 9 Q. Do you know whether he had any documentation that you reviewed in terms of supporting the conclusion 10 to support that? 10 that you draw here? A. I don't know what his documentation was. I 11 11 12 assumed, because he is a -- someone who works with the 12 A. I think I just stated that I reviewed a large CCTC credentialing system (he was there representing the 13 number of deposition transcripts. 13 14 MS. KOURY: Can we take our last break of the CCTC), that he made an accurate statement about that. 14 15 day? 15 Q. And I apologize if you already answered this, but when was that meeting that he made this statement? 16 MR. AFFELDT: Sure. 16 THE WITNESS: Good idea. I'm really ready. A. It would have been sometime in 2001. I 17 17 18 (Whereupon, a break from 3:57 to 18 believe. 19 19 4:11 was taken.) Q. Other than this communication, his verbal MS. KOURY: Q. Could you turn to page 52 of 20 communication in this regard, did you make any other 20 21 your report? 21 efforts to determine whether the CCTC had information --22 A. Okay. 22 A. I did -- I'm sorry about that. 23 Q. And looking at --23 O. Go ahead. 24 MR. JORDAN: 52? 24 A. I did. My research assistant called the CCTC 25 MR. HILL: 52. 25 to see if they had a formal report that stated the size

43 (Pages 358 to 361)

	Page 362		Page 364
1	of the credentialing pool. The individual she spoke to	1	minimal standard for a school that can
2	said that they were not aware of any such report. And	2	function even at"
3	she and in the course of the conversation, my	3	MR. AFFELDT: Rudimentary.
4	research assistant stated that she had gotten that or	4	MS. KOURY: Thank you. " level of
5	I had gotten that statistic in a meeting from Mike	5	professional responsibility for planning and oversight
6	McKibbin, and the person she spoke to said, Well, he	6	of practice."
7	ought to know.	7	Is this still your opinion?
8	Q. And when was that?	8	A. Yes.
9	A. When was that?	9	Q. And with respect to the sentence starting:
10	Q. Yes.	10	"This is far from a constitutional
11	A. Sometime in the last year. I would have to	11	standard which would require all students
12	get the exact dates from her notes.	12	in public schools to have full access to
13	Q. With respect to your other statement or	13	teachers who meet the state's standards for
14	your statement in that same paragraph, quote:	14	professional teaching credentials," is
15	"Some of these individuals who prepared to	15	that still your opinion, that phrase?
16	teach and never entered teaching in the state,	16	A. Yes.
17	entering other careers or going to other	17	Q. What do you base that opinion on?
18	states to teach" I think I missed	18	A. We talked about this earlier, and my answer is
19	misread that.	19	the same, that I understand the constitutional standard
20	"Some of these are individuals who	20	to be the state's requirement to provide a uniform
21	prepared to teach and never entered teaching	21	system of public schools and to provide equal access.
22	in the state, entering other careers or going	22	And so, the access to teachers who meet the state
23	to other states to teach. Many of these are	23	standards for professional teaching credentials ought to
24	individuals who taught in California and left	24	be full and equal.
25	teaching."	25	Q. Have you had any conversations with any of the

Page 362

Page 363

Do you have any -- what do you base this 1 2 opinion on?

3 A. On the fact that those are the destinations

4 that teachers would have and that we know that some 5 people who prepare to teach never enter teaching in the

6 state based on the other documents we cited and talked 7 about earlier. We -- I know personally that there are

8 people who prepare to teach and enter other careers or

9 go to other states to teach. 10 Q. But there isn't any specific data that you're 11

referring to with respect to this opinion? 12 A. No. And I'm not quantifying those

13 proportions.

14 15 Q. Could you turn to page 79 of your report?

A. Mm-hm.

16 Q. In the second-to-last paragraph on that page 17 where you state, quote:

- 18 "No school ... should be allowed to have 19 more than 20 percent of its teacher lacking 20 full preliminary or clear certification. This
- 21 is far from the constitutional standard --
- 22 which would require all students in public
- 23 schools to have full access to teachers who
- 24 meet the state standards for professional 25 teaching credentials -- but has proposed as a

Page 365

other experts in this case regarding what the 1 2 constitutional standard requires? 3 A. Not -- not in a specific way. 4 Q. How about in general terms? 5 A. We've had -- I'd had conversations with some 6

people. I'm remembering a conversation at the meeting

- 7 we discussed yesterday where a number of California
- 8 researchers were assembled -- some of whom have become
- 9 experts, but I don't know all of the people who were on 10 that list -- where we talked about what the standard
- ought to be, but we did not -- what the standard would 11
- be for the state's efforts, but we did not talk about it 12
- 13 in terms of what a constitutional standard would be.
- 14 Q. What was said in terms of what the standard
- 15 ought to be for the state's efforts?
- 16 A. I don't remember the full conversation, but I
- do remember some discussion about whether a percentage 17
- 18 of teachers ought to meet the credentialing
- 19 requirements, some of that conversation focusing on the
- 20 findings in the SRI reports that -- and others that
- 21 there are some schools with very high proportions of
- 22 teachers without credentials that make the school even
- 23 more dysfunctional than the dysfunction in an individual 24 classroom. So that was part of the conversation.
- 25 Q. What percentage, if any, of teachers ought to

	Page 366		Page 368
1	meet credentialing requirements?		But it's a it's a useful benchmark given the research
2	A. I believe a hundred percent ought to, as they	2	that's been done that clearly shows that dysfunction
3	do in law and medicine and other licensed professions.	3	above that level.
4	Q. Do you believe that that's the what the	4	Q. The SRI research that you refer to, is that
5	constitutional standard should be, a hundred percent	5	cited in your report?
6	or is?	6	A. Yes, it is.
7	MR. AFFELDT: Objection to the extent it calls	7	Q. Assuming there were a standard where every
8	for a legal conclusion.	8	school had no more than 20 percent of teachers without
9	You may answer.	9	full or preliminary certification, that wouldn't
10	THE WITNESS: What I state here is that I	10	guarantee that every student would actually have
11	believe the standard requires all students to have full	11	80 percent of its teachers on full credentials; is that
12	access to teachers who meet the state's standards.	12	right?
13	MS. KOURY: Q. In your opinion, is that the	13	A. That would not guarantee is what you're
14	same as a hundred percent of teachers ought to meet the	14	saying?
15	credentialing requirements?	15	Q. Correct.
16	A. Yes. I believe that that is what ought	16	A. Right. Particularly assuming that there was
17	what a state ought to be striving to accomplish.	17	continued inequality in the allocation of teachers to
18	Q. To the extent that your opinion, as	18	students within schools, that can still be a problem.
19	articulated on page 79, says that no school should be	19	Q. You'd still have one student although
20	allowed to have more than 20 percent of teachers lacking	20	they're attending a school with 80 percent of its
21	full preliminary or a clear certification, is that	21	teachers having full credentials, you could still have
22	something, then, that you think should be just an	22	one student that happens to have a bad luck and hit that
23	interim standard?	23	20 percent time and time again; is that correct?
23	A. Yes, I that's exactly right.	23	A. Absolutely. In an elementary school, you
24	Q. Would you put you a time frame on how long	24	could have 20 percent of the students being taught all
23	Q. Would you put you a time frame on now long	23	could have 20 percent of the students being taught an
	Page 367		Page 369
1	that should be the standard?	1	year long by the 20 percent of the teachers who are
2	A. I wouldn't put a specific time frame, because	2	uncredentialed.
3	all these things are, you know, relevant to what gets	3	The purpose for the criterion, however, is to
4	worked out in a moment in time and what the situation	4	also take into account that in schools where you have
		4 5	too many teachers without training, you also lack
5	is. In the I I would, however, say that I agree with the conclusion in the California Professional	6	
6			mentors and you lack supervisors and you lack people who
7	Development Task Force report that the state ought to be	7	can be supportive of other teachers, insufficient
8	able to eliminate emergency permits and waivers without	8	numbers.
9	diluting the credentialing standard, by the way, within	9	Q. In the next paragraph on page 79, it states:
10	five years.	10	"Low-performing schools should be
11	Q. How did you arrive at this percentage for the	11	prohibited from having more than the state
12	interim standard that no more than to percent of a	12	average proportion of teachers without
13	school's teachers should lack full preliminary or clear	13	preliminary or clear credentials."
14	certification?	14	What do you mean by that, "more than the state
15	A. It it's a very approximate kind of measure	15	average proportion of teachers"?
16	based in part on the research of some researchers at	16	A. Whatever that state average proportion is. If
17	SRI in particular that looked at the effects of having	17	that criterion were to pertain currently, it would be
18	more than 20 percent of teachers lacking full training	18	about 14 percent.
19	as a teacher and identified the dysfunctions that occur.	19	Q. And how did you arrive or what do you base
20	From their perspective and I think they've done a lot	20	this opinion on?
21	of reasonably California on the teaching question	21	A That low parforming schools there sught to be

- of research in California on the teaching question -- 21 A. That
- 22 that begins to be a kind of tipping point.

- 23 But I would certainly add that there is
- 24 nothing magic about 20 percent. 19 percent would also
- $25 \quad \text{be a lot of teachers without preparation, or 18 percent.}$
- A. That low-performing schools, there ought to bea special effort made -- particularly given the
- 23 accountability system in the state -- to make it an
- 24 accountability system. A special effort ought to be to
- 25 made to be sure that low-performing schools do not have

	Page 370		Page 372
$ \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 370 underprepared teachers. I mention in my paper that in New York State, the schools that are assigned to what's called the "Schools Under Registration Review," or SURR program, are no longer permitted to hire uncredentialed teachers. Because if the state is trying to improve the achievement of students in those schools, they have a special responsibility to make sure that those students that those schools have hire prepared teachers and those students have such teachers. So here I'm suggesting those schools deserve a more rigorous standard rather than a less rigorous standard for their hiring. Q. Are you aware of any special efforts by the state to ensure that low-performing schools do not have high levels of underqualified teachers? A. There have been some pieces of state legislation have tried to enable low-performing schools to hire to access and hire more qualified teachers. Some of those have been helpful, although not all of them have been continued with the budget cuts. Q. Are those discussed in your report? A. Yes, they are. Q. Are there any other state efforts that are not discussed in your report that you're aware of in this	$ \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 372 ideas in the report. The main point I'm making here is that the prohibition here should be accompanied by the incentives and supports. Q. Have you attempted to determine how much, in terms of dollar amounts, it would cost the state in order to implement a prohibition that you just articulated in other words, to couple a prohibition with incentives and subsidies? A. I haven't developed a single number for that. There are some elements of what I discuss here that I give examples of methods for costing out. But the answer to that would depend on how the state decided to approach the problem, with what combination of incentives, under under what circumstances. Q. Could you point me to where in your report that you give examples of that with respect to quantifying the amount of implementing such prohibition? You just articulated that you attempt to give examples of that in your report in other words, of how much that would cost. Is that accurate? A. Not not that with respect to the prohibition clause. In particular I said I give examples in the report of some of the kinds of incentives that I discuss of how you could cost them
1 2 3 4 5 6 7 8	Page 371 regard? A. None that come to mind at the moment. Q. How would you propose that the state went about prohibiting low-performing schools from having more than the state average of teachers without preliminary or clear credentials? A. I'm not sure I understand your question. How does the state prohibit something?	1 2 3 4 5 6 7 8	Page 373 out. Q. Can you point me to where that is in your report? A. There is a place where I give an example of what it would cost to Page 84 is one example. Page 83 is another example. Flip to 83 first. If part of what the state was doing was to try to increase teacher salaries, Footnote 65 simply

9 Q. Yes. How would you propose that the state go 10 about prohibiting?

A. I would propose that they do it much in the way that New York did when they made a similar prohibition or Connecticut did when they eliminated emergency credentials, which is to couple the prohibition, the legal prohibition, with supports and incentives that enable schools and districts to recruit, attract and retain those teachers. So, a two-prong strategy that couples the -- the prohibition with subsidies that -- on a larger scale than currently exists for fully prepared teachers to receive free or reduced-price teacher education; that they go into low-performing schools that require -- that provide additional incentives like the Teachers as a Priority program did for hiring and retaining credentialed teachers in those schools and so on. So I detail those

2	Q. Can you point me to where that is in your
3	report?
4	A. There is a place where I give an example of
5	what it would cost to Page 84 is one example.
6	Page 83 is another example. Flip to 83 first.
7	If part of what the state was doing was to try
8	to increase teacher salaries, Footnote 65 simply
9	describes how you could estimate the costs of an
10	increase of a particular amount in teacher salaries. On
11	page 66 on page 84 in Footnote 66, I give an estimate
12	for the programs that provide subsidies for preparation
13	for teachers who agree to teach in hard-to-staff or
14	underperforming schools. And I give an example of what
15	it would cost to expand that set of subsidies.
16	Q. With respect to Footnote 65 in the example you
17	provide there, how did you derive that estimate that:
18	"An average increase of 5,000 in teacher
19	salaries for new hires would cost the state
20	about 125 million annually"?
21	Actually, let me rephrase that question.
22	How did you derive the estimate that an
23	increase in 5,000 in teacher salaries, in your opinion,
24	is necessary for new hires?
25	A. I didn't

	Page 374		Page 376
1	Q. Or I'm sorry. Is it your opinion that let	1	Q. I'm just going to finish my question.
2	me start over.	2	A. Oh, I'm sorry.
3	MR. JORDAN: One at a time.	3	Q. That's okay. Just for the record.
4	THE WITNESS: We're both so tired we're going	4	That you suggest on page 79? And your answer
5	to be rolling out of here.	5	is?
6	MS. KOURY: Q. Why do you estimate that an	6	A. I have not.
7	average increase of 5,000 in teacher salaries should be	7	Q. Okay. Footnote 66 on page 84, if you could
8	implemented for new hires?	8	please turn to that. It states that at:
9	A. I don't advocate that particular amount. I	9	"The current funding level for these
10	simply give the example that if one wanted to increase	10	programs combined is about 25 million. The
11	salaries, this is a way to make an estimate of the cost.	11	state spent about 50 million on programs for
12	Q. Do you think that an increase of 5,000 in	12	uncertified teachers in 1999-2000."
13	teachers salaries would be effective in hiring new fully	13	What do you mean by "programs for uncertified
14	credentialed teachers?	14	teachers"?
15	A. In some places, it's not needed, because in	15	A. Programs supporting legislation providing
16	large numbers of districts in the state, they're able to	16	financial support for programs for emergency permit
17	hire fully credentialed teachers. In other places, it's	17	teachers, pre-intern teachers, and so on.
18	might be needed if that's the reason for the failure to	18	Q. You go on to say that:
19	hire uncredentialed teachers.	19	"At 12,000 awards annually and \$10,000
20	As I suggest throughout the report, you have	20	average award, the costs of an expanded set of
21	to do a diagnostic on the situation at a moment in time	21	subsidies for preparation, sufficient to fill
22	in particular districts to figure out which of the	22	all hard-to-staff vacancies with
23	remedies is most needed.	23	fully prepared teachers, would be 120 million
24	Q. Do you know whether districts perform those	24	annually."
25	types of analysis?	25	What do you mean by that?

A. Some districts do. You know, say, we have Δ this particular experience in our hiring, and we've decided that, in order to remedy it, we either need to raise salaries or we need for monitoring for beginning teachers because we're getting them, but they're leaving or we need to change our recruitment process so that we can hire earlier because we're hiring too late. So there are lots of reasons why you could have difficulty, and the remedies would vary based on the reasons that that district is experiencing. Q. So, in your opinion, the need for increasing teacher salaries will vary depending on each district; is that correct? A. It -- it could be that some -- that one needs a policy that increases district -- helps to increase salaries in some places, but not others, not necessarily across the board for the state as a whole. It would also depend, at the point at which the state decides to do something, what the labor market is and what the salaries look like at that moment in time. O. Have you attempted to quantify how much would be necessary in terms of providing money to districts that have low-performing schools in order to implement the legal prohibition that you suggest? A. I have not.

Page 377

A. What part of it don't you understand?

-	A. What part of it don't you understand?
2	Q. Well, to what extent or what do you base your
3	opinion on to the extent that you say that that amount
ŀ	of money would be "sufficient to fill all hard-to-staff
5	vacancies with fully prepared teachers"?
5	A. There are about 25,000 teachers hired each
7	year in California, and some proportion (less than
3	50 percent of them) have been less than
)	fully credentialed. And if one assumed that all of
)	those were this is a generous assumption that all of
l	those were hard-to-staff vacancies, and you were trying
2	to provide a subsidy tied to working in a hard-to-staff
3	school for each person for each of 12,000 people,
1	this would be a way of estimating that cost.
5	Q. That calculation, though, assumes that there
5	are not other factors which play a part in a teacher's
7	decision to teach at a hard-to-staff school; is that
3	correct?

A. Right. It's not including the costs that one
might need to have to also improve the working
conditions at those schools or the mentors for the
beginning teachers. This is just to get awards tied to
a teacher's intention to work in a hard-to-staff school
like those that are cited above.
Q. Also, on page 80, which is under -- start

	Page 378		Page 380
1	over.	1	updating and streamlining and hiring
2	Under Section 1 of page 79, which is:	2	processes, for timely hiring of
3	"Establish a standard below which no	3	fully qualified teachers, and for priority
4	school can fall and maintain a monitoring	4	placement of fully qualified teachers and
5	system that identifies schools falling below	5	administrators in hard-to-staff schools."
6	the standard and ensures those schools and	6	What is the basis for this opinion?
7	their districts receive close scrutiny and	7	MR. AFFELDT: Do you want to allow her to
8	oversight,"	8	finish reading the paragraph herself?
9	under that section, you state on page 80 in the	9	MS. KOURY: Oh, I'm sorry. I thought you had
10	second or first full paragraph, "Require evidence of	10	indicated that you had reviewed it.
11	annual progress."	11	THE WITNESS: Okay. I'm not sure I understand
12	Could you just review that and let me know	12	your question.
12	when you've had an opportunity to?	13	MS. KOURY: Q. Sure. What is the basis of
14	A. Mm-hm. Okay.	14	your opinion that the state should provide these
15	Q. In this paragraph you state that the state	15	incentives for updating and streamlining the hiring
16	should develop an annual Teacher Qualifications Index,	16	process?
17	which would:	17	A. By "basis," do you mean why do I think this
18	" provide school-level and district	18	would be a desirable thing to do?
19	information about the number of emergency	19	Q. Yes.
20	permits, waivers, intern, pre-intern, clear	20	A. Because there is because there's evidence
21	credentialed, and National Board Certified	21	that districts that have been able to do so, to upgrade
22	teachers."	22	their personnel departments, computerize application
23	Do you know whether California currently has a	23	processes, make the recruitment and hiring processes
24	database that includes this type of information?	24	more aggressive and streamlined, have been able to
25	A. Yes, I believe it does, and such an index has	25	improve their outcome for hiring credentialed teachers.
20			
	Page 379		Page 381
1	been proposed and actually enacted, but vetoed and	1	And it is also true, in some districts that have had
2	and described by Futernick in the document I cite.	2	various kinds of budget problems to deal with over the
3	Q. So, in other words, this state has considered	3	years, that many particularly urban districts have
4	this particular type of index but rejected it?	4	not had the resources to upgrade their recruitment and
5	A. Well, the legislature passed it, but the	5	hiring processes.
6	governor vetoed it.	6	Q. What districts have are those districts in
7	Q. And why do you propose that the index include	7	California that you're referring to in your
8	national whether teachers have national board	8	A. Certainly, yes, there are districts in
9	certifications?	9	California that are included in what I just said.
10	A. It's a simply a measure of accomplished	10	Q. What districts in California are you aware of
11	teaching. Like board certification in medicine or	11	that have done this in other words, that have updated
12	certification in public accounting, that gives a measure	12	and have a streamlining process for hiring?
12	on the negitive side of teachang having mot high an	12	A Loite have in the new out New House

13 on the positive side of teachers having met higher

- standards, and that's the way it was proposed in the 14
- 15 places that I cite there in the paragraph.

Q. I'm really jumping around here, but could you 16

please turn to page 81 and review the first full 17

paragraph on that page and let me know when you've had 18 an opportunity to do so? 19

- A. Mm-hm. "Provide incentives to districts"? 20
- 21 O. Correct.
- 22 A. Mm-hm.
- 23 Q. For the record, your report states that the
- 24 state should: 25 "Provide incentives to districts for
- ig proce ıg 13 A. I cite here in the report New Haven, 14 California, and give some discussion of what they did, 15 and San Diego, California, as two examples. 16 Q. Are there any other examples other than the ones cited in your report? 17 18 A. Certainly, other examples exist. Those are 19 examples that are documented in research reports that I 20 cite. 21 Q. What efforts, if any, are you aware of by the state in terms of providing such incentives to 22
- 23 districts?

24 A. None. On this particular -- on this

25 particular set of points. I should qualify that by

	Page 382		Page 384
1	simply saying that one could consider the Teachers as a	1	research in terms of what the CCTC does in order to
2	Priority Program as an incentive for creating supports	2	ascertain what type of surplus of teachers are out
3	for hiring fully qualified teachers, but that program	3	there?
4	did not go to the issues of streamlining hiring	4	A. I don't I'm not aware that they do try to
5	processes, updating personnel departments, et cetera.	5	do that.
6	Q. Could you turn to page 53 of your report? And	6	Q. I'm sorry. Just to be clear, is it that
7	in the first paragraph, you say in the first	7	you're not aware because you have not made such efforts
8	paragraph, it states:	8	in order to determine what the CCTC does or are you
9	"In addition to the large number of	9	aware based on some understanding of what the CCTC does?
10	prepared credentialed teachers in California,	10	A. In my conversation with various CCTC staff
11	there are many states that have had surpluses	11	over the last few years and in which I have asked them
12	of teachers for most of the last decade and	12	about their understanding of teacher supply and demand
13	are expected to have surpluses into the	13	or surpluses/shortages in other states, none of them
14	future, which should provide an additional	14	have been aware of any particular efforts the CCTC makes
15	pool."	15	to evaluate that question.
16	Is that still your opinion today?	16	Q. On page 63 of your report, if you would please
17	A. Yes.	17	turn to that. Your report states that at the bottom,
18	Q. And as to the point that "there are many	18	the last paragraph, in, quote:
19	states that have had surpluses for teachers for most of	19	"In the spring of 1998, the legislature
20	the last decade," you cite the AAEE 1997 report?	20	passed a bill authorizing the CCTC to
21	A. Mm-hm.	21	establish reciprocity with other states and,
22	Q. Is there any other report and/or data that	22	in the spring of 2000, the CCTC approved a
23	you that you would point to in support of that	23	list of states with which it would seek to do
24	opinion?	24	so. The process does not establish full
25	A. Not that I can recall at the moment.	25	reciprocity, however, but ascertains

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Q. And with respect to the point that -- or your 1 'equivalences' for various aspects of the 2 California requirements ... for equivalence in opinion that these surpluses are expected to continue 3 into the future and should provide an additional pool, six areas." what data do you have that supports that opinion? 4 Could you describe the changes that occurred A. Also, the AAEE data, and I've seen projections 5 in 1998 with respect to reciprocity? A. I describe them in some detail in the report. from some states' own individual administrator, you 6 7 know, data that are -- are similar -- that provide Q. Other than what's in your report, do you have evidence for that same conclusion. 8 any other understanding as to the reforms that occurred MS. KOURY: I'm sorry. Could you read back 9 in 1998? 10 A. Yeah. There are probably things I know about that last part? that are not stated in the report. (Record read.). 11 THE WITNESS: Okay. That would be not be Q. Is it your understanding that the basic change 12 administrators. That would be administrative data. 13 in 1998 was to waive specific credentialing requirements That's what I was trying to say. for experienced out-of-state-certified teachers or 14 MS. KOURY: Q. How recent are those 15 experienced out-of-state teachers? MR. AFFELDT: Objection. Asked and answered. projections from other states' data that you reviewed? 16 16 A. Within the last couple of years. There have 17 And objection to the extent it calls for a narrative. been also some recent reports in the Popular Press about 18 MS. KOURY: Actually, it was sort of a surpluses of teachers occurring as a part of the recent 19 yes-or-no question, so I don't know how it's a recession, recent economic recession. 20 narrative, but it might have been asked and answered. 21 O. Do you know if the CCTC has investigated what THE WITNESS: It's my understanding that in 1998 there were some changes made to waive certain states have surplus teachers and the extent of their 22 surpluses? 23 requirements in California, not only for experienced 24 teachers from out of state but for teachers who were A. I do not know if they have. Q. Have you ever made any investigation or 25 prepared out of state.

1 2	Page 386 MS. KOURY: Q. Is it your opinion that California should establish full reciprocity with other	1 2	Page 388 CERTIFICATE OF REPORTER
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	 A. I do recommend in the report that the state establish fuller reciprocity that is, to continue to give credit for a wider range of the experiences and qualifications teachers have met from out of state so that the process becomes more streamlined. Q. Do you know what the CCTC has considered in terms of which equivalences to establish and how far to go with reciprocity? A. I I am aware of what the CCTC has done in establishing equivalence yes, and what the criteria are that they're using. Q. Are you aware of the underlying considerations that they have taken in that regard? A. I believe so, based on the publications that they've issued and that I have read and that I cite in this report. Q. Are you familiar, then, with certain reciprocity procedures that the CCTC has considered but rejected for one reason are the other? A. I'm aware of, certainly, some of those. MS. KOURY: Can we go off the record for a 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	I, QUYEN N. DO, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was, by me, duly sworn to tell the truth, the whole truth and nothing but the truth, in the within-entitled cause; That said deposition was taken down in shorthand by me, a disinterested person, at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision; I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto. DATED: April 14 , 2003 QUYEN N. DO, CSR 12447
25	second?	25	
	Page 387		
1 2 3	(Whereupon, the deposition was adjourned at 4:55 p.m.)		
4	000		
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	I declare under penalty of perjury that the foregoing is true and correct. Subscribed at , California, this day of , 2003. 		