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STATE OF FLORIDA
DEPARTMENT OF EDUCATION
AMERICAN INSTITUTES FOR RESEARCH

FLORIDA'S RACE TO THE TOP
STUDENT GROWTH IMPLEMENTATION
COMMITTEE MEETING

University of Central Florida
Teaching Academy Building
Orlando, Florida

Thursday, May 20, 2011

Volume 1

DEPARTMENT OF EDUCATION:

KATHY HEBDA, Deputy Chancellor for Educator Quality
JUAN COPA, Director, Research & Analysis

AIR MEMBERS PRESENT:

JON COHEN, Ph.D., Executive Vice-President
HAROLD DORAN, Ed.D., AIR, Principal Research Scientist
CHRISTY HOVANETZ
MARY ANN LEMKE

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1 (Whereupon, this is an uninterrupted
 2 continuation from Volume 1, to-wit:)
 3 * * * * *
 4 DR. DORAN: Good morning, everybody.
 5 Welcome back to day two. We have some very
 6 thoughtful and helpful questions coming in from
 7 the web yesterday, and so we had something over
 8 70 people watching on. We'll try and do our
 9 best. We want to thank you folks for watching
 10 online as well as here in the room.
 11 We covered a pretty tremendous amount of
 12 ground yesterday. Let me just refresh us in
 13 terms of where we have been. We started six
 14 weeks ago with a more policy oriented and
 15 thought experiment oriented-type discussion on
 16 what are the different model types, what are
 17 some of the issues about value-added modeling,
 18 what are some of the models that seem most
 19 sensible, and we had some pretty interesting
 20 conversations surrounding those kinds of
 21 policies and model -- genres of models. From
 22 there during that six week period, we ran a
 23 number of different value-added models in both
 24 math and in reading, eight different model types
 25 across seven different grades. That is well in
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1 excess of over 115 models or so.
 2 We started the day yesterday with a
 3 description showing the teacher effects and the
 4 school effects estimated across the different
 5 models and showing that the behavior of the
 6 models all of them across all grades in both
 7 subjects behave similarly, it would be virtually
 8 impossible to present the results over a hundred
 9 models to this group within a two day period.
 10 So we used that comparison of the models and how
 11 they behaved similarly to justify our reason for
 12 focusing only on grade 7. We chose grade 7 only
 13 because it's in the middle, and models in grade
 14 4, grade 10, reading and math. So it's a
 15 relatively good sample of what we're looking at.
 16 There were no models that behaved very, very
 17 differently in different grades. If they would
 18 have, we would have pulled those out, brought
 19 those back.
 20 We spent a tremendous amount of time
 21 yesterday looking at all seven models across
 22 multiple criteria, and those criteria included
 23 precision. We looked at the standard errors and
 24 which of the models produced smaller average
 25 standard errors. That's an important statistic.
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1 We looked at what we called parsimony. Which of
 2 these models include variables that seem to be
 3 about the right amount of variables to make
 4 accurate or good enough predictions of school
 5 and teacher effects? We didn't look at
 6 classifications consistency just yet. We looked
 7 at -- I need to remember my criteria --
 8 precision, parsimony --
 9 PANEL MEMBER: Lags.
 10 DR. DORAN: Lags. We looked at whether or
 11 not we want to include one lag or one prior test
 12 score or two lags, two prior test scores, and
 13 one of the criteria we looked at again for
 14 making that decision was whether or not the
 15 standard errors were smaller under one lag model
 16 or under the two lag model, and then we had a
 17 very lengthy discussion on whether the school
 18 effects needed to be included in the model or
 19 not. We finished the day yesterday more or less
 20 with a conversation about which of those models
 21 you are most comfortable with at this point.
 22 After evaluating them through the lens of those
 23 criteria, you came to a tentative or pretty
 24 close to final discussion on where you are with
 25 the models that you like most, but you're not
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1 done yet. There are some lingering questions
 2 and things that you wanted to say, particularly
 3 on the school effects.
 4 Jon spent a pretty significant amount of
 5 time generating some numbers and doing a
 6 simulation to illustrate what the consequence of
 7 including or not including the school effect is
 8 and we'll start the day today with his
 9 simulation if we can get that up on the screen
 10 -- Jon, were you able to get that up?
 11 DR. COHEN: Yes.
 12 DR. DORAN: So we'll start the day today
 13 with his simulation and continuing that
 14 conversation on whether or not including a
 15 school effect is or is not a reasonable thing to
 16 do. Number Model 1 and 1A were the teacher-only
 17 models. They included only teacher effects; and
 18 all of the Model 3's which were more or less the
 19 models that the group seemed to favor included
 20 school effects. But it was a bit of a
 21 controversial issue or we needed a little bit
 22 more understanding on what are some of the
 23 implications for teachers if they were to change
 24 schools when there is the inclusion of a school
 25 effect, and we're going to try to answer that
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1 question today to the best of our ability.
 2 The other question that is still a
 3 lingering issue was the inclusion of covariates.
 4 Which of the covariates should be included? All
 5 of them? Some of them? I think there was a
 6 sentiment in the room that some of them should
 7 be included, but there's still an issue of which
 8 ones. Some of the variables were not
 9 significant. There may be some questions on
 10 whether categories should be collapsed or not.
 11 We'll continue that conversation here today.

12 There are a couple of questions that we had
 13 here, the intact school effects. We also want
 14 to look at the average value-added effect across
 15 the districts in one of the models. There was a
 16 question on scale size, how many students need
 17 to be in a teacher's class or you estimated a
 18 reliable teacher effect. We'll move through
 19 that one pretty quickly. That has a relatively
 20 straightforward answer.

21 Then from there we're going to look at some
 22 consequences. We're going to look at
 23 consequences in terms of expectations, what are
 24 the different expectations, conditional on
 25 different kinds of students, predictions for

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1 model, as well as the covariate that would be
 2 included in that model. So that's the big
 3 picture for today. Does anybody have any
 4 issues, comments, concerns before I turn this
 5 over to Jon to start the discussion on the
 6 school effects and the average value-added
 7 effect by district?

8 Yes?

9 MS. WOODHOUSE-YOUNG: Don't you remember we
 10 also had a discussion, if I recall properly,
 11 about whether the data for the whole of Florida
 12 was representative of the different areas of
 13 Florida, southern Florida, northern, et cetera.
 14 I seem to remember a discussion on that, and
 15 hopefully the data today will renew our minds of
 16 some of that.

17 DR. DORAN: We're going to show you
 18 district by district of value added effects by
 19 district.

20 Okay. That's this second one. That is
 21 what you're going to show them, right?

22 MR. COHEN: I'm prepared to show.

23 MR. DORAN: I've put him on the spot.

24 Any other questions before we start the
 25 day?

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1 growth for students that are ELL, gifted, and so
 2 forth. We'll show you those data.

3 We also have correlations of the
 4 value-added effects from all of the models with
 5 things that you think are correlated with the
 6 value-added model. So things that you think
 7 would be related to high value-added effects, we
 8 show those correlations within as well as some
 9 other factors. We'll go through the slides.
 10 Whenever we finish that, we'll turn the
 11 microphone back over to Sam who will facilitate
 12 a continuing conversation on now that we have
 13 most of the information, what are the lingering
 14 issues? Where do you need more data? Where do
 15 you have more questions? I want to remind you
 16 that Jon and I have data -- not everything, but
 17 we have a substantial amount of data we can
 18 tonalities in the back if there are still some
 19 lingering issues. You can try and call back to
 20 AIR if you need something else, but we'll see
 21 depending on what the issue is. We can try and
 22 generate some additional analyses and results
 23 for you.

24 We want Sam to facilitate the conversation
 25 where we move towards a recommendation of a

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1 All right. I want to make just one
 2 comment. Yesterday was a lot of information and
 3 a very challenging day, and when we briefed last
 4 night we were extremely pleased with the level
 5 of conversation, the questions, the challenges
 6 and the issues. We would hope that that would
 7 continue today. We know that this is a
 8 difficult topic; we know that we have real world
 9 consequences. We know that this group has a
 10 vested interest in getting this right. We want
 11 to encourage you today to continue with these
 12 hard questions, those were challenging issues.
 13 We want you to try and press us to find the
 14 answers that you need so that you have the
 15 information so that when you leave here today,
 16 remember, you're making a recommendation and
 17 ultimately this group has to defend as the
 18 ambassadors of this model. Anyone in this room
 19 if you left here today without all of the
 20 information you needed to make you fully
 21 comfortable with making the recommendations that
 22 you need to make today.

23 So please, with what happened yesterday
 24 just continue that today so that we can move
 25 forward giving you all of the information and

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1 being as transparent as we can possibly be.
 2 All right. We're going to turn it over to
 3 Jon and we'll go forward.
 4 DR. COHEN: Impact of school effects.
 5 Round 2. Let's try this again. I guess when
 6 Harold said I'm going to tell you the impact of
 7 teacher's scores of school effects, I'm going to
 8 answer that question now, and when I say I'm
 9 going to answer the question, I'm not really
 10 going to answer the question.
 11 I'm going to do my best to make clear the
 12 question and then we can work towards an answer.
 13 A bunch of us were talking earlier this morning
 14 about it and Sam raised this example. Suppose
 15 you have two schools and one is a very high
 16 growth school. All the kids are learning an
 17 extra ten points -- we won't choose a number --
 18 an extra ten points, and you have another school
 19 that's a very low performing school. All of
 20 those kids are learning like ten points less
 21 than elsewhere in the state.
 22 If you take a teacher from school A, the
 23 high performing school, and move them to school
 24 B, assuming that the same teaching methods work
 25 and they do, yes, and you need individualized

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1 instruction and all that, assuming everything
 2 else is the same can that teacher produce --
 3 will that teacher produce the same results, 10%
 4 more than the average in that second school?
 5 Right. So you take a teacher from school A, put
 6 that teacher in school B, will that teacher
 7 produce the same results. One side of the
 8 question. I don't know the answer to that. I
 9 suppose we could probably pay teachers to
 10 participate in an experiment and move them from
 11 school to school, but how you apportion school
 12 effects and what you do with school effects in
 13 the model really depends on what your answer is
 14 because it might be that you take that teacher
 15 from school A where they were doing the same as
 16 other teacher in the school and give them 10
 17 extra points of achievement and move them to
 18 school B where everyone else, their students are
 19 10 points less than the state average, and you
 20 might find that they hit zero. They get up to
 21 the state average and is 10 points more, or will
 22 they have the absolute value of 10 points more.
 23 Sam, is that -- are people clear within the
 24 question here? Is anyone not clear with the
 25 question? Okay.

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1 I'm going to open up a spreadsheet. All
 2 right. It actually didn't take all that long
 3 for this spreadsheet together.
 4 MS. BROWN: Can I just throw out a little
 5 point of thought? I want to be careful because
 6 I know when we get into school effect a lot of
 7 times what we're really trying to get at is we
 8 don't set up a model that incentivize teachers
 9 to leave our most needy schools and stay in
 10 other schools because they could get a better
 11 effect. That's what we are all trying to get
 12 at. But we also have to be careful that we
 13 understand the terms because in the value-added
 14 world, the term high growth, which would be a
 15 high performing school, or low growth which
 16 would be a low performing school in value-added,
 17 that's not identical to high achievement as in
 18 greatest percentage of level three and above
 19 readers and low achievement, because you can be
 20 a high achieving school with zero growth in your
 21 students.
 22 Therefore, you would be low performing in
 23 value add, but you could be a lower performing
 24 school achievement-wise, maybe in a very urban
 25 poverty school but have high growth and be

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1 considered a high value add school. So it's
 2 important to understand the difference between
 3 those two terms as this conversation rolls
 4 forward, I think. Okay. Sorry.
 5 DR. COHEN: That's true, and in fact, at
 6 least with the data here in Florida, you tend to
 7 see higher growth among lower performing
 8 students.
 9 MR. FOERSTER: To give an example, I think
 10 we're all thinking we're in a great school that
 11 has high growth, you know, plus ten points
 12 average and I think -- myself, I was guilty,
 13 also. I'm gravitating immediately toward the
 14 schools in my district that I think are great
 15 schools. The truth is probably those aren't the
 16 schools that are going to have the high growth
 17 rates. They're going to be the lower performing
 18 fewer kids at three and above kinds of schools,
 19 so if we're all sort of making that assumption I
 20 think that's a really valuable point to
 21 re-calibrate our thinking about --
 22 MS. BROWN: Yeah, because it's actually
 23 sometimes the middle-of-the-road schools that
 24 are raising that bar of achievement, getting to
 25 that high level of achievement and they got

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1 there because they have high levels of growth.

2 MR. FOERSTER: Right.

3 MS. BROWN: That's the school kind of in
4 the middle that has both pieces. So I have to
5 remember that.

6 MR. LeTELLIER: I think that's one of the
7 dilemmas of discussion is that we ought to have
8 a list of some basic assumptions that fit into
9 these categories, so you could eliminate that
10 confusion if we had such a list in writing; we
11 could see that.

12 MS. BROWN: Well, I think you have to
13 remember for the purposes of this discussion
14 what we're talking about is focused around
15 value-added school effects and teacher effects.
16 Therefore, when we use the terms "high
17 performing" and "high growth", you just have to
18 remember that a school that's getting a lot out
19 of their kids, not necessarily a school that has
20 the highest levels of achievement as defined by
21 our state test.

22 MR. LeTELLIER: That's kind of what I was
23 getting at yesterday because I've talked to
24 several of you individually at lunch, et cetera,
25 but it's the fact that we don't want to handicap

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1 a teacher because they're at a good school
2 that's achieving well, and then where do they go
3 from there? So I think that's the concern. I
4 don't think there's anybody in this room that
5 doubts that there is a school effect. I mean,
6 everybody understands that -- administration,
7 the climate of the school, that's very, very
8 important to the success of the school. The
9 concern is once you get to that high achieving
10 school, how can we take and make some sort of
11 delineation so that those teachers still have
12 the ability to have a higher value-added model
13 score?

14 MS. BROWN: Then the difference will be
15 because the whole point varies; you have to
16 really go into that discussion of what is good
17 because when you use the words "good school", is
18 a good school that has absolute high achievement
19 but absolutely no growth in their students? Or
20 is a good school a school that's gaining in
21 achievement getting closer to those high bars
22 and have lots of growth in their students. You
23 know, that's a big dilemma that we have to
24 figure out.

25 MR. LeTELLIER: Yeah, and growth is
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1 important. I think you had mentioned yesterday
2 about the ceiling effect. When you hit that, do
3 we say if the growth isn't great in a high
4 achieving school that those teachers are not
5 performing well?

6 MS. BROWN: And then we have to remember,
7 and I'm so sorry that I've derailed this
8 discussion; I hope I'm not derailing it. If I
9 am, you all just tell me to be quiet. But we
10 have to remember, too, when we also define
11 growth you've got to remember what does growth
12 mean in value-added versus what does growth mean
13 as we have known it in the past in a simple
14 growth model?

15 In a simple growth model in the past, it
16 was if you're here you have to move up or
17 there's no growth, but in value-added it may be
18 that you're here super high and your prediction
19 or expectation is to be right there or just a
20 little bit above. So the ability to show growth
21 may be -- not always -- but may be different.

22 MR. LeTELLIER: In how it appears.

23 MS. BROWN: Exactly.

24 MR. LeTELLIER: Absolutely.

25 MS. FEILD: I think a lot of this may
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1 resolve itself if the accountability model moves
2 towards using BAN (ph) as growth because what
3 you have now is two different models. It's
4 going to be confusing. So if accountability
5 replaces what they call growth with a
6 value-added, then they'll be in sync, right? So
7 I think eventually, Juan, that's where we're
8 going, I believe, so I think you'll have less
9 disparity then.

10 MR. FOERSTER: I don't mean to throw a
11 complication in there, though. Here's the thing
12 that is the benefit as I understand it about
13 having them distinct and separate. Right now we
14 can take into account different expectations of
15 student growth to be fair to the teacher without
16 impacting our actual expectations on kids
17 because those models reside in separate silos.
18 When you go to reconcile them while there is the
19 benefit of being consistent, which I completely
20 buy, the policy implications of setting
21 different expectations of growth for different
22 kids becomes a really big deal.

23 MS. FEILD: The only problem is that if you
24 have a high performing school and you're a
25 teacher with 30 children and all your children
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1 maintain their level four or five, but they made
 2 minimal growth on their value-added, how are you
 3 going to sit when they tell you on your
 4 evaluation you were a low performing yet 100% of
 5 your kids stayed above proficiency because of
 6 the value-added, the way it was worked out? So
 7 I think that that could lead to -- I agree with
 8 you that there would be different expectations,
 9 but I actually think that that would lead to a
 10 bigger problem because teachers are going to
 11 compute their own growth. They're going to
 12 continue to do it on the old model and justify
 13 whatever score because they're never going to be
 14 able to compute a value-added model on their
 15 own, so they're going to go by that mantra that
 16 we've had, and it's going to take many years, I
 17 think, to kind of un-educate them to move away
 18 from that.

19 DR. COHEN: I'll continue with this or we
 20 can just decide that there are school effects
 21 and they're due partly to the teacher and partly
 22 to the school, and then we can move on.

23 MR. FOERSTER: That's an interesting point
 24 of clarification here because we can beat this
 25 to death. I think we gave it a good wail

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1 yesterday and we can pick up the stick if you
 2 want to, but I think where we're all at is that
 3 conclusion. We all agree there is a school
 4 effect, right? And we all agree that there is
 5 teacher effect, and what is at issue here is how
 6 you apportion the school effect. Do you want to
 7 live in the one world where there is no school
 8 effect? Do you want to live in the other world
 9 where you pay -- you attribute all school effect
 10 to the school and none to the teacher? I don't
 11 think anybody is comfortable with either of
 12 those extremes.

13 So what we're talking about is how we land
 14 in the middle, and I don't know how finally we
 15 want to define what the middle is. I mean, we
 16 really could say show us what a 50/50
 17 apportionment looks like. I will borrow a point
 18 that Lance made before this meeting. We start
 19 there, run the data for this year, study it like
 20 crazy and see what we learn after we've had the
 21 opportunity to do that. That's a perfectly
 22 valid course of action and it would advance the
 23 discussion. I throw it out there. If that's
 24 where you guys want to go, we can move forward.

25 MR. LeTELLIER: Seeing data, I think that's
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1 what we need.

2 MR. FOERSTER: So do you just -- we all
 3 want to agree that there is a school effect, it
 4 needs to be apportioned 50% to the teacher;
 5 what's that mean? Is that what we're asking?

6 MS. BROWN: What I'm hearing is we all
 7 agree there's a school effect. The question is
 8 how will it be applied in the value-added
 9 calculation and what decisions will we need to
 10 make. But not just tell us, show us. If we say
 11 it's 5%, this is what it looks like. If we say
 12 10, whatever, the numbers that we had yesterday
 13 -- if we say 50, whatever, kind of what does
 14 that look like in some real scenarios?

15 MR. FOERSTER: And you're prepared to
 16 deliver a 50/50, right? Is that what your model
 17 up here does?

18 It takes us through some scenarios where
 19 here's world one where there's only teacher
 20 effect, here's world two where there's school
 21 effect, and it's 100% school --

22 DR. COHEN: Yeah, but not with real data,
 23 with simulated data --

24 MR. FOERSTER: Well, sure, sure.

25 MS. BROWN: It's numbers; it helps.

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1 DR. COHEN: I mean, I have that and we
 2 could very, very quickly in like ten minutes
 3 just show you some stuff with real data too, if
 4 you wanted to see that, but we need to know you
 5 want to look at it because you've got 10,000
 6 teachers out there in grade 7. So I guess I'll
 7 run through this now; is that what my direction
 8 is?

9 MR. FOERSTER: Please, sir.

10 DR. COHEN: All right. Let's focus on
 11 these rows right now. What I did, on this side
 12 of the spreadsheet if you can't see it, it's in
 13 column Y over here, there's a bunch of made up
 14 students, around 20 students. For a little fun
 15 experiment, let's take a teacher and her
 16 students and move that teacher from school 1 to
 17 school 2 and see what happens under different
 18 scenarios, under different value-added models,
 19 whatever. Those two schools don't exist in just
 20 one world. They live in three parallel
 21 universes, one where only the teacher matters;
 22 one where all the common component at the school
 23 is being caused by the school backers and the
 24 teacher can't affect that school level common
 25 component; and one law of where it's half and

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1 half. Again, 50% is just a number plucked from
2 the air.

3 All right. So we start -- I made up the
4 schools and we can change this if you want.
5 School 1 has a minus 50 point common component,
6 so on average students at that school are 50
7 points less than the state average in growth.
8 School 2 is exactly the opposite; it's a more
9 effective school with higher growth, 50 points
10 above the school average, and this particular
11 teacher, we'll call him teacher Harold who's the
12 good teacher, Harold has a 100 point effect,
13 true effect. Under any world, this teacher is
14 going to increase the student's achievement by
15 100 points, what the teacher is causing.

16 So we can count and put him in the lower
17 growth school with his class and they have --
18 his class is an average score here, it says
19 1,477; and the prior score entering and at exit
20 after he has taught them, they're up about 300
21 points to 1,778, right? We dig Harold.

22 Remember, we're in the world where only the
23 teacher matters. We take Harold and his class
24 magically transport them to school two. That's
25 the really higher growth school and you see

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1 impacted score.

2 Okay. So under these different assumptions
3 about how the world works, you wind up with
4 different numbers, different actual observed
5 patterns of growth, and you can see the growth
6 down here below. So is everyone with me so far?
7 All right.

8 Now we're going to go to estimate teacher
9 effects. True teacher effects are about 100,
10 there's a little bit of randomness in the thing;
11 we can compute this and get new numbers if I
12 press in a button. If only the teacher matters,
13 the right thing to do is to attribute any common
14 component to the teacher because we know that's
15 the thing that matters and if you do that you'll
16 get unbiased estimates in both schools of about
17 100 points. And we know that Harold induces an
18 extra 100 points of learning among his students
19 and so that's the right answer.

20 Now we move over to the parallel universe
21 where there are real live school effects that
22 Harold can do nothing about. If we attribute
23 all the school effects to Harold, we're going to
24 estimate his effectiveness at only 50 points in
25 the lower growth school and 150 points in the

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1 exactly the same result. Why? Because the
2 school doesn't matter. So the kids' exiting
3 scores are the same in those two schools because
4 the school doesn't affect their growth, only
5 Harold does, only the teacher.

6 That's clear, right? Now we take Harold
7 and his students and plunk them -- we transport
8 them magically to the next universe. In this
9 universe, there is a school effect. It's an
10 independent effect and all of the common
11 component in the school is due to things that
12 are beyond the teacher's control. Principal's
13 community, whatever.

14 So you take the same starting value, the
15 same students, Harold is still the teacher. Now
16 we plunk him into the lower performing school,
17 their observed growth is 50 points lower, 1,728
18 rather than 1,778, because those school effects
19 are pushing down those scores. The other school
20 pushes them up by 50 points. Is that clear?

21 So what happens to the actual students in
22 the actual observed growth if you're able to do
23 this and move them, it depends on which of these
24 worlds you're in. Then the difference is split
25 where it's half and half; they only half the

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1 higher growth school. In this case, it would be
2 bias; it wouldn't be a fair estimate of Harold's
3 impact on the school. In that world, you get
4 the fair estimate when you attribute none of the
5 school effects to Harold.

6 So depending on how the world works, you
7 want to make your model selection that there's
8 consensus in the room that teachers may be --
9 higher and lower growth teachers may be
10 concentrated in different schools and there's
11 some independent factors at the school that the
12 teacher can't affect that affects student
13 growth. I think that's the consensus you all
14 came to, right? So both things -- I made them
15 half and half and conveniently I made my other
16 example, Harold, half and half; you get your own
17 unbiased estimate when it matches with what's
18 really going on in the world.

19 So the choice of how to attribute the
20 school effects really depends on what you
21 believe about the world. It's not a statistical
22 question. It's a substantive question about how
23 the world works.

24 MS. ACOSTA: I just want to add also sort
25 of a way to look at that from a policy

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1 standpoint, as well, because how we make the
 2 attribution, how we decide how much goes to the
 3 school effect and the teacher effect may depend
 4 on which way we want to err. If we want to err
 5 - and we're talking about this a little bit
 6 before the meeting, if we want to -- if there
 7 will be some error as to some people being
 8 overrated and some people under-rated, do we
 9 want the error to be in favor of teachers at
 10 lower performing schools or at higher performing
 11 schools or higher growth schools to clarify the
 12 vocabulary? I think that's a decision that we
 13 need to think about, which I think goes to Jon's
 14 question before.

15 Do you in some way limit the teachers at
 16 the higher performing schools? And you may have
 17 to, at least as I understand it, in order to
 18 make sure that we're fair to the people at the
 19 lower performing schools.

20 MR. LeTELLIER: I think part of looking at
 21 this, it's -- maybe it's kind of how you look at
 22 what school effect means. If we're looking at
 23 it here, it may mean one thing. If we're
 24 looking at it from the way we're all thinking in
 25 a general term, we know the school has a

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1 positive effect. What does that mean, you know,
 2 using this nomenclature, I guess, just trying to
 3 put that together with how we're putting
 4 together a model. If I'm reading the chart
 5 right, the more that you add a school effect,
 6 the less that a teacher has a chance to show
 7 growth.

8 So different from what we're thinking,
 9 which is schools do affect the situation. In
 10 the model here, the more that you add from that
 11 the less, you know, the spread -- so to speak is
 12 less for how a teacher can look good or bad, I
 13 think, because as you go higher with the school
 14 effect then obviously that will prevent the
 15 teacher from getting too low as well, correct?

16 MS. HALL: I have a question. You're
 17 talking about schools here in this model and in
 18 school 1 it's minus 50 points compared to the
 19 State. Now that's not my understanding; I just
 20 want to make sure that we're clear is that when
 21 we're talking about a school effect at negative
 22 50, I'm talking about the entire growth that has
 23 happened at my school in relation to what's
 24 happening in the classroom. My teachers have
 25 shown growth with their students because we have

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1 two lags and they've made growth; and so we can
 2 measure that. That same model is applied to the
 3 entire school, but you're describing this as
 4 compared to the State. So I just want to make
 5 sure that I'm clear because now that's whole
 6 'mother differential that's coming into. Now my
 7 growth is now being compared to the State and so
 8 I just want to make sure --

9 DR. COHEN: It is in fact -- all of these
 10 are comparative. Remember the progression line
 11 with the scatter plot we put up before? That
 12 State level if you create an expectation and the
 13 value-added, so that comes under the expected
 14 growth and we're looking at the value-added, the
 15 amount of extra growth beyond that or less
 16 growth relative to that statewide expectation.

17 So there is a State component there.

18 MR. COPA: Just one clarification. State
 19 average based on the parameters of the model.
 20 So it's not just one number, simple average.

21 DR. COHEN: Yes, given the two years prior
 22 achievement and the --

23 MR. COPA: Everything we have in the model.

24 DR. COHEN: Okay.

25 MS. TOVINE: Which model -- which one is
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1 the truest representation of a teacher effect?

2 DR. COHEN: In which universe? See, that's
 3 the essential policy choice because we don't
 4 have a technical answer. Are there things in
 5 the school that the teacher can't affect that
 6 influence student achievement? If the answer to
 7 that is no, then this is the right model and
 8 this is going to be the truest unbiased
 9 estimates. So this is what you want to do if
 10 that's true. If there are no things -- let me
 11 start over.

12 If there's nothing at the school that
 13 affects students that the teacher can't
 14 overcome, if the teacher is the only influence
 15 on learning at the school, then you're in this
 16 universe and your unbiased estimate comes in --

17 PANEL MEMBER: The same.

18 DR. COHEN: -- when all the effects are
 19 attributed to the teacher.

20 MS. STEWART: I'm trying to get this clear
 21 in my mind, but I think - my thought is if this
 22 is a super star at a low growth school, I'm
 23 having trouble with their being penalized by
 24 including the school effect. They naturally are
 25 affected by the school effect because they're

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1 there, if in fact we believe that there is a
2 school effect. The reverse is true as well. If
3 a less than highly effective teacher is in a
4 high growth school, we're hiding their lack of
5 ability to get that student growth that most of
6 the teachers in that school are getting. So you
7 have swung the other direction and they've even
8 been in that school that had the great school
9 effect and in spite of that they were unable to

10 --

11 DR. COHEN: Right, but what you're doing is
12 you're not describing this world, you're
13 describing this world over here. And there if
14 all of the common component at the school is due
15 to school effects, again an assumption, then you
16 get the unbiased estimate when you compare it to
17 the school average.

18 MS. STEWART: Yes, I don't think that's
19 what I'm saying. I think I'm saying on the
20 left.

21 DR. COHEN: Well, one thing you said was of
22 course they're affected by the school effect,
23 right? That put you in this world.

24 MS. STEWART: Or what I'm saying is there
25 is a school effect, but in spite of that school

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1 effect they either had really high growth in a
2 low growth school or the reversal of that.
3 That's really what I'm saying, Jon; I may not be
4 saying it well.

5 DR. COHEN: Right. So there are -- if you
6 were to take that same teacher and put that same
7 teacher in a high growth school, they would show
8 super high growth, right? So, yes, you're still
9 living in this world. What you're saying is
10 that there are things at the school that affect

11 --

12 MS. STEWART: I'm saying that even if I can
13 believe that there is a school effect, I think
14 the better measure of the teacher's effect is on
15 the left.

16 DR. COHEN: Okay. So there are three
17 measures under each of these. There are three
18 measures of the school effect --

19 MS. STEWART: I understand.

20 DR. COHEN: So if you're here and you
21 attribute all of the school effects to the
22 teacher then that teacher is going to look less
23 effective in school one. So it says each of
24 these corresponds to like a way of analyzing the
25 data, apportioning the school effects to the

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1 teacher.

2 MS. STEWART: No, I'm saying the top
3 left-hand is the better representation of the
4 teacher effect.

5 DR. COHEN: So we know that this teacher's
6 true effect is 100 points, right? We made them
7 up and we generated the data, so that teacher is
8 adding exactly 100 points to all the students,
9 we still prefer to model an approach that
10 attributes 150 points to that teacher and a bad
11 score and 50 points to that teacher and a good
12 score. That's a decision we can make.

13 MS. FEILD: I think the question really is
14 if you have that teacher and that was the only
15 person who instructed those children every
16 single day, are we saying that we're not going
17 to give that school credit for after-school,
18 before-school, Saturday tutoring,
19 push-in/pull-out? That's what we're saying.
20 We're saying that it would be like a doctor
21 who's treating you and you're going to say that
22 it doesn't matter that you took the medicine or
23 not or whatever other that you happen to go
24 every day and go drink after you left, or you
25 took your medicine or you didn't take it when

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1 you had to; you know, you're attributing it all
2 to that one person. I'm not saying what's right
3 or wrong, but if we only look at that teacher
4 then anything else that's happening at the
5 school is pretty much we're saying has no
6 contribution, right, to that instructional
7 effect on the child.

8 That's what I'm seeing as the difference
9 between including a school effect or not, even a
10 parent, an after-school parent and private
11 tutoring and all that.

12 MS. TOVINE: But the concern is that we're
13 evaluating the teacher.

14 MS. STEWART: But I'm saying that same
15 effect would be happening to all the other
16 teachers in that school, but that teacher
17 achieved more of that growth.

18 MS. FEILD: Well, in Miami-Dade what
19 happened and I don't know if this happens
20 anywhere else, but if you have a teacher who is
21 struggling, you may send people in to do pull-in
22 or push-outs; or if you have a teacher who's a
23 good teacher but can make a lot of movement and
24 she has a bigger class, maybe you go in and you
25 pull kids to cut them -- bump up her kids. So

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1 that part --

2 PANEL MEMBER: That's a school effect.

3 PANEL MEMBER: School effect.

4 DR. COHEN: Let me ask a couple of
5 questions just to make sure I understand what
6 you're saying.

7 So do you believe that there are
8 independent school factors not associated with
9 the teacher that affect the students' growth?

10 MS. STEWART: Yes.

11 DR. COHEN: Okay. Then we are in this
12 world, okay. So we're in this world but that's
13 okay because there are different estimates we
14 can get in this world if we want by doing
15 different things. Now, the teacher, Harold, is
16 a 100 point value-added teacher. We know that
17 that's true. You don't have to perform to give
18 him an unbiased 100 point estimates. You may
19 prefer, I think, to give him one of these other
20 estimates.

21 MS. HALL: I think for clarification is
22 that when you get a number where you have 101
23 and 101. What they're saying is is that is the
24 most accurate measure, and so the half-and-half
25 when you attribute half of the measure to the

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1 school and half to the teacher, you get the most
2 accurate measurement when it is at half-and-half
3 and the last one there. That's how I'm reading
4 that, is that when you have both numbers at 101
5 it is because the teacher effect is 100 and you
6 want those numbers to be the same, is that
7 correct, for an accurate unbiased measurement.

8 DR. COHEN: Remember, these things
9 represent a different universe. I'll get to you
10 in one second, Lance, and the half-and-half is
11 the universe where there are some teacher
12 effects that are common within school and some
13 unique independent school effects within
14 schools. So that common component of the school
15 is driven by two different things half-and-half.

16 MR. TOMEI: Some of the conversation that
17 we're having right now, it seems to me like
18 we're talking about school effect and teacher
19 effect as totally independent of each other; and
20 I'm going to suggest that that's not true. I
21 think again this is a philosophical issue as to
22 what do you believe the world looks like in
23 schools. My argument for some apportionment
24 model is simply this: I think there are things
25 that we consider a school effect that then

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1 manifest themselves in terms of what teachers do
2 in classrooms, so there's interaction there.

3 I also think if there are things that
4 teachers can do -- mentoring is just an example
5 just given, collaborative learning communities
6 within schools that will have the ability to
7 elevate the school effect and all teachers will
8 benefit. I think that interaction between what
9 teachers do in school and school effect, both
10 input and output, is in fact a philosophical
11 argument for some apportionment approach to how
12 we deal with school effect. I don't think
13 they're independent variables. I think they
14 play off each other and I think a well managed
15 school will leverage the teacher talent to
16 elevate the school effect for everybody.

17 MS. BROWN: Okay, I want to make sure that
18 we all can read the chart because that's what's
19 important here. Now I'm going to go out there
20 because I'm probably going to get told I'm
21 wrong, and I'm at least ready to go there.

22 What I think we're seeing is if in fact the
23 number one decision is which universe do you
24 believe in. So once you pick that belief, then
25 what we had said was which attribution gets us

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1 the most unbiased score? So if you believe in
2 universe one, you have to go with line three.
3 If you believe in universe two, you have to go
4 with line one. If we believe in universe three,
5 according to these made up statistics, you'd
6 have to go with line two, and that's kind of
7 what Stephanie was trying to say. So the issue
8 is, I think, this is where you guys have to
9 help, you pick your universe because that's
10 totally non-statistical, you've got to pick it
11 -- but once you pick it and that's what we
12 wanted was, okay, if we pick that universe tell
13 us the statistics, and now it shows us that if
14 we believe there's a half-and-half, then we've
15 got to have that 0.5 attribution in order to get
16 an unbiased score for the teacher.

17 Now am I right or am I totally off?

18 DR. COHEN: Absolutely. I mean, Pam went
19 some place a little bit different; she said I
20 might prefer a bias statistic.

21 MS. BROWN: That's not what she meant.

22 DR. COHEN: Okay, I misunderstood.

23 MS. BROWN: She was trying to say we cannot
24 set up a system, I think, we cannot set up a
25 system where we potentially have the ability for

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1 a less than effective teacher to look better
2 than they are because they're in a school that
3 has a very high effect. So if we're setting up
4 that system fairly where there's unbiased scores
5 then we're okay with that. I'm hoping that that
6 solves her question.

7 MS. WOODHOUSE-YOUNG: But it also means
8 vice versa, too?

9 MS. BROWN: Yeah.

10 MS. WOODHOUSE-YOUNG: That's important.

11 MR. LeTELLIER: I wanted to say I was
12 thinking about this and I had a little bit of a
13 light bulb go on inside my head for my world.

14 MS. BROWN: That's a good thing.

15 MR. LeTELLIER: Yeah. But I was looking at
16 this and something struck me, which is we're
17 assuming that we have to take and do this as a
18 50% or that we have across the board with all
19 schools. What if the school effect was measured
20 by some sort of a rubric or point system?

21 Therefore, you're -- because we would all agree
22 at some schools they are managed better than
23 others. If we're going to say that some
24 teachers teach better than others then some
25 schools are managed better than others. I mean,

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1 how it's calculated? I mean, understanding that
2 the way you get a school effect is having the
3 model with the student information, it rolls up
4 to, it's the sum of aggregate of all that
5 student stuff becomes the school effect. Then
6 the question is, how much of that -- is part
7 from the teachers, part from the school
8 environment itself? It's not like you just pick
9 a number and say this is the school effect.

10 It's all in the same calculation, if I --

11 DR. COHEN: That's right. That's very
12 helpful. Thank you.

13 MS. BROWN: It starts at the student level,
14 so the student's predictions are calculated and
15 there's a number for that student. So all of
16 the students get added up to each teacher.
17 That's where the teacher effect comes from, but
18 then the sum of all of the students enrolled in
19 the school. It's not really a sum, I'm just
20 using that as a loose term, but the sum of all
21 the students in that school become the school
22 effect. So it's not a separate calculation;
23 it's the same calculation, it's just who it's
24 rolled up to and who's included in it. So the
25 idea is if the sum of all the students in the

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1 at any level you can make that assumption.

2 If we make that assumption, is there a way
3 to take and make -- we all know that there's a
4 school effect of some sort. Is there a way to
5 take and make some sort of a sliding scale --
6 that would be my question to you guys -- that
7 would make sense so that maybe at one school
8 when it's all added up at the end of the day we
9 found that this school had a 10% effect upon the
10 kids, school B down the road, the school effect
11 was more like a 40%. Is that at all possible?

12 DR. COHEN: It sounds like you're combining
13 the attribution of the school effect with the
14 size of the school effect. So a school where
15 there's not an effective principal; it's a badly
16 managed school, you might expect to have
17 negative growth value associated with that. And
18 an average managed school, you might in fact
19 have a zero associated with that and a well
20 managed school you might have some positive
21 numbers. So that's one dimension.

22 Then how much of that do you attribute to
23 the teacher who should be -- what we're doing
24 here is it's constant across all of the schools.

25 MS. BROWN: But doesn't that go, too, to

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1 school is 'X', what contributed to that?

2 MR. LeTELLIER: So are we saying --

3 MS. BROWN: Was it only the teachers or was
4 there something else?

5 MR. LeTELLIER: No, but are we saying that
6 -- I guess the way I'm looking at it is we're
7 saying it's a 50-50 or a zero-zero.

8 MS. ACOSTA: No, it doesn't have to be, and
9 I don't think there's any way that we will ever
10 be able to say at my school it was 40% due to
11 teachers and 50% due to administration and 10%
12 due to parents, and at your school it was 30 and
13 40 and 30. I think that's what you're
14 suggesting.

15 MR. LeTELLIER: Yes.

16 MS. BROWN: How would you know that?

17 PANEL MEMBERS: (Over-speaking.)

18 MS. EDGECOMB: Anna, I think you've
19 answered my question. I hope you haven't
20 because I want to change it a little bit. Does
21 it have to be half and half? I don't want to
22 talk about on a sliding scale like you talked
23 about, but I think it is philosophical about
24 what do we believe is the biggest factor here?
25 Do we attribute then a higher number to that?

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1 DR. COHEN: No, there's nothing magical
 2 about a 0.5 other --
 3 MS. EDGECOMB: Okay, whatever. And if we
 4 believe that, and we do believe that the school
 5 effect is important but maybe not as important
 6 as the teacher effect, can we do a not a
 7 half-and-half, 25, 75, I mean, can you do that?
 8 DR. COHEN: Any numbers you like.
 9 MS. EDGECOMB: Well, now, is that a guess
 10 or is that --
 11 MS. BROWN: No, no, I --
 12 MS. EDGECOMB: We have to decide
 13 philosophically what we believe, and then we
 14 can, I think, then we move to attributes where
 15 we assign to that that would indicate
 16 philosophically where we are.
 17 MS. BROWN: This is what's important, I
 18 think, because when you look at these numbers
 19 the implication is there's a range from 0 to 1.
 20 The closer you are to 0, that's the skew you
 21 would see in the third universe to the right,
 22 and the closer you are to 1, that's the skew you
 23 would see. But that's because the universe is
 24 half-and-half.
 25 MS. EDGECOMB: Right.
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1 MS. BROWN: If you made a fourth universe
 2 that was 80/20 was 90/10, whatever it is. Then
 3 if your attribution equals your universe belief,
 4 you would still have an unbiased score.
 5 DR. COHEN: That's right.
 6 MS. BROWN: That's what everybody needs to
 7 hear, I think. If that's correct then you can
 8 say we believe there are school effects, we want
 9 to err on whatever because it's got to be
 10 common, it's not something you can say each
 11 school's different --
 12 MS. EDGECOMB: Right.
 13 MS. BROWN: And so if we say, okay, 10%.
 14 We're going to put -- 10% is from the school,
 15 90% is the teacher and 10% is the school. We'll
 16 give a little bit of credit for the way the
 17 environment is. Then there's a way to do that,
 18 then the attribution is 0.9 or whatever it is,
 19 and you can still have the 101-101, both
 20 teachers or teachers look the same in both
 21 schools.
 22 DR. COHEN: That's exactly right.
 23 MS. BROWN: That I think was the crux of
 24 our worry.
 25 MS. EDGECOMB: Yeah, and I think thinking
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1 back there's a fourth universe there, very much
 2 like you said, but they are half-and-half that
 3 we attribute it to what we believe is the
 4 greatest factor.
 5 MS. BROWN: So it doesn't really matter, it
 6 could be anywhere on this scale. We pick the
 7 scale.
 8 DR. COHEN: Right, because we don't know
 9 the true answer; we don't know which one they're
 10 going to live in among the infinite possible.
 11 So we choose the one that in our professional
 12 judgment is the one that we think this is
 13 reasonable, we think this is the most likely and
 14 then you attribute it that much.
 15 MS. EDGECOMB: Yeah.
 16 MR. FOERSTER: Point of clarification, Jon.
 17 As you have constructed this chart, is teacher
 18 effect equal to actual average growth of the
 19 teacher minus the school effect?
 20 DR. COHEN: Only in this world. Look,
 21 because remember where we started. The student
 22 scores changed as you moved from world to world.
 23 MR. FOERSTER: Okay. If I believe that
 24 there is no school effect which is universe
 25 wide, am I correct in assuming that the teacher
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1 effect, that score that would be reported for
 2 the teacher, is 100 points which is exactly what
 3 we see in terms of average student growth? And
 4 is that true in both schools because we don't
 5 believe in a school effect, right?
 6 DR. COHEN: Yes, yes.
 7 MR. FOERSTER: The teacher effect in both
 8 cases is 100 points.
 9 DR. COHEN: That's right.
 10 MR. FOERSTER: And the actual growth
 11 demonstrated in terms of average growth of the
 12 kids is 100 points.
 13 DR. COHEN: Yeah, now it's compared to a
 14 growth expectation; mathematically, it's not
 15 exactly like that, no value-added, but yes, yes,
 16 followed by yes.
 17 MR. FOERSTER: But mostly that's right,
 18 right?
 19 DR. COHEN: Yes.
 20 MR. FOERSTER: Okay. So in that case
 21 teacher effect equals actual average growth
 22 minus the school effect, but the school effect
 23 in this case is zero because we don't believe it
 24 exists?
 25 DR. COHEN: Right.
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1 MR. FOERSTER: In real world one. Okay.
2 Where I'm going is that in world two the same
3 formula still seems to hold. Teacher effect in
4 that case is equal to the actual growth
5 demonstrated by the kids minus the school
6 effect.

7 MR. TOMEI: Whatever the percent is.

8 MR. FOERSTER: Right? Because you're
9 assuming that in this case the teacher effect is
10 still 100, but because our formula is teacher
11 effect equals actual growth minus school effect
12 you run it all through school one, the school
13 effect is minus 50 points.

14 DR. COHEN: Right, and this is all good as
15 long as you don't confuse school effect as
16 you're using the term right now with a common
17 component within schools that we estimate.

18 MS. BROWN: Yes, because that assumes that
19 everything in the school effect is the teacher
20 had nothing to do with it.

21 MR. FOERSTER: Common component.

22 DR. COHEN: Yeah, so --

23 MR. FOERSTER: But we are using those terms
24 interchangeably through the course of this
25 conversation, right?

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1 DR. COHEN: Even here there's a common
2 component, right? The common component in this
3 world, also, because in school one they tend to
4 have teachers associated with lower growth. The
5 average teacher is causing less growth, not as
6 good teachers.

7 MR. FOERSTER: Right.

8 DR. COHEN: In school two, the average
9 teacher in that school is causing more growth,
10 so there is a common component but it's not a
11 school effect. It's only because of the things
12 the teacher is doing.

13 MR. LeTELLIER: Is another way of saying
14 this that once you put the school growth in
15 there that the teacher is responsible, let's say
16 maybe 80/20 as you're saying, the teacher is
17 responsible for 80% of the growth if it was
18 split like that.

19 DR. COHEN: I think that's right, yes, and
20 80% of the average growth observed at the
21 school, something like that.

22 MR. LeTELLIER: So we just need to come up
23 with a percentage then that we feel comfortable
24 with, whether or not it's all school versus the
25 teachers in with that 20% or whatever.

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1 DR. COHEN: Yes, and I don't think that you
2 need to make the decision about that; and
3 correct me if I'm wrong, Kathy or Sam or Juan, I
4 don't think you need to decide on that
5 percentage today; you just have to decide that
6 you want to apportion it and therefore you must
7 estimate the things that they do so you have the
8 number in hand to apportion. I think once
9 you've done that we can bury this once.

10 MS. TOVINE: A simple question which may be
11 obvious to everyone else but not to me; which
12 one of those scores, which row, is the one that
13 would actually be attributed to the teachers'
14 evaluation? Is it the last bottom row, 18?

15 DR. COHEN: No, the last bottom row is the
16 actual growth.

17 MS. TOVINE: If I'm looking at it as a
18 teacher, as a principal, and I'm sitting down to
19 do evaluations and I want to know what the
20 actual value or score would be for the teacher
21 to complete their evaluations on that part of
22 the evaluation system, where am I looking?

23 MS. BROWN: In other words, where's the
24 teacher effects?

25 DR. COHEN: It's the 100 points and that's
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1 the thing that is a little confusing to me in
2 the top part of that chart is that you've got
3 attribution in world one when there is no
4 attribution. I mean, the only one that makes
5 any sense is fully attributed to the teacher at
6 100 points. Then in the second column, again,
7 there's no attribution; it's 100 points up top.
8 But the thing that I find a little confusing is
9 that the definition of teacher effect changes
10 between column one and column two. In column
11 one, teacher effect is assumed to be actual
12 average growth. That is to say, the assumption
13 is there is no school effect or common effect or
14 whatever.

15 In the second column you're saying teacher
16 effect is still 100 points. What creates a
17 teacher effect of 100 points in this universe is
18 actual student growth down at the bottom row of
19 50 points in school one because school one has a
20 common effect, I guess, of minus 50, and in
21 school two that same teacher would have to
22 generate an actual growth, average growth per
23 kid of 150 points to get a teacher effect of
24 100.

25 MS. BROWN: But if the school is
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1 contributing to the overall growth --
 2 MR. FOERSTER: Right, so rather than -- I
 3 think where we're all coming from is that we
 4 wanted to see how the different assumptions --
 5 how do I say this? If we assume that student
 6 growth was constant, how would that effect how
 7 the teacher effectiveness score is impacted?
 8 And what you've actually done is created
 9 something that assumes the opposite, that the
 10 teacher effect is constant and how do these
 11 different universes -- what does that imply in
 12 terms of student growth?
 13 That's the best interpretation I've gotten
 14 to this point. Just because it's a little
 15 counterintuitive, I think that's -- for me,
 16 that's what he has me hosed up. I didn't
 17 realize that we were assuming in every case that
 18 the teacher effect is 100, and what does that
 19 imply in terms of student growth in every
 20 universe?
 21 What it implies is that if you don't
 22 believe there's a school effect then a teacher
 23 effect of 100 means that the average growth per
 24 kid is 100. If you believe there is a school
 25 effect and it should be fully attributed to the
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1 school then the teacher effect if it's 100 is
 2 going to be actual student growth minus the
 3 school effect, right? So in the case of school
 4 one where you've got a very large negative
 5 school effect, the actual growth that the
 6 teacher generates is only 50 points, but they
 7 have an effectiveness score of 100 because
 8 they're in a low growth school, and so it goes.
 9 DR. COHEN: That's right.
 10 MR. FOERSTER: I mean, so if we can all
 11 agree that the formula that we're talking about
 12 is teacher effectiveness equals actual growth
 13 minus school effect. If you don't believe
 14 school effect is zero, that term is zero. If
 15 you believe that there is a school effect and
 16 you want to fully attribute it, the coefficient
 17 on the school effect is one, that's universe
 18 two. If you believe there's a school effect and
 19 it should be apportioned, what's the
 20 co-efficient?
 21 DR. COHEN: Yeah.
 22 MS. BOURN: So doesn't the question really
 23 become at that point what percent of school
 24 effect is attributable to teachers versus things
 25 that are out of their control? And how do we
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1 look at that and make it fair for things like
 2 encouraging collective accountability for
 3 student achievement, we all own all students
 4 that walk through our doors, versus things that
 5 we have completely no control over -- ZIP codes,
 6 school resources, magnet programs, student
 7 population demographics, all of those things
 8 that come into the mix.
 9 MR. TOMEI: I totally agree and I think
 10 that part of what we're trying to do here is
 11 build an accountability model that will help us
 12 move education forward in the state then part of
 13 that philosophy and the decision we have to make
 14 because this is not a science what that
 15 apportionment should be, one of the decisions is
 16 do we try and get our arms around what we think
 17 the apportionment is right now, or do we set the
 18 bar at what do we think is in the ideal school
 19 the maximum amount of school effect that
 20 collectively teachers can take ownership of.
 21 So there are always going to be some
 22 components of school effect that are totally
 23 independent of the teachers, but much that
 24 teachers can influence. If we think in an
 25 absolutely perfectly managed school with great
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1 learning communities and 100% student engagement
 2 on a school level that teachers then can produce
 3 80% of school effect, then my argument would be
 4 that's we ought to set the bar for apportionment
 5 because we want to set the bar to encourage
 6 maximum attainment of overall school
 7 effectiveness. Wherever we think teachers can
 8 influence that, now again no science. We don't
 9 know what that number is. The philosophy is do
 10 we try and get our arms around where we think
 11 that apportionment is right now or where we
 12 think it should be in the perfect world and set
 13 the bar high. So I think that's also part of
 14 what we have to be thinking about when we think
 15 about apportionment and where we want that
 16 number to be.
 17 MR. FOERSTER: At this point, I'm going to
 18 ask for some direction because we've given this
 19 about an hour, and the truth is we don't need
 20 the number. If we all agree -- the co-efficient
 21 is what I'm talking about, you know, how heavily
 22 do we weight school effect? If we all agree
 23 that there is school effect, we feel like the
 24 discussion has been of benefit in terms of
 25 understanding what it is and what it means in
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1 terms of teacher effect as reported relative to
2 actual growth, you know, and I think the
3 relationship really is just this teacher effect
4 equals actual growth minus school effect; we're
5 arguing about co-efficient. We don't have to
6 decide that today.

7 Can we just agree that we want our model to
8 include school effect and move forward? Ms.
9 Hebda, would that be --

10 MS. HEBDA: That's exactly what I wanted to
11 talk to you about. At some point, you are going
12 to have to decide that.

13 MR. FOERSTER: Do you want it decided
14 today?

15 MS. HEBDA: Well, that depends. One of the
16 things John and I were just talking about was
17 what they can do to help you come to that
18 decision possibly today. Ultimately, they have
19 to know what the apportionment is to run the
20 final numbers, so you do need to get there.

21 MR. FOERSTER: Okay. Sorry.

22 MS. HEBDA: Not in the next ten minutes
23 necessarily, but you do need to get there. So I
24 think maybe the next discussion if that's where
25 you want to see how long it would take you, you

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1 might need maybe the next discussion for the
2 committee is what you need, what you see
3 data-wise that maybe could help you talk about
4 apportionment.

5 MR. FOERSTER: Is it fair to say, though,
6 that I'm taking something out, I heard Jon say
7 and Lance say, this is a philosophical
8 discussion more than a data driven decision; is
9 that right?

10 MS. HEBDA: No, I don't disagree with that.
11 Jon, you want to kind of address what the things
12 are that you have?

13 DR. COHEN: Yeah, you all make a decision
14 and then we can run some data and show you what
15 it looks like in terms of teacher effects, but
16 then I don't know what I'd show you in terms of
17 teacher effects. I don't know what would be the
18 outcome you would be looking at; if you had
19 questions we have data here. We can calculate
20 those things and fire it off for you.

21 MS. FEILD: Are there existing bands used
22 in other states that utilizes school effect, and
23 if so, what does the research show in either
24 states that have used it, are they apportioning
25 50-40%, do we know?

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1 DR. COHEN: Where did Harold go? Harold
2 would have a better answer for this, but I think
3 that often it's zero or one. This is not a
4 discussion folks have and if it's zero then you
5 wind up with the mean teacher effect being zero
6 at each school; and if it's one you wind up
7 attributing all school effects to the school.

8 Harold, are you aware of other states or
9 other value-added applications where they make
10 an explicit choice about the apportionment of --

11 DR. DORAN: No.

12 DR. COHEN: So usually it either includes
13 school effects and subtracts those off of the
14 teacher effects entirely or doesn't include them
15 and attributes everything to the teacher?

16 DR. DORAN: The only statewide
17 implementation that I'm aware of is the
18 Tennessee value-added model and there it's
19 complete attribution to teachers. There are no
20 estimation of school effects there. In other
21 states where they do some growth models, they
22 use models. They don't use value-added models
23 in the same way that you're proposing to use
24 them here. So the only other statewide
25 implementation that's comparable to the effort

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1 that you're looking at here, that's all on
2 contributions of teachers.

3 MS. BROWN: Isn't that a learning path
4 model? It's not a --

5 PANEL MEMBERS: (Over-speaking.)

6 DR. DORAN: It's a different kind of
7 regression model for sure, but the issue is
8 similar. This has not been part of the
9 discussion now, but it was raised yesterday and
10 someone asked me this yesterday, so I looked at
11 this for reading and for math just to share this
12 and set your concerns at ease.

13 If the question was, are there any teachers
14 who would have high value-added with a teacher
15 effect only model and of low value-added when a
16 school effect is, in the grade 7 reading and
17 math data there are zero teachers who have
18 reversals in their classifications. In fact, it
19 turns out in reading and math the correlation
20 between teacher effects and a teacher-only model
21 and a model that has teacher and school effects
22 is 0.95. It's 0.95 for both and in both reading
23 and math there are zero teachers who actually
24 reverse their classification.

25 Now, of course, when the school effect is

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1 included there are fewer teachers that appear to
 2 have high value-added and fewer teachers that
 3 appear to have low value-added, as we would be
 4 expecting. That's what happens. You just get
 5 fewer teachers who would be identified in those
 6 extremes because some effect is served by the
 7 school effect. I sort of toyed around with
 8 creating different proportions in Model 3C of
 9 what would the world look like if you had a
 10 school effect that was weighted 0.8 and a school
 11 effect that was weighted at 0.2; and I created
 12 that and ran that correlation with the teacher
 13 effect only model and then correlated about
 14 0.91. I don't think there is any number. I
 15 think that's complete pure professional judgment
 16 decision; of the school effect how much gets
 17 apportioned to the teacher and how much gets
 18 apportioned is weighted for the schools.

19 MR. FOERSTER: And that's the danger of
 20 making that number too high, right?

21 DR. DORAN: Just so you know, as you weight
 22 the school effect weighted lower, the
 23 correlation between the new teacher effects, the
 24 weighted teacher effects and the teacher effect
 25 only model, it also gets lower.

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1 MR. FOERSTER: So at this point what is the
 2 pleasure of the committee in terms of defining a
 3 co-efficient? It seems that's the work at hand
 4 here. We're all in accord that we want the
 5 school effect in the model.

6 MR. TOMEI: Why don't we vote on that since
 7 we never made that official, right? Or do we
 8 have to?

9 MR. FOERSTER: Did we? Actually, it's
 10 implicit. We chose 3C and 3C has school effect.
 11 So what's at issue is the apportionment and Ms.
 12 Hebda has indicated that it would be advisable
 13 that we get that done today. I'm not sure that
 14 we're going to see any data that really is going
 15 to inform the discussion any more than it
 16 already has been. So I'm looking for direction.

17 Does somebody want to throw a number out
 18 there and we put it to a vote? Do we want more
 19 discussion? Are we not ready to take action on
 20 this item at this point? Where are we?

21 MS. FEILD: I'd like to ask if the analysis
 22 that Harold just commented on, you didn't run
 23 that for senior high, did you?

24 DR. DORAN: Just grade 7 math and reading.

25 DR. COHEN: So, Harold, one more time. How

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1 much did you attribute --

2 DR. DORAN: I did three experiments. This
 3 is just me trying to get my head around this. I
 4 created a -- using Model 3C I created a teacher
 5 effect that was weighted at 0.2 of the school --
 6 20% of the school and 80% of the teacher; and
 7 then I correlated that with the teacher effect
 8 that you get under the teacher only model and
 9 that correlation was 0.91.

10 MS. FEILD: So yours was 20-80?

11 DR. DORAN: Twenty percent and 80 percent.
 12 Then I created another one that was 50-50 and
 13 correlated that with the teacher only model and
 14 the correlation was 0.85.

15 Then I ran a correlation -- then I did one
 16 more that was 80% school, 20% teacher and the
 17 correlation with the teacher only model was
 18 0.62. These are -- obviously, looking at these
 19 from my own -- I'm not advising this --

20 DR. COHEN: Let me make an offer. How
 21 about we return to the specific proportion after
 22 lunch? I'll run some stuff and show you some
 23 graphs that show you how they're related to each
 24 other, what it means in terms of teachers, and
 25 in terms of teachers and schools. I don't know

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1 exactly what that will all give you, but that'll
 2 buy me and Harold some time to look into it.

3 MS. GINN: Jon, can we give you some
 4 examples, like how the 20-80 -- can we see 25 or
 5 35 percent school effect and the 65? Give us --
 6 I've really got to see how that data work. So
 7 one for me would be 25 or 30 school effect and
 8 65 or 70 teacher effect. That's one piece I
 9 would like for you, if you don't mind, sir, to
 10 look at. We can vote or whatever, but I think
 11 that's a good way of placing; it's definitely
 12 not 50-50.

13 MR. FOERSTER: Sandi, do you have a
 14 question?

15 MS. ACOSTA: I have a question.

16 DR. DORAN: Can I ask you a quick question,
 17 Sandi, just so that we can think about this.
 18 We'll do whatever you want. What is the
 19 question that we want answered?

20 MS. GINN: Well, for me I definitely think
 21 that a school effect -- but I'm going to tell
 22 you what, when I was interning in '72, my
 23 supervisor teacher told me I can take a stick
 24 and a little bit of dirt and go outside and
 25 teach. And that's how she trained me. So my

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1 point is this: It is a school effect, but once
2 that door closes it's me and those kids and I
3 don't want that school effect so high because
4 it's just not true. We've got - you know, I'm a
5 teacher and a child advocate.

6 MS. NOYA: There you go. The numbers are
7 not --

8 DR. COHEN: Doretha?

9 MS. EDGECOMB: I think the question you
10 would answer for me is that we are making a
11 decision on some data rather than just on some
12 numbers arbitrarily. I mean, if you -- because
13 I think somebody's going to ask the question,
14 how did you make that decision about what
15 attributions were made? And I don't want to
16 say, oh, we just threw out some numbers and they
17 sounded good to us. I would rather say we have
18 some data to support our decision, you know;
19 this is why we're assigning those numbers.
20 That's why it's important to me.

21 MR. TOMEI: The way the test data are
22 designed, you can run those in every 10%
23 increment and aren't you going to see a
24 relatively linear association with the
25 correlation between the teacher only and --

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1 teachers based either on what we think is
2 actually happening or what we think would happen
3 in an ideal setting where the teachers are truly
4 powerful in helping the school move forward.

5 MS. ACOSTA: That's 20 and 80, 20 school
6 effect and 80% teacher effect.

7 MR. LeTELLIER: If this model doesn't work,
8 et cetera, we can adjust that and say, hey, we
9 were off by how much that really was. So what I
10 would propose is to put a couple of numbers out
11 there and see if we have some comfortability
12 (sic) with it, like a 90/10, and 80/20. I think
13 most of the group from what I'm hearing is not
14 wanting the school effect to be too high, and so
15 we need to err on the opposite side, it's pretty
16 obvious, so that we just figure out how far to
17 that side we go.

18 DR. COHEN: Ma'am, Nicole?

19 MS. MARSALA: Just in the opposite a little
20 bit, one of the ways that I'm looking at this is
21 in looking at the teacher effect there's more
22 teachers in that school affecting that student
23 than just the one who's being judged as language
24 arts and math. As a social studies teacher, I
25 cover reading and that should be included in the

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1 MS. BROWN: Absolutely.

2 PANEL MEMBERS: (Over-speaking.)

3 MR. FOERSTER: No, it will go down.

4 DR. DORAN: So as we apportion that --

5 MR. TOMEI: But linearly. I mean, there
6 will be a direct relationship. The more you
7 apportion the teacher, the higher correlation
8 will be to the teacher only.

9 MS. BROWN: Because, hello, you're --

10 MR. LeTELLIER: So we'll see all the data,
11 but it's not going to tell us anything
12 substantive.

13 DR. DORAN: Yes, you're exactly right. The
14 more you weight the teacher effect, the more it
15 will correlate with the teacher only. The more
16 you weight the school effect, the more it will
17 correlate with the school only. So that's
18 exactly right, yes.

19 PANEL MEMBERS: (Over-speaking.)

20 MS. BROWN: Why would you need to do that?

21 MR. TOMEI: We know what the data are going
22 to look like; that's what I'm saying.

23 PANEL MEMBERS: (Over-speaking.)

24 MR. TOMEI: We have to decide how much of
25 the school effect ought to be attributed to

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1 school effect because my teacher effect isn't
2 affected. So part of the school effect is still
3 the other teachers. I mean, it's not just these
4 over-arching factors that we keep going back to.

5 MR. FOERSTER: So that's application that
6 the co-efficient should be closer to one, the
7 co-efficient in front of school effect?

8 MS. MARSALA: Instead of making it only 10%
9 of school effect, there needs to be maybe a
10 larger school effect and --

11 MR. FOERSTER: Right, right. Okay. We're.

12 Talking about how much of the school effect
13 we're going to factor into the calculation for
14 teacher effect. The stronger you believe that
15 the school effect really, really, really matters
16 and that it is independent of the efforts of an
17 individual teacher, the closer that co-efficient
18 needs to be to one. The less strongly you
19 believe that or conversely the more strongly you
20 believe that the individual teacher really has a
21 lot of bearing on how that school effect comes
22 out, the closer that co-efficient needs to be to
23 zero, which takes you closer to a teacher only
24 model.

25 I really am on the bus. There isn't a
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1 data-driven opportunity here. It's
2 philosophical. We're going to pick a number and
3 we're going to live with it and we can change it
4 later. Sandi?

5 MS. ACOSTA: I just want to add one more
6 thing about that to make sure we're all on the
7 same page. When we talk about the co-efficient,
8 we're only talking about the portion that is
9 attributable to the difference between the state
10 average and the school average, not the rest of
11 it, because I think sometimes when we start
12 looking people are thinking, oh, I made this
13 huge gain and you're going to take away 50% of
14 it. We're only talking about the portion of
15 that gain that is attributable to the school.

16 MR. FOERSTER: Absolutely, yes, ma'am.
17 How about somebody throw me a motion about
18 what that co-efficient should be and we can put
19 it to a vote?

20 MR. LeTELLIER: I move for 80/20.

21 MR. FOERSTER: Okay, 80/20 what -- 80%
22 weighted for school effect?

23 MR. LeTELLIER: Oh, 80% for teacher, 20%
24 school.

25 MR. FOERSTER: So you want the co-efficient
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1 on school effect to be 0.2, a relatively small
2 weighting of school effect?

3 MR. LeTELLIER: Yes.

4 MS. ACOSTA: I think that's too low.

5 MR. FOERSTER: Do I have a second? Dies
6 for lack of a second. Let's throw another
7 number out there.

8 MS. FEILD: Are we throwing a number out
9 for.

10 A simulation or are we throwing a number
11 out for only -- I'm sorry --

12 MR. FOERSTER: No, I'm sorry; I'll rewind a
13 little bit. I think the consensus of the
14 committee is that this is a philosophical
15 decision. There isn't any data that AIR is
16 going to be able to provide that is going to
17 inform what this co-efficient should be because
18 --

19 MS. FEILD: Wait, let me stop you on that.
20 The data that Harold just gave us on 7th grade,
21 right, that informed us a bit.

22 MR. FOERSTER: It informed us only in that
23 what we would expect to be the case, which is
24 that the heavier you weight school effect, the
25 less strongly correlated the calculated teacher

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1 effect is to a teacher-only model, that
2 correlation gets weaker. You would expect that
3 to be the case because you're driving further
4 away from it, and all his calculations
5 illustrate is that's true.

6 MS. ACOSTA: Right, so in a case like that
7 we're not necessarily looking for some
8 correlation.

9 MS. FEILD: I guess I'm just concerned
10 because it's 7th grade and I wonder if that same
11 analysis holds true for senior high?

12 DR. COHEN: Yes, actually that same pattern
13 has to hold true for everything.

14 The statistical model assumes when it's
15 estimating the common component and the teacher
16 unique component that they're independent. When
17 you add -- basically, it's like adding random
18 noise, adding an independent variable to it.

19 MR. TOMEI: If you think about things in a
20 school that are truly independent of the
21 teachers, if you believe school leaders make an
22 impact, then that's a piece of the school effect
23 that shouldn't be attributed to teachers which
24 is one of the arguments, that there's some
25 school effect that's independent. On the other

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1 hand, if you believe that the essence of what
2 happened in schools really is in large part of
3 control of the teachers both depending on what
4 they do in their individual classes, which is a
5 teacher effect, and how they work together as a
6 collaborative learning community, which is how
7 they influence the school effect, they have an
8 ownership or part of that. Then again the
9 philosophy here is how much of that school
10 effect do you really think can be controlled
11 collectively by the teachers if they're working
12 effectively as learning communities?

13 So if you really think that the teacher is
14 the most important part of that formula, then
15 that's an argument for an apportionment
16 something like what Jon has suggested, that you
17 heavily weight the teacher piece of the school
18 effect. If you think that it's independent
19 factors like school leadership then you go in
20 the other direction. I tend to be more in Jon's
21 camp. I don't know if 80% is the right number.
22 Philosophically, I think teachers are so
23 important that that number in my mind -- and
24 again, it's philosophical, it's not statistical
25 -- is beyond 50% somewhere; I just don't know

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1 where the somewhere is.

2 But I'm more comfortable with Jon's basic
3 belief about what this apportionment should look
4 like; I favor that over a 50/50 just because
5 it's my personal philosophy about how schools
6 work or how they can work if a great learning
7 community is established in a school.

8 MS. STEWART: But, Lance, it's not enough
9 to second the motion.

10 MR. TOMEI: I'm not saying that 80 is the
11 right number, but I do think it's something more
12 than 50 in my mind. Again, it's such an
13 arbitrary decision here --

14 MS. STEWART: No, I agree.

15 MS. EDGECOMB: I want go with 75/25.

16 MR. FOERSTER: So, 75/25, to be clear we're
17 saying that of the school effect we're only
18 taking 25% of it into account because we believe
19 that the other 75% is teacher. So we're talking
20 about a co-efficient on the school effect of
21 0.25, and everybody clear about what that
22 implies philosophically?

23 MS. MARSALA: We're talking only the single
24 teacher in their classroom who's being held
25 accountable, not all the other teachers who are
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1 also working toward that common goal, and that's
2 the big thing we keep losing when we say
3 teacher. Not all the teachers who are working
4 with that student, it's just the one in that one
5 classroom in language arts and math for reading.

6 MR. FOERSTER: That is one of the
7 articulations of what we're talking about here.
8 If you believe the collective has a really
9 strong bearing on student growth then you are in
10 favor of a co-efficient on the school effect
11 that's closer to one. If you believe
12 fundamentally that the impact of individual
13 teachers, or as I understand Lance's discussion,
14 their working together to create this effect; if
15 you believe that that is a stronger force then
16 you want the co-efficient on the school effect
17 to be smaller.

18 MR. TOMEI: So if we pick 75/25 which has
19 just been suggested, that means every teacher in
20 the school is going to be credited with 75% of
21 the school effect plus all of their teacher
22 effect that's measured independently --

23 MR. FOERSTER: It's the opposite, Lance.
24 It's the opposite.

25 MR. TOMEI: No, if we say the school, if we
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1 apportion the school effect as 25% to the
2 school, 75% to the teacher, which is what I
3 think I just heard, then every teacher gets 75%
4 of the growth attributable to the school effect
5 and 100% of their teacher effect growth. I see
6 heads shaking.

7 PANEL MEMBERS: (Over-speaking.)

8 DR. COHEN: All right. Let me just ask
9 this because it's clear the committee is saying
10 things and not always meaning the same things
11 when they say it.

12 Do you believe that whatever is common in
13 school, that common component, raise your hand
14 if you think it's mostly attributable to
15 teachers?

16 All right. Then you want to say that you
17 want to add 75% of the school effect back into
18 the teacher effect. So it will be your teacher
19 effect in this model will have a mean within the
20 school of zero, plus 75% of the school effect
21 which will be non-zero. So that -- Lance has it
22 right; you want to move it from the school
23 effect to the teacher effect.

24 MS. MARSALA: He was subtracting. Lance
25 was subtracting that's why he was starting from
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1 zero.

2 MR. TOMEI: Right.

3 MS. MARSALA: Right. I was following you
4 but he's doing it -- he's going to be doing the
5 opposite.

6 PANEL MEMBERS: (Over-speaking.)

7 MR. LeTELLIER: At the end of the day,
8 let's just make sure that we all understand what
9 it means with that decision. The math involved
10 is not important.

11 MR. FOERSTER: Okay, really, we get in the
12 weeds here for lack of the formula and I'm
13 telling you that implies teacher effect is equal
14 to actual student growth minus the school
15 effect. That's what's up there.

16 DR. COHEN: Okay. So you only --

17 MR. FOERSTER: What that implies to me is
18 that in a universe where you believe in no
19 school effect, this formula holds because the
20 school effect is zero, right? And in the
21 universe where you believe that school effect
22 really, really matters and it's completely
23 independent of the individual teacher, the
24 co-efficient on the school effect is one. We're
25 taking all of it into account and in some
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1 hybridized universe we're between zero and one,
 2 and the closer you are to universe one where
 3 it's individual teacher that co-efficient is
 4 closer to zero, and where you're closer to
 5 universe two where you believe it's all going to
 6 the school, that co-efficient is closer to one.

7 DR. COHEN: Just so we can get the message,
 8 I used to know how to put the screen up. I want
 9 to write the formula up on the board so that
 10 everybody can look at it and talk about the same
 11 thing. Do we just press the power button?
 12 Okay.

13 All right. These things are all going to
 14 benefit you. Now the school is two teachers.

15 MS. BOURN: Can we just do it in general
 16 terms? Are we really talking P sub-S where S is
 17 the score? So teacher's score is equal to T
 18 sub-E teacher effect minus S sub-E, which is the
 19 school effect -- put an X in front of it for the
 20 co-efficient, and then let's define X. Where X
 21 is going to be the apportionment of school
 22 effect and then the philosophy is how is that
 23 attributable to teacher versus school?

24 DR. COHEN: Okay, now this is not exactly
 25 the formula that would be used, and the numbers

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1 components, all right? The total growth effect,
 2 we'll call it growth associated with the teacher
 3 is equal to a common growth component, which is
 4 common across all the teachers within the
 5 school, plus a unique growth component that is
 6 for a given teacher. You the unique component
 7 for teacher -- but then the school has a mean of
 8 zero, saying what Sam noted earlier when you
 9 take the common component out and put the all
 10 school with an equal average teacher. So this
 11 growth is decomposing to these two pieces, and
 12 this is the school average of just the raw
 13 growth effectively and this is different from
 14 the school average for a given teacher. So
 15 that's how you're decomposing the total growth.

16 MR. FOERSTER: As a point of clarification
 17 here, that number is actually calculated before
 18 you decompose it into these two constituent
 19 parts, you're looking at growth per kid. That
 20 is, you're looking at the residual, you've got
 21 an expected for that child, you see where that
 22 child actually scored, the difference is the
 23 residual and you do that for all the kids in
 24 that class, average them and that's the growth
 25 of the teacher.

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1 will come out ever so slightly differently when
 2 you estimate it.

3 MS. BOURN: But it's pretty close.
 4 Wouldn't it be --

5 DR. COHEN: It's pretty close. As long as
 6 we're not making this exactly the formula that's
 7 going to get used because that becomes just a
 8 mess and statistically inelegant and --

9 MS. BOURN: But it's illustrative of the
 10 idea.

11 MR. FOERSTER: Can you put the actual
 12 formula just using terms?

13 MS. FEILD: See, I thought it would be
 14 reversed; I thought it would -- if we're talking
 15 of 75/25%, I thought it would be 0.75 x the
 16 teacher effect plus 0.25 x the school effect.
 17 The sum of those two equals the teacher.

18 MR. FOERSTER: That's not what we're doing.

19 MS. FEILD: I know, but that --

20 MR. FOERSTER: That's the point of
 21 confusion.

22 MS. FEILD: That is the confusion, so
 23 there's two formulas I'm talking about.

24 DR. COHEN: Let me tell you how the
 25 statistical model outputs the teacher and school

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1 DR. COHEN: That's what we say when we're
 2 speaking loosely; that's not really how the
 3 model is estimated. It's all estimated
 4 simultaneously. That's a good characteristic
 5 for understanding how this statistics --

6 MR. FOERSTER: How close is it?

7 MS. BOURN: But when you're doing the
 8 student growth you're talking about the
 9 difference from the average of the state not
 10 school.

11 MR. FOERSTER: I'm sorry, one more time,
 12 Ronda?

13 MS. BOURN: In what you just said, when you
 14 talk about the individual student growth, you're
 15 talking about the difference from the average of
 16 the state. Is this calculated on the state or
 17 the school?

18 MR. FOERSTER: This is a point of
 19 clarification. I'm assuming that when we are
 20 talking about actual growth that a teacher
 21 generates what we're doing is at the individual
 22 child level for -- and I think Anna was talking
 23 about this a few minutes ago -- you take a
 24 student in that class, whatever factors define
 25 that student that we have incorporated into our

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1 predictive model or factored in, we take in
 2 prior year scale score or prior year scale score
 3 or all the other -- anyway, we get an estimate
 4 of what that kid's expected growth is going to
 5 be, and then we compare that to what the actual
 6 growth was. The difference is the residual and
 7 that is the residual for that student.

8 We look at all those residuals for all the
 9 kids associated with that teacher --

10 DR. COHEN: All right. Let's talk about
 11 that. I like that.

12 MR. FOERSTER: Right. Average them and
 13 there's your teacher effect. No, no, no.
 14 There's actual growth, actual growth.

15 DR. COHEN: So then for a given teacher
 16 we've got our residual, right, for a given
 17 teacher it's equal to the mean residual within
 18 the school plus the teacher's deviation from
 19 that, right? This is the average residual among
 20 the student teachers. This is going to have a
 21 mean -- I just subtracted the mean within the
 22 school level and I think what you're talking
 23 about is saying that the teacher growth measure,
 24 the teacher effectiveness measure, is going to
 25 equal $0.75 \times$ that mean plus the individual

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1 teacher deviation.

2 MR. FOERSTER: Where did 0.75 come from?

3 DR. COHEN: We're talking about whatever X
 4 is. How much of a school mean do you want to
 5 attribute to an individual teacher?

6 PANEL MEMBER: Not sure yet.

7 MR. FOERSTER: Ronda, help me.

8 MS. BOURN: I never hear that.

9 MR. FOERSTER: The formula that Ronda put
 10 up there initially --

11 DR. COHEN: It means that, yeah, is that
 12 right? Is that close enough?

13 DR. DORAN: I was still stuck on the job.
 14 I think Ronda got it. Did you intend that to be
 15 like the song?

16 MR. FOERSTER: Yes, I did.

17 DR. DORAN: Sorry, I was totally lost in
 18 that.

19 MR. FOERSTER: So that I'm clear at least
 20 on the definitions of that first formula, the T
 21 S, that is the teacher value-added score?

22 MS. BOURN: Right.

23 MR. FOERSTER: Right? We're saying that
 24 the value-added score reported for a teacher is
 25 equal to the teacher effect -- you used the term

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1 'effect' but what we mean by that is actual
 2 growth as calculated by these residual
 3 individual kids, la-la-la, relative predictable
 4 upon actual growth generated by that teacher
 5 minus --

6 MS. BOURN: So let's change the E to a G,
 7 sub-G.

8 MR. FOERSTER: T sub-G. So T E would be T
 9 sub-G. And that is student growth is what it
 10 would be? Teacher --

11 MS. BOURN: It's the student growth
 12 attributable to that teacher purely.

13 MR. FOERSTER: Right, it's the teacher
 14 growth statistic that is calculated by looking
 15 at all the individual kids minus the school
 16 effect.

17 MS. BOURN: But I think what we're
 18 struggling with is understanding how that school
 19 effect is apportioned to teacher versus school.

20 MR. FOERSTER: Right, and this is where I'm
 21 going to how do you talk about apportionment in
 22 a meaningful way?

23 DR. DORAN: I would go about this a little
 24 differently. Suppose -- this is all helpful,
 25 but I was thinking about this and maybe it's

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1 just -- maybe we're saying the same thing but
 2 I'm just taking this differently. We have when
 3 we estimate a school effect and a teacher effect
 4 two independent things. The teacher effect and
 5 we have a school effect, and what I was thinking
 6 is that you want a new teacher effect and that
 7 that new teacher effect is going to be a
 8 weighted linear combination of these two things,
 9 0.75 if that were the number of the teacher
 10 effect, plus -- da-da-da --

11 MS. BOURN: That's what I said --

12 DR. DORAN: Hold on, this is what I'm
 13 thinking. This is what I was thinking that the
 14 group initially wanted, a new teacher effect to
 15 be a linear combination of these two independent
 16 components. That's what I thought you were
 17 suggesting.

18 DR. COHEN: Let me --

19 MS. BOURN: That's simple. Teachers can
 20 understand that.

21 PANEL MEMBERS: (Over-speaking.)

22 DR. COHEN: -- Model 1 estimates school
 23 effects at all, right? So our teacher effect
 24 estimated from Model 1, right, we'll call that
 25 T1. It attributes everything about the school

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1 to the teacher, okay? We start with that. I
 2 think that's what you're talking about and then
 3 we -- if we estimate with Model 3 where we've
 4 got school effects, also, then our teacher
 5 effect becomes T1 minus S, which is the school
 6 effect, and we get a school effect, right? So
 7 now T1, your model where you attribute
 8 everything to the teacher, is equal to T1 minus
 9 S plus S, so we can go -- we can get back from
 10 Model 3 back to Model 1 using this formula,
 11 right?

12 MS. BOURN: T1 is teacher --

13 DR. COHEN: Well, it's when you get out of
 14 Model 1 where you don't estimate. It's not as
 15 exact as this one is, but it's blah-blah-blah,
 16 yes.

17 MR. FOERSTER: Right, Model 1 teacher
 18 score, value-added score, is approximately equal
 19 to actual growth. What I mean by growth is
 20 average of the residuals.

21 DR. COHEN: Yeah, it's growth above or
 22 below -- . So we can get back to that here. We
 23 can -- doing this, turn Model 3 back into the
 24 teacher estimate for Model 1, right? But we
 25 don't want to do that. We don't want to do this

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1 because every school has a mean teacher effect
 2 of zero. You don't want to get rid of that,
 3 right? So what we want to do is we want to say
 4 $X \times$ -- we want to put some proportion of the
 5 school effect back in and we'll say sub-X. So
 6 we're going to move in the direction of -- let
 7 me get rid of the subscripts.

8 MS. BOURN: Yeah, the subscripts are fine.

9 MR. FOERSTER: When you simplify that
 10 expression, you're back to T1 minus X minus 1 X
 11 S.

12 DR. COHEN: That's right. It's not
 13 estimated that way and it's a little bit --

14 MR. LeTELLIER: Can I ask something? Is
 15 this basically two different equations? Can we
 16 get to the one -- can we make it that way, I
 17 think we were originally talking about which is
 18 the effect, the growth equals teacher effect
 19 plus school effect, whatever those two are.
 20 Then the school effect, we're determining what
 21 amounts are from the combination. So this is
 22 just a suggestion. Can we first just deal with
 23 the first part of it because I think that's
 24 where we're getting lost. We're getting stuck
 25 in what is the school effect, what's it

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1 constitute of versus just coming to the
 2 agreement that 75% of it is the teacher effect,
 3 25% of it is the school effect, and now that we
 4 know that let's define what the school effect
 5 is.

6 DR. COHEN: I think we've drifted from
 7 where we started because I don't think what you
 8 were talking about before was decreasing this at
 9 all. This is the unique thing about the
 10 teacher. I think you want 100% of that in there
 11 and only a portion of the common component
 12 included in that.

13 MS. BROWN: That's what I'm trying to say.
 14 The formula at the bottom, I think, so please,
 15 people help me, I think what happens if you look
 16 at it that simplistically is you forget the
 17 double impact of the teacher because the
 18 teacher's effect is all about the teacher and
 19 their students. The school effect includes that
 20 same teacher. So that's why we have to be
 21 thinking about it's all the teacher, 100 percent
 22 of the teacher effect, and then there's some
 23 apportionment of the school effect that gets
 24 applied back to the teacher in some way.

25 MS. FEILD: What if you changed that right
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1 underneath the 75 a new formula that says T/
 2 which is the whole teacher effect, plus and then
 3 a parentheses, and it can be either plus or
 4 minus, whatever it happens to be, X times the
 5 school effect. So if a teacher had 100 average
 6 on her whatever, teacher effect, she keeps her
 7 100. Now you're going to either add or subtract
 8 the school effect from her overall number. If
 9 the school had a negative 25, you take a quarter
 10 of that negative 25 and you subtract that amount
 11 from the 100. If the school had a positive 25,
 12 you get a quarter of that and you add that to
 13 her 100.

14 DR. COHEN: That's exactly right. The one
 15 clarifying point is when you do that, we're
 16 starting with teacher effects that have a mean
 17 of zero within the schools, right? So the
 18 average teacher effect estimate is going to be
 19 zero within the schools, and that's the main
 20 impetus for adding back part of the common
 21 component.

22 MS. BROWN: You just totally lost me. I'm
 23 thinking about how we're going to explain it to
 24 a teacher.

25 MR. FOERSTER: I promise, really, it's just
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1 the teacher value added score is equal to the
2 actual growth as calculated as the average of
3 the residuals minus some proportion of the
4 school effect.

5 MS. BOURN: Which is why in the beginning
6 that X, we're talking about making the X the
7 co-efficient 0.25.

8 MR. FOERSTER: Absolutely.

9 MS. BOURN: Mine is my growth adjusted for
10 25% of my school. Ta-Da.

11 DR. DORAN: Just to add to that I have to
12 say one thing. Actually, what you said is
13 heuristically correct but not mathematically
14 100% accurate.

15 MR. FOERSTER: Is it close?

16 DR. DORAN: It's close enough, but let's
17 jus make sure that there's clarifying statement
18 that there's actually another component that's
19 used.

20 MR. FOERSTER: If it's close and everybody
21 gets it conceptually, I think that's -- folks,
22 we've been at this for a while. Would you all
23 be okay with taking a break for 15 or 20
24 minutes? We'll come back and try to button this
25 one up.

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1 (Whereupon, a short break was had.)

2 MR. FOERSTER: Everybody feel refreshed,
3 clear as a bell? Okay. After a good bit of
4 huddling up, I'm going to do my best to explain
5 the decision at hand and we're going to try to
6 get out of the fray of the math and put things
7 in very clear terms as to what is being decided
8 upon, and then I hope we're going to pick a
9 number because we've already all agreed that
10 this is a philosophical discussion, not one
11 that's data driven.

12 What is at issue here is how much as a
13 fraction of the school effect we're going to add
14 or subtract, depending on if the school is
15 positive or negative, to the teacher to get to a
16 value-added score, okay. So I want to be really
17 clear. We're not talking about changing the
18 weighting at all on the teacher effect. That
19 term stands wholly always. If there is no
20 school effect then the teacher value-added score
21 is equal to the teacher effect. They're one and
22 the same. What we're talking about is in a
23 model that allows us to see a school effect do
24 we want to use the school effect, and if we do
25 want to use it how heavily do we want to use it?

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1 So I want to be really clear. We're not
2 talking about changing how much of the teacher
3 effect is taken into account in the value-added
4 score. All of the teacher effect will always be
5 taken into account in the value-added score.
6 The question is what do we add or subtract from
7 that teacher effect based on what we know about
8 the school. Rather than get caught up in the
9 addition or subtraction and whether it should be
10 a positive or negative term, I'm going to
11 describe it to you like this.

12 We're picking a number between zero and
13 one. If you pick the number one, that means
14 that you believe the school effect is really,
15 really important and should be factored fully
16 into the calculation. All of those things that
17 are beyond the teacher's control are
18 fundamentally important and should count
19 completely. If you pick a number that's closer
20 to zero, you're saying, yes, I agree there's a
21 school effect, yes, we should count it for
22 something, but I believe that lots of those
23 things about a school, lots of those things that
24 make the school effect what it is, is
25 attributable to the teacher ultimately.

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1 Where we've got to end up is somewhere in
2 between zero and one, and that decision is
3 philosophical in nature. If you want school
4 effect to weigh more heavily and be counted
5 fully with the full teacher effect, that
6 co-efficient needs to be one. If you want it be
7 lightly weighted because you don't believe it's
8 as important or you believe that lots of what
9 makes a school a school is the teacher, it's got
10 to be closer to zero.

11 Everybody clear on what we're deciding?
12 Are we in accord that we're talking about the
13 right thing? We all agree there needs to be a
14 school effect? We all agree that we're not
15 changing the weighting on the teacher effect,
16 the teacher effect is calculated as it's
17 calculated and it will stand? We're talking
18 about how much of the school effect do we add
19 into that calculation.

20 Okay. With that, if you guys are good with
21 those descriptions and understand the work at
22 hand, I would suggest we throw out a number
23 understanding that one means school effect is
24 fundamentally important and we need to count all
25 of it, and zero means it isn't and we don't

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1 count any of it. Pick a number and let's see if
2 we can get a vote.

3 MS. BOURN: Is there not a motion on the
4 floor?

5 MR. FOERSTER: Is there a motion on the
6 floor.

7 MS. BOURN: It was 25/75.

8 MR. FOERSTER: Did that get moved?

9 MS. NOYA: No.

10 MS. BOURN: Yeah.

11 MS. NOYA: It did not get moved.

12 PANEL MEMBER: It was not seconded.

13 MR. FOERSTER: Okay. We are all about
14 Robert's Rules here. So was the motion that the
15 school effect be weighted at 75% or the school
16 effect term be weighted at 25%?

17 PANEL MEMBERS: Twenty-five.

18 MR. FOERSTER: Okay. So the motion at hand
19 was that the school effect term should be
20 weighted at 25% in calculating the value-added
21 score.

22 MR. LeTELLIER: Sam, wait before we do that
23 because we could all vote for that and that
24 would be it.

25 MR. FOERSTER: And that's a bad thing?
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1 MR. LeTELLIER: Yes, because we could take
2 five minutes to make it look -- in my mind a
3 little easier to make a vote. Can we just take
4 and put up some hypothetical numbers on the
5 Board? It doesn't have to be on the spreadsheet
6 that would show us here's teacher A and here's
7 what the rest was et cetera, and by putting it
8 at 25, 35, or 45, here's what the end result
9 looks like for that teacher.

10 MR. FOERSTER: We could. I'm going to
11 offer that -- there's going to be numbers that
12 are non-contextualized and probably aren't going
13 to mean a whole lot. We can couch all of this,
14 I think, philosophically. You believe they are
15 fundamentally important or you believe they're
16 less important and need to be less heavily
17 weighted.

18 MS. FRAKES: I have a question. At 25%
19 that's closer to zero, less important.

20 MR. FOERSTER: Less important.

21 MS. FRAKES: And I just want to say this
22 because I do represent a small local from north
23 Florida and we have a lot of rural poverty, and
24 we have a lot of challenges. Not that we're not
25 rising above the challenges because we do have

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1 'A' schools, but we have schools that are
2 struggling. I just want to say in Madison
3 County if you're a middle school teacher you
4 have one choice of where you teach and the
5 school effect is huge. The instructional
6 leadership, the parental involvement -- even
7 though we can't consider poverty, the challenges
8 that these children are facing in their homes
9 every night, the lack of homework. The school
10 contribution, the school culture contributes to
11 it enormously and we have some of the best
12 teachers I've ever seen at that middle school
13 and it still struggles.

14 We have one high school. If you're a high
15 school teacher, you can't say I'm a great
16 teacher, I want to go to a great school; you are
17 there and you are stuck with those school
18 effects and you're dealing with those school
19 effects. You're not going anywhere else; it's
20 Madison County. You're not even driving to
21 another county with gas prices at five dollars a
22 gallon.

23 If you're an elementary school, we have
24 three county schools -- I mean three community
25 schools, and you're teaching in those
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1 communities, and when those jobs are filled up
2 you're going to the county elementary school.
3 In that county elementary school, there are
4 definitely some challenges. So for me, I can't
5 vote for anything that doesn't get us as close
6 to one as possible because if we don't take into
7 account the school effect, that is disabling our
8 teachers any way you look at it. I've run the
9 numbers for the 'A' schools, I've run the
10 numbers for the 'F' schools and I just can't
11 vote for anything that's not as close as one as
12 we can possibly get.

13 Now will I not vote for anything that's not
14 one? I'm a reasonable person and I'll look at
15 compromise, but I will not vote for anything
16 that's not as close as we can possibly get it.

17 MS. BOURN: You want the school effect to
18 be (inaudible)?

19 MS. FRAKES: I do. I want it to be as
20 close to one as possible, and the reason is when
21 we have schools that are 'F' at minus 50 and you
22 look at it being added in, those teachers are
23 closer to the good school, which is plus 50,
24 that's as close as we can possibly can get them
25 to even the playing field.

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1 MS. KEARSCHNER: Does everybody understand
2 that what we're talking about is what percentage
3 of the teacher effect will be included? We're
4 not taking away from --

5 MR. FOERSTER: School effect, what
6 percentage of the school effect.

7 MS. KEARSCHNER: Excuse me. School effect.
8 What percentage of the school effect will be
9 included? We're not taking away the teacher
10 effect. We're talking about how much of this
11 school effect, whatever this number is, is going
12 to be included, okay. It's not how much is
13 attributed to the teacher and how much is
14 attributed to the school and you add those two;
15 we're deciding now what percentage of the school
16 effect will be considered. Do you want to
17 consider it all or just a small portion of it?

18 MR. FOERSTER: That is the point of
19 discussion and Stacey clearly makes a compelling
20 argument for being closer to one.

21 MS. ACOSTA: I think this goes back to what
22 I said earlier and I think this is Stacey's
23 point about, if we're going to err, err on the
24 side or in favor of teachers at lower performing
25 schools, which may cut against the teacher --

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1 MR. FOERSTER: To be clear, I'm going to
2 take Anna's point. Lower performing in this
3 case is --

4 MS. ACOSTA: No, lower growth, what she's
5 saying. Lower growth, not lower performance.
6 Schools that will have a negative number on
7 here.

8 MR. FOERSTER: So it may not favor the
9 schools you're thinking of in the head? High
10 achieving and low -- yeah.

11 MS. ACOSTA: Yeah, yeah.

12 MR. FOERSTER: I just want to be clear
13 because this could have unintended consequences
14 if we don't distinguish between achievement and
15 growth.

16 Nicole?

17 MS. MARSALA: I think everybody should keep
18 in mind that what Harold said at the break is
19 that half of the schools are going to be in the
20 positive and half are going to be in the
21 negative, no matter what. So, I mean, the more
22 we keep it towards one, that's hurting, I think,
23 a lot more teachers ultimately by dragging down
24 their scores if they're in those negative
25 schools. No matter how much that teacher is

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1 working, there's going to be some negative pull
2 on them, correct?

3 MR. FOERSTER: I want to be clear about one
4 thing and that is that you've got to remember
5 any time that you build a control into a model,
6 it's not going to always be helpful or always be
7 hurtful. It's going to be helpful and hurtful
8 in equal proportions, so I go back to the
9 philosophy part of it. You know, rather than
10 contemplating whether it's going to be hurtful
11 or helpful to particular teachers or particular
12 scenarios, I think we've got to stick with how
13 strongly do you believe that there's a school
14 effect that is beyond the teacher's control?

15 The closer you are aligned to that, the closer
16 the number needs to be to one. The further away
17 you are from that, the closer we need to be to
18 zero.

19 Lance?

20 MR. TOMEI: Yeah, I just want to again
21 emphasize, I think if you say that you want that
22 number to be close to one, you're really making
23 two philosophical statements. You're making one
24 statement that you believe that school effect is
25 extremely important, and the other statement

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1 you're making is that you don't think that
2 teachers within that school have much influence
3 on the school effect. So that's what assigning
4 a weight of one says. So there are two
5 statements, two philosophical statements
6 embedded in that decision, not just one. You're
7 saying more than just that school effect is

8 important, so people need to understand that --

9 MS. KEARSCHNER: And, Lance, are you saying
10 that at 50/50 it's neutralized or it's equally
11 shared?

12 MR. TOMEI: No, again, I don't think that
13 we know what's real out there. I think again
14 we're back to trying to decide how much of
15 school effect philosophically do we think
16 teachers both contribute to and benefit from, in
17 terms of what goes on in the schools. And I
18 don't think those two things are independent.

19 The other thing that I would just remind
20 everybody is, and Sam's obviously right; no
21 matter what decision we make here there will be
22 instances where the model will disincentivise
23 (sic) some things. There will be some bias in
24 the model, but keep in mind that this model
25 ultimately will drive 40% of the teacher

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1 evaluation. So if we understand the model and
2 the biases that the model can create and
3 understand that we can't totally eliminate
4 those, but we can measure that, then the other
5 60% of how we evaluate teachers can be designed
6 to counter-balance the disincentives create that
7 we want to prevent.

8 So I think we have to get beyond the point
9 where we think this model's got to do an
10 absolutely flawless job to the extent that we're
11 able to get it there, it never will. But there
12 are ways within the overall teacher evaluation
13 system to handle that, to handle what can't be
14 handled perfectly by the model.

15 MR. MOREHOUSE: But will this committee
16 have the authority to handle that, or is there
17 another committee that has the responsibility
18 for covering that other 60%?

19 MR. TOMEI: Well, I think a lot of this has
20 to be done at the district level, but the
21 districts need to be aware of the model and how
22 the model functions and the strengths and
23 weaknesses so they can factor that in to how
24 they design their evaluation system. I think
25 this will be an interim process over time and

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1 the whole process will get better. In terms of
2 this apportionment argument, I think that
3 Florida will be the vanguard here. I think
4 other states -- we're not going to be able to
5 look to other states to see what's been learned
6 elsewhere. I think other states are going to
7 look to us to figure out what is Florida
8 learning about how to go about this element of a
9 value-added model, if in fact we're going to
10 incorporate the school effect.

11 MR. MOREHOUSE: The committee will then
12 have the responsibility for clearly articulating
13 those things that we know that are biases in the
14 model.

15 MR. TOMEI: Correct. And there's a teacher
16 and leader preparation committee that's one of
17 the eight implementations that -- although I
18 don't know that that committee will directly
19 impact on how teachers and districts, practicing
20 teachers would be evaluated. I know that the
21 overall goal here is that the new teacher
22 standards are cradle to grave. How we evaluate
23 teacher candidates will also manifest themselves
24 in how teachers are evaluated in the field. So
25 there's a potential and maybe Kathy can answer

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1 this question, that that other committee could
2 at least be part of how this issue gets
3 communicated throughout the state.

4 MS. HEBDA: Are you talking about the
5 teacher preparation committee or are you talking
6 about the committee for teacher evaluation?

7 MR. TOMEI: The teacher leader preparation
8 committee and its potential to at least help
9 inform what's going on this regard.

10 MS. HEBDA: Thank you. There are a number
11 of ad hoc committees. The other one that's
12 probably closest to this is the teacher leader
13 preparation committee, but they'll be using the
14 results of this model then to also see how that
15 would work in evaluating over time teacher
16 preparation programs.

17 Again, just like you're talking about this
18 being one factor of a teacher evaluation, that
19 will be one factor in an overall evaluation of a
20 teacher preparation program going forward or a
21 leadership preparation program going forward.
22 So this model is going to be interacting with
23 lots of different things, not just teacher
24 evaluation and principal evaluation going
25 forward, that's correct. It works the same way

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1 -- one factor among others.

2 MR. FOERSTER: Any additional discussion?
3 Okay, then I recommend this approach and if you
4 have another suggestion I will welcome it. We
5 have a motion on the floor for a weighting of
6 0.25 which means obviously that's closer to
7 zero, we want to weight school effects less
8 heavily because we believe teacher effects to be
9 more important. I'm going to look for a second
10 and let it go to a vote. Do not feel compelled
11 to vote at this point. What we can do next is
12 put in 0.35, 0.50, 0.70, 0.80, and hopefully
13 we're going to find a place where the majority
14 of us say that seems about right to me and we're
15 done. If we don't we're going to need another
16 idea.

17 Okay, we've got a motion for 0.25 on the
18 floor. Is there a second?

19 MS. NOYA: I second it.

20 MR. FOERSTER: Okay. All those in favor of
21 a weighting of 0.25 on school effects, signify
22 by raising your right hand.

23 Okay, 0.25 does not pass. You can vote for
24 more than one, by the way. This is the nice
25 thing about this kind of election. So do I have

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1 a motion to consider a weighting of -- let's
2 make it an even fraction, 0.33?
3 MS. WOODHOUSE-YOUNG: I'm still a little
4 bit -- even though we may have a number for the
5 school effect. That number 25 is multiplied by
6 a negative number?

7 MR. FOERSTER: We're going to stay out of
8 the woods on the positive/negative.

9 MS. WOODHOUSE-YOUNG: Because it would
10 matter for the score.

11 MR. FOERSTER: Here's the thing. If the
12 school effect is negative, the impact on the
13 teacher will be positive because whatever that
14 teacher has generated in terms of real growth is
15 that much more significant because they did it
16 in an environment where the average teacher
17 effect or teacher value-added score is less than
18 zero. Does that make sense?

19 MS. WOODHOUSE-YOUNG: So, okay, teacher
20 score 100. As Stacey was mentioning, she's at a
21 school where a school effect is negative. So if
22 that number I'm using is one times that negative
23 number, that's going to adversely affect my
24 score.

25 MR. FOERSTER: The co-efficient is simply
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1 going to determine how much of that number we
2 take into account. I asked not to get hung up
3 on the positive or the negative. I will tell
4 you that a negative score will actually have a
5 positive -- a negative school effect score will
6 have a positive impact on the teacher, right,
7 because it makes it easier for that teacher to
8 look positive.

9 MS. STEWART: So are you saying that the
10 reverse is true for everyone to understand that
11 a positive school effect will have a negative
12 impact on a teacher?

13 MR. FOERSTER: Relative to taking into
14 account the actual student growth in that
15 teacher's classroom, yes.

16 MS. FEILD: So what we're saying is that a
17 teacher's score can go plus or minus, depending
18 on the school effect?

19 MR. FOERSTER: Absolutely.

20 MS. FEILD: Okay, and I think that's what
21 you were getting at?

22 MS. EDGECOMB: The more school effect, the
23 less teacher effect, correct?

24 MR. FOERSTER: The teacher effect stands
25 fully always, okay. It stands fully always.

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1 MS. BROWN: That's what I was going to say
2 is that it's not a matter of we think the
3 teacher means more than the school or that the
4 school means less than the teacher. The teacher
5 effect is the teacher effect is the teacher
6 effect. It's not going to change, but then
7 we're saying should we add an adjustment in
8 there because there's something about the school
9 that's happening, and if so how much of what's
10 happening at the school should be put in there?

11 MS. EDGECOMB: By the same token, should we
12 subtract from it?

13 MS. FEILD: But you can subtract and I
14 think that's what we need to make sure we
15 understand. Okay. In the end if a teacher
16 finishes with a teacher effect of X, that X can
17 be positively or negatively impacted by the
18 school effect?

19 MR. FOERSTER: That is absolutely right.

20 MS. FEILD: Okay. So if she gets her score
21 report or whatever and she's got a number, that
22 number can now be altered for her evaluation
23 based on the school effect plus or minus.

24 MR. FOERSTER: To be clear, I don't believe
25 she's going to get a score that is --

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1 MS. FEILD: Well, we get it maybe to look
2 at or whatever.

3 MR. FOERSTER: There's going to be a score
4 and as a consequence of this decision that
5 school effect will have been added in at some
6 level.

7 MS. NOYA: And that's why the districts can
8 play --

9 MS. STEWART: And I think to use Stacey's
10 example, and I'm very familiar with those
11 schools that she describes, a shining star in
12 those schools will be negatively impacted if the
13 student growth of that school is less than that
14 shining star in that school.

15 MR. LeTELLIER: So in which case the
16 smaller school effect even in our situation,
17 what you're saying is that teacher is going to
18 look very good so they don't have to worry about
19 a lower performing school.

20 MR. MOREHOUSE: But are we losing sight of
21 the fact that the administrators -- that
22 evaluation of teacher is not only determined by
23 our model, but it's also determined by
24 administrators, their evaluation. So the
25 evaluation could be changed by that shining star

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1 still be seen with a very positive evaluation.
 2 MS. ACOSTA: It's not all of it.
 3 MR. FOERSTER: That's a great point. Okay.
 4 MR. LeTELLIER: So what are the pros and
 5 cons because I know I was just looking, I was
 6 towards the aspect of 20/80 if you remember.
 7 MR. FOERSTER: Twenty percent school
 8 effects or 80% school effects?
 9 MR. LeTELLIER: Yeah, 20% school effect,
 10 then I didn't raise my hand for the 25 because I
 11 got a little confused. That's closest to where
 12 I originally was, so can we just literally for
 13 the benefit of the group write down some pros
 14 and cons of going one way or the other? Would
 15 that help or make things easier or harder?
 16 MR. FOERSTER: I will defer to the group.
 17 I think most of us are ready to put a number on
 18 this and go on. Okay. So do I have a motion
 19 for 0.33, a third of school effects are
 20 weighted?
 21 MR. LeTELLIER: I'll move for that.
 22 PANEL MEMBER: I'll move that we make the
 23 school effect 20%.
 24 MR. FOERSTER: Do I have a second?
 25 MS. BROWN: Second.

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1 MR. FOERSTER: All those in favor, signify
 2 by raising your right hand? Going to be close.
 3 So how many members do we have? We were at
 4 nine. Was it ten? Nine. Okay. Give me
 5 another motion. I will encourage you --
 6 DR. HOVANETZ: If you could just raise your
 7 hands again because there could be --
 8 MR. FOERSTER: Okay. We're going to vote
 9 20%. Those in favor of weighting the school
 10 effects at 20%, raise your hands, please.
 11 I'm going to vote for this one.
 12 PANEL MEMBER: I count eleven.
 13 MR. FOERSTER: And there are how many
 14 members? So the majority.
 15 I want to throw a party and you're all
 16 invited. Okay. I think we're done. Eleven
 17 people, 21 members, simple majority. So the
 18 motion carries. School effects will be weighted
 19 at 20%.
 20 DR. COHEN: Just a clarifying question. So
 21 does that mean that the bulk of the school
 22 effect, 80%, is attributed to the teacher and
 23 20% to the school?
 24 MR. FOERSTER: Yeah, the attribution is
 25 0.20. I think where you're going and how the

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1 model actually works and that our simplified
 2 heuristic representation is imperfect --
 3 DR. COHEN: I'm just trying to understand.
 4 DR. HOVANETZ: How I have it written and
 5 the way it was introduced was the committee
 6 recommends that 20% of the school effect be
 7 added to the teacher effect to reduce the
 8 teacher value-added -- score.
 9 MR. FOERSTER: Perfect.
 10 MS. BROWN: Can we not say 'added', but can
 11 we say 'adjust'?
 12 MR. FOERSTER: Sure, yeah.
 13 MS. KEARSCHNER: Can I just make sure I
 14 understand what we voted on? Are we also saying
 15 80% of the school effect is now being ignored?
 16 MR. FOERSTER: Yes.
 17 PANEL MEMBERS: Yes.
 18 DR. COHEN: Can you repeat that? I'm
 19 sorry.
 20 MS. KEARSCHNER: Sure, 80% of the school
 21 effect is now being ignored.
 22 BOARD MEMBERS: (Over-speaking.)
 23 MS. BROWN: As far as adjusting, the 80% is
 24 not 20%.
 25 MS. FEILD: Maybe a better way to state it

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1 on a positive side is that in addition to the
 2 teacher effect we've decided that the whole
 3 school effect is going to contribute to her
 4 number by 20%, instead of negatively saying it's
 5 going to be -- it sounds less --
 6 MR. FOERSTER: It is potentially -- they
 7 mean the same thing.
 8 MS. FRAKES: And only 20% of that is going
 9 to be used?
 10 MS. FEILD: To be added to each teacher's
 11 value added, on top of hers which already
 12 includes 100% of the --
 13 MS. FRAKES: So a teacher should be able to
 14 overcome 80% of that school effect within her
 15 classroom; that's what we're saying?
 16 MR. FOERSTER: One of the clever parts of
 17 not really adhering to Robert's Rules is that we
 18 can go backward. I see a lot of body language
 19 that I've not seen in this group before. Folks,
 20 now's the time. What we decide you've got to
 21 own when we go out of here. So if you're
 22 uncomfortable, make the conversations and the
 23 discussions and the arguments and let's do it.
 24 MR. LeTELLIER: Okay. I want to hear from
 25 someone like yourself.

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1 MS. FRAKES: I'm very uncomfortable with
2 that decision.

3 MR. LeTELLIER: I think that's what I was
4 saying a little bit before, and I know I just
5 voted for that which is I don't know that we're
6 --

7 MR. FOERSTER: John, that's not helpful.

8 MR. LeTELLIER: It is helpful. I want to
9 hear -- you have almost half the group that's
10 not in agreement with that. I want to hear what
11 they're thinking.

12 MR. FOERSTER: Me, too. Linda, Lori?

13 MS. KEARSCHNER: Stacey gave an outlying
14 example. She's in a county with very few
15 schools, okay. The same applies to a school
16 district like mine in Pinellas which is very
17 densely populated, a large number of schools, a
18 large county. We have great variations in
19 schools, huge differences. In all of those
20 cases what's happening in the school as a whole
21 is impacting student growth; and to ignore the
22 school effect to me that vote just says you're
23 ignoring 80% of the school effect in capping
24 that score. You've ignored the learning
25 community as Lance described it. That

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1 some factor here to the fact that there's
2 something to be said about what school culture
3 contributes, the leader, the way they hire
4 teachers, et cetera, and making it at 20% it's
5 basically saying we'll put some portion of that
6 back in to kind of level out what that school
7 effect was in everything there. So we're not
8 ignoring the 80% because it's there, because
9 let's look at it -- this is kind of what's
10 tripping me up. I'm looking at this way.

11 What if I'm a school that's very low growth
12 and what if the reason for that low growth is
13 poor hiring practices by the principal because I
14 want to take all those other potential factors
15 out. And what if there's nothing than less than
16 effective teachers teaching in that school
17 because there were poor hiring practices by the
18 principal? What if I get transferred into that
19 school? I wasn't chosen by the principal, I
20 transferred in or got put there, whatever. So
21 what if my teacher effect is here even though
22 the average school effect and the teacher effect
23 is here because those -- so if more than 20% of
24 that school effect gets put back into my effect,
25 I now go to this because the whole overall

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1 definitely impacts --

2 MS. BROWN: I don't believe it was ignored,
3 but I'm also very much like this. I'm okay, but
4 what I'm tending to say is that 100% of the
5 school effect is already in the teacher's score.
6 It's in the teacher's effect because how a
7 teacher's residuals roll up, their students'
8 performance is a result of both the conditions
9 that lie in the school and the teachers' ability
10 to impact growth regardless of those situations.
11 And when you -- so in the teacher's effect,
12 everything is in there, but by saying we're
13 considering a school effect what I think I'm
14 saying is that because schools can have some
15 underlying conditions that are, we're trying to
16 say in some situations there may be the fact
17 that we could be a not so great teacher, but
18 because the school underlying conditions are
19 just way out there, if we say 100% of that
20 school effect back to the teacher, we could be
21 making not so great teachers look fabulous when
22 in reality the flip side could be true in
23 another situation.

24 So what we're really saying is let's say
25 what the teacher did and then, yeah, let's give

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1 school effect is getting more and more and more
2 weight.

3 So the point that I'm getting at because
4 you can say this multiple ways, you know, if the
5 school is overall low -- and this is kind of
6 where it's hard to get at because we're looking
7 at growth -- value add in its implicit (sic) by
8 looking at prior year achievement tends to level
9 out some of those other factors like income and
10 poverty and those types of things because we're
11 using those prior year test scores. So we're
12 really only looking at the amount of growth
13 being able to be affected. If we're in a really
14 low growth school, you know, the opposite could
15 be I'm in a very high achieving, high SES, high
16 parent involved school, but every person in that
17 school is low growth not because everybody of
18 the ceiling effect. Let's just say there's no
19 growth occurring. So if more than 20% of that
20 school effect is added back in to me, I could be
21 a mediocre, average teacher because my true
22 teacher effect was here, but because of that
23 overall school effect and if I put more than 20%
24 back in, I could now look like I'm like this
25 when in reality my actual ability was here.

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1 Does that make sense?

2 MS. FEILD: Yeah, I think the idea of
3 keeping the weight low is so that a teacher
4 doesn't almost go from one category of effective
5 or ineffective just because of the weight of the
6 whole school.

7 If you put too much weight, you could
8 totally alter that teacher's performance, not
9 because of her but because of the other 20
10 teachers. So the weight was so that it doesn't
11 -- that it contributes apportion --

12 MS. KEARSCHNER: To me you're looking at it
13 from the negative, like it's going to drag down
14 the teacher effect --

15 MS. FEILD: No, it could be the opposite.
16 You could have a low performing teacher who gets
17 bumped up because of the whole school.

18 MS. KEARSCHNER: But remove whether it's
19 moving you up or down. I still go back to how
20 much of that is the school community impacting
21 the outcome, and to me the philosophy is that
22 there is a lot more of that. It's not just
23 what's happening in a reading teacher's
24 classroom; it's what's happening in every single
25 class and how it all works together, controlling

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1 all things considered. That is to say if you
2 look at the actual output of a teacher in terms
3 of growth of kids as measured by residuals,
4 differences between actual outcomes and
5 expected, if you're taking that as the teacher
6 effect that we're talking about and you factor
7 in the school effect, a negative school effect
8 is subtracted off, which means that it is added
9 to the value-added score and vice versa. If you
10 have teachers in high growth schools, the
11 expectations of those teachers will be higher.
12 That is to say their actual results as measured
13 by averaging the residuals for all their kids,
14 that number will have the school effect
15 subtracted from it.

16 So if they're in a very high school, a high
17 performing school, let's say the school effect
18 is 20 and their actual output is 110, their
19 value added score will be 90. That's the impact
20 on teachers. So it does set different
21 expectations. The more heavily you weight that
22 school effect the more true it will be that in
23 high growth schools the expectations of those
24 teachers will be higher. In low growth schools,
25 those expectations in terms of actual student

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1 behaviors in the school. Teachers contribute to
2 that when they're walking down the hall. All of
3 those factors, the parents, you know how many
4 volunteer hours you have in a school. All of
5 those things add into that score and you're
6 taking away that impact, that influence, and not
7 attributing that to the growth of students in
8 the classroom.

9 MS. FEILD: Let me make one final argument.
10 If you're in a school where you have a great
11 principal and you have a community of teachers
12 that work together and are constantly -- you're
13 going to want that school weight to be high.
14 But think of the opposite.

15 MS. KEARSCHNER: I am thinking of the
16 opposite.

17 MS. FEILD: (Inaudible) -- school where's no
18 principal organization or now all of a sudden
19 her score is going to be impacted by this chaos,
20 by this chaos that she has no control over.

21 MR. FOERSTER: I've got to clarify a point
22 here as much as I really don't want to. There's
23 a misconception, I think, around the table about
24 how the school effects impact teachers. To be
25 clear, a negative school effect helps teachers

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1 growth will be lower. That's how the school
2 effect is factored in. I just need to make that
3 point of clarification.

4 MS. BROWN: So what you're saying if that's
5 true from the experts, then what I heard you say
6 was the higher the weighting of the school
7 effect, the greater the potential of setting
8 lower expectations in low growth schools.

9 MR. FOERSTER: In terms of actual student
10 output, yes. So in the high performance schools
11 it will make that teacher -- a much more
12 difficult for them to show growth. Not to show
13 growth. They will show growth, achievement,
14 right? Value-added score, difference. It will
15 be harder for them to get the same value-added
16 score and that's not fair.

17 MS. WESTPHAL: Where is it more difficult
18 to attract teachers to? If you're throwing this
19 out there, we need to attract good teachers to
20 our low growth schools. If you tell them we're
21 going to take this into account, we're going to
22 look at this; we want you to come to our school,
23 we're going to take all this into account. Or
24 is it more difficult to attract teachers to high
25 growth?

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1 MR. FOERSTER: Lori, I completely take your
2 point. I'm going to go back to a clarification
3 that Anna made at the beginning of this session
4 which I think is really important. When you say
5 where is it most important to attract teachers
6 to, when we start talking about growth schools
7 in many cases our high growth schools are our
8 low achievement schools.

9 PANEL MEMBER: That's right.

10 MR. FOERSTER: They are the quote,
11 unattractive, campuses.

12 PANEL MEMBER: That's where the greatest
13 growth is.

14 MR. FOERSTER: Okay. I'm going to do
15 something really weird here. I appreciate your
16 all's patience, by the way, but I felt like the
17 additional discussion was necessary. We've got
18 to own this when we get out of here.

19 I will take a motion to rescind the
20 previous motion and if there is a majority we
21 will rescind that motion and we will start over
22 with coming up with the right number. If there
23 is not a second or a motion or a majority, we're
24 leaving it at 20% and we'll move on.

25 Is there a motion to rescind the previous
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1 The total teacher effect if you just
2 analogous to the average residual --

3 MR. FOERSTER: Can we not do this? I
4 promise it's going to --

5 DR. COHEN: Okay, okay.

6 MR. FOERSTER: Teacher effect. Not
7 value-added score, teacher effect as calculated
8 by looking at all the students associated with
9 that teacher, looking at their actual
10 performance relative to expected, given our
11 predictive model, looking at those residuals
12 adding them together. Okay? That's the teacher
13 effect. That's what actually happened in the
14 classroom. That term will always stand. We're
15 not talking about how to modify that term.

16 There is also what we're calling the school
17 effect, which is for all the kids in that school
18 we're going to look at how they did relative to
19 expected, and we're going to come up with an
20 average. In schools that have lower than
21 expected results on average, that number is
22 negative. The school effect is negative because
23 those students on average did worse than
24 expected relative to the state expectations.

25 High growth schools are going to have
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1 motion?

2 PANEL MEMBER: So moved.

3 MR. FOERSTER: It's been moved. Do I have
4 a second?

5 MS. KEARSCHNER: Second.

6 MR. FOERSTER: It's been moved and
7 seconded. Any discussion before we put it to a
8 vote? All those in favor of rescinding the
9 previous motion to weight school effects at 20%,
10 please indicate by raising your right hand.

11 Simple majority. Excellent. Okay. I
12 think we're done with a discussion. Do I have a
13 motion?

14 MS. BROWN: Will you just restate what you
15 said one more time?

16 MR. FOERSTER: Which one?

17 MS. BROWN: That last clarification about
18 high growth, low growth, harder to do, lower to
19 do, say it again. Part of it was clear and part
20 was confusing and I want to make sure.

21 MR. FOERSTER: Okay.

22 DR. COHEN: Sam, I think this says what
23 you're saying up here. I want you to quickly
24 make a judgment whether it's helpful or not,
25 then I'll take it off.

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1 positive school effects because on average those
2 kids grow more than what had been predicted by
3 the State predictive model. When we're taking
4 school effects into account, we are subtracting
5 them off the teacher effect. The net effect
6 being that if you have a teacher that generates
7 a certain amount of growth, but that teacher is
8 in a really highly effective school --

9 MS. BROWN: Wait. High growth?

10 MR. FOERSTER: High growth, I'm sorry,
11 thank you very much. Is in a high growth school
12 where the school effects are positive, the
13 rationale of including school effects is to,
14 quote, level the field. You're saying I believe
15 that part of why that teacher is so successful
16 is because of the school she or he is in. So
17 I'm going to subtract off the school effect. So
18 in the case of a teacher that is in a high
19 growth school, that actual teacher effect is
20 reduced by the school effect to come up with a
21 value-added score.

22 The converse is also true. If you're in a
23 low growth school and that school effect is
24 negative, meaning that on average those kids
25 perform worse than expected, that value is going

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1 to be subtracted off, but when you subtract a
 2 negative, it's a positive. It gets added. So
 3 what that means is that if you have a teacher
 4 that generates a certain amount of growth in a
 5 low growth school, they are going to deride
 6 benefit from having been in a low growth school.
 7 Let's say the school effect is minus 10; that 10
 8 will be added on with the rationale being that
 9 whatever growth, absolute growth, teacher effect
 10 growth, that that teacher generated it was
 11 harder to do in that school than it would have
 12 been to do in a school that positive school
 13 effects. Does that clear up how the school
 14 effects work?

15 MS. BROWN: What I wrote was, "In a high
 16 growth school with a positive school effect, the
 17 actual teacher effect is reduced by the school
 18 effect."

19 MR. FOERSTER: To calculate the value-added
 20 score. To be clear, the teacher effect stands
 21 whole.

22 MS. BROWN: I get that part. Then we said
 23 prior that typically our high growth schools are
 24 not always our highest performing schools. So
 25 typically, our high growth schools are those

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1 schools as was mentioned by Stacey that have
 2 some of these other challenges that are in
 3 place. So we're talking about the greater the
 4 school effect, the more we're reducing that
 5 teacher's value-add score.

6 MS. BOURN: Exactly.

7 MR. FOERSTER: If it is a high growth
 8 school. The assumption that you're making and I
 9 think the scenario you're contemplating is a
 10 high growth low performance school where it's
 11 already difficult to attract good teachers.

12 MS. BROWN: Which is what she was really
 13 trying to get at.

14 MS. FRAKES: Well, no. We have schools
 15 that are low growth and low performing. That's
 16 why they're still stuck in low growth. I mean,
 17 we're trying and they're making some
 18 improvements. But when you look at the schools
 19 that are failing in the rural areas, I mean,
 20 we're talking Jefferson County, we're talking
 21 Madison County, we're talking challenges in
 22 Taylor County. I've actually heard from these
 23 teachers via e-mail and these aren't schools
 24 that are low performing and high growth; these
 25 are schools that are still struggling and

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1 searching for solutions and I'm hearing from
 2 these teachers who are saying are you taking
 3 into consideration that our PTA never meets?
 4 Are you taking into consideration that I can't
 5 get these parents to come in and volunteer, or
 6 we can't get people to mentor our youth. So are
 7 there in those counties schools where they are
 8 low performing but they are seeing growth? Yes,
 9 they are, but do I think that's the majority in
 10 our rural counties? No, I don't, not at this
 11 time.

12 So will I know that it may hurt a school?
 13 It may; it's an unintended consequence, but I
 14 have to speak for the vast majority when we're
 15 talking Taylor, Hamilton, Gadsden, Madison.

16 MS. KEARSCHNER: And it's not just those
 17 rural districts --

18 MS. FRAKES: I hate to send out this
 19 committee to send out and say --

20 MS. KEARSCHNER: -- diverse schools and
 21 everyone of large counties has failing schools.
 22 So whether it's high performing or low
 23 performing; the school effect matters.

24 MS. FRAKES: I hate to send out the message
 25 that to our parents and PTA organizations that

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1 I'm sorry, really with or without you teachers
 2 can overcome that 80% because I think that is a
 3 very wrong impression to send. I need every
 4 volunteer and every parent that comes in to that
 5 classroom. I need every community resource that
 6 is available to that school, that it all
 7 matters; and I think to say only 20% matters
 8 sends the wrong message as we're trying to fill
 9 capacity within communities.

10 MS. BOURN: I think we can probably think
 11 of a scenario for every single imaginable --
 12 maybe the best thing is to do 50/50.

13 MR. FOERSTER: So I'll take a motion. The
 14 motion on the floor is to weight school effects
 15 at 50%. Is there a second?

16 PANEL MEMBER: Second.

17 MR. FOERSTER: All those in favor indicate
 18 by raising your right hand?

19 PANEL MEMBER: I have eleven.

20 MR. FOERSTER: We're done. May we break
 21 for lunch?

22 MS. HEBDA: Come back at 12:30.
 23 (Whereupon, a lunch recess was had.)

24 DR. COHEN: Very patient and committed
 25 committee members, we still need to go over a

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1 lot of stuff regarding important decisions and
 2 you all have been thoughtful in pretty abstract
 3 stuff too.
 4 Yesterday you remember we selected Model
 5 3C, "we" being you. You looked at the models,
 6 you said, well, what's wrong with controlling
 7 more things? When estimating the school effect,
 8 you have to figure out whether to put them back
 9 in. We'll do that. We have a lot of
 10 covariates. Model 3C, the second to last one in
 11 the slides, was the one that you honed in on and
 12 made a tentative decision that that's the model
 13 we chose.

14 We have a series of slides now that are
 15 going to walk you through the impact of that
 16 decision. How does Model 3C look relative to
 17 some of the other models in terms of how it
 18 plays out in the real world with the real world
 19 data from the 2010 impact.

20 We're going to look at two different kinds
 21 of -- we're going to look at the impact in two
 22 different ways. Question one: What does this
 23 mean in terms of expectations for students? How
 24 do the expectations for students vary? And
 25 number two, we'll look at teacher impact. What

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1 as we did about which model we wanted, and this
 2 power point was generated well before those
 3 decisions took place. They thought that the
 4 information should be presented in the context
 5 of all these other models. That's why you see
 6 other models up there. What we're going to try
 7 to do I the next hour, and we have discussed
 8 this and we're thinking an hour is just about
 9 enough time just to go through quickly what are
 10 the implications of Model 3C? Because we have
 11 selected it, we do want the committee members to
 12 be familiar with what it implies in terms of,
 13 for example in this case, different expectations
 14 for ELL or different expectations for gifted
 15 because attributes of this model are going to
 16 come into question.

17 That is, our stakeholders are going to have
 18 questions of us as to why this model does what
 19 it does. We should be familiar, I think, with
 20 how it behaves or what implies in terms of
 21 different student growth expectations. So we're
 22 going to go through relatively quickly these
 23 slides focusing really on Model 3C.

24 Your point is extremely well taken that its
 25 comparison to other models isn't really the

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1 characteristics of a teacher are associated with
 2 higher or lower value added scores.
 3 We want to pose some for Model 3C and we
 4 want to see how Model 3C compares with the other
 5 models. All right. So we're going to start off
 6 looking at expectations for students. We have a
 7 model that generates a unique expectation for
 8 each student and what we see here in both
 9 reading and math is we see higher expectations
 10 for ELL students.

11 MR. FOERSTER: Jon, can I interrupt for
 12 just a second? To set the discussion up, is
 13 that your question?

14 MS. KEARSCHNER: I just want to stop for a
 15 second. We've already decided on 3C?

16 MR. FOERSTER: We have, yes.

17 MS. KEARSCHNER: Well, why are we comparing
 18 this to - why do we need this data? And if it's
 19 so important that we have it, it should have
 20 been before we made our decision. I don't need
 21 to know how this compares to Model 1 or 1A
 22 because we've already ruled them out.

23 MR. FOERSTER: That's a good point. Let me
 24 set the table a bit here. AIR was not
 25 contemplating us making the decisions as quickly

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1 point now. The idea is what does 3C mean? What
 2 have we bought with this car that we now own?
 3 That having been said, I don't want this to
 4 sound like the train has automatically and
 5 completely left the station. If we see things
 6 in this information that are problematic, we can
 7 back up. I want you to know that, but I don't
 8 anticipate that that's going to be the case.
 9 Really, I think this is just information
 10 purposes only. So we're going to do that for
 11 about an hour.

12 The next hour -- yes, ma'am?

13 MS. STEWART: I think, too, didn't we sort
 14 of table for sure which of these we were going
 15 to include that might be important for us --

16 MR. FOERSTER: Yes, ma'am, hour two. Thank
 17 you so much. Good segue.

18 After we go through the general discussion,
 19 we have to come back to the decisions about
 20 which covariates to include and not include.
 21 And while I think the consensus at the table is
 22 keep them all in there, it's a big decision.
 23 Christy points out, I think, well that a lot of
 24 these things are included initially to get a
 25 sense of whether or not they are important, but

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1 we understood that keeping them in the model did
2 have some policy implications that we need to be
3 aware of. I think we need to at least spend an
4 appropriate amount of time talking through those
5 things before we conclude yes, in fact, we want
6 them all in there.

7 If that's the conclusion that's great; I
8 just think it needs to be well considered. We
9 think that'll take about an hour. After that,
10 time permitting we will move on to a discussion
11 about classification and how perhaps this
12 information might be used to classify teachers
13 and what the classification error looks in Model
14 3C. That's what this afternoon looks like.

15 Any questions about what the game plan is?
16 Okay.

17 DR. COHEN: Okay. So under all models,
18 including Model 3C, you'll see higher
19 expectations.

20 Next slide here. And correspondingly you
21 see lower expectations of growth for gifted
22 students. What you see in Florida and it may be
23 a -- this character is the FCAT scale, what we
24 see in Florida every time we do an analysis is
25 growth is highest at the lowest end of the scale

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1 dwell on it. The next set we expected a good
2 value-added model would be associated with
3 things that we would expect to be associated
4 with more effective teaching and not associated
5 with other things. So we take another look at
6 some of these relationships.

7 The statistic we're presenting here is a
8 correlation, a correlation co-efficient. Many
9 of you know what correlation co-efficients are
10 but just to make sure that everybody
11 understands, it describes the correspondence
12 between two variables. If a correlation is
13 positive it means this thing goes up as the
14 other thing goes up; if it's negative this thing
15 goes up as the other thing goes down. Very weak
16 relationship. It would be anything 0.10 or less
17 is a weak relationship. You'll notice these
18 relationships between teacher experience and a
19 value-added measure, so are teachers with more
20 experience getting higher value-added measures?
21 These are tiny, 0.01, so barely or not even
22 statistically significant, not noticeable.
23 They're just very small which maybe is
24 surprising, but we -- in our meeting last time
25 we noted that when you look at the teacher

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1 and lowest at the highest end of the scale. Do
2 you remember that scatter plot with the more
3 discordant at the lower end of the scale and the
4 higher end of the scale. So you're expecting
5 some growth in gifted kids on average, but it's
6 substantially less than growth you expect for
7 kids who are not identified as gifted.

8 The thing driving the ELL result, I
9 believe, and the gifted result is if you divide
10 achievement just into quartiles, you know, the
11 top 25%, the next 25%, the next 25%, you see the
12 typical growth -- remember, the expectations are
13 coming from the growth we typically observe.
14 Typical growth is higher in the highest and
15 lowest quartile and marches downward so slow
16 it's in the highest quartile. It may have to do
17 with measurement characteristics of the test,
18 the ability to measure at that higher end of the
19 scale.

20 You see Model 3C doesn't look significantly
21 different than Model 3B, Model 3A, Model 1A, any
22 of the models that include two lags in that
23 characteristic. Everyone good so far?

24 All right. Now we're looking at reading
25 and you see exactly the same pattern and I won't

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1 experience data over time you see a lot of
2 teachers whose experience doesn't change from
3 year to year, which you know it does. They were
4 in the data last year and they should be one
5 higher this year.

6 So you see that, so I expect that teacher
7 experience that is not currently used for
8 anything in Florida, I believe that it does not
9 have any states associated with it, I think it's
10 maybe just not that well reported. You see the
11 same thing, very close to zero correlation in
12 reading scores. So I don't know what to do with
13 that.

14 Teacher absences. You all asked if we
15 could look at the data related to teacher
16 absences. Once again we see that the
17 value-added scores are virtually uncorrelated
18 with teacher absences. This is the correlation
19 between teachers' value-added scores and the
20 percent of students in their class who have
21 disabilities. Model 4, remember that was the
22 fixed effects model is starting to show some
23 correlation with that. We're not really looking
24 at model cores, so we don't want to talk too
25 much about that.

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1 Model 3C is virtually uncorrelated with the
2 percentage of teachers teaching who have
3 disabilities. So the value-added score doesn't
4 seem to be really related to that.

5 All right. Now when we look at the
6 expectations, the student expectations in the
7 last series of graphs, we saw that there were
8 higher expectations for students who were ELL
9 students. So nonetheless despite the higher
10 expectation for those students in the data
11 historically teachers have been more likely to
12 exceed those expectations. The higher the
13 proportion of ELL kids, your value-added scores
14 tend to go up. Not strongly, but a bit, tend to
15 go up for teachers who are teaching a higher
16 proportion of ELL students. So now you're
17 setting higher expectations for ELL students,
18 but the teachers are doing a little bit better
19 nonetheless, even though they're being compared
20 to a slightly higher expectation.

21 MS. WESTPHAL: Is this still just looking
22 at 7th grade math or is this overall?

23 DR. COHEN: Seventh grade math and reading.

24 MS. WESTPHAL: Okay, 7th grade.

25 DR. COHEN: You see very similar patterns
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1 significantly larger correlations than what we
2 have seen in some of the others, they're still
3 really, really small.

4 DR. COHEN: They're still pretty small.
5 I'd characterize them as pretty small rather
6 than really, really small.

7 MR. FOERSTER: Fair enough.

8 DR. COHEN: We see the opposite when we
9 look at average entering math scores. So it's a
10 little tricky because of the negative
11 correlation, so if your kids come in with higher
12 scores you're slightly less likely to have a
13 high value-added score. Your value-added score
14 is slightly lower if you're teaching kids who
15 come in with higher prior scores, which
16 corresponds with what we saw in the student
17 expectations. We saw lower student expectations
18 for the highest achieving students in the first
19 series of graphs and despite that the teachers
20 teaching them still seem to get slightly lower
21 -- the teachers of the highest achieving
22 students still get slightly lower value-added
23 scores. So the remains -- the inference is the
24 model in Model 3C as well as the rest of them is
25 going to result in, if everything stays exactly
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1 in all the grades. We looked at all this across
2 all grades, but you don't want me to show you
3 seven times as many as these graphs, do you? I
4 can talk faster.

5 MR. FOERSTER: Jon, the correlation, is
6 that R or R-Squared? I'm assuming it has to be
7 R.

8 DR. COHEN: It's R.

9 MR. FOERSTER: So in terms of explaining
10 variance, you would actually square that term.

11 DR. COHEN: In terms of -- yeah, it
12 explains 1% of the variance.

13 MR. FOERSTER: So even when we have a
14 correlation of 0.10, we're talking about a one
15 percent explanation of variance?

16 DR. COHEN: That's right, that's right.

17 MR. FOERSTER: So insignificant?

18 DR. COHEN: Statistical significance
19 depends on sample size, too. I didn't look at
20 the statistical significance, so I don't know
21 that offhand, but I can find that out for you.
22 But it's very small; it's not substantively
23 important.

24 MR. FOERSTER: Okay. I guess the point I'm
25 making is that though the ELL graphs are larger,
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1 as it was last spring, it will result in
2 slightly higher value-added judgments for
3 teachers teaching lower performing students.

4 MS. BROWN: Isn't there something to be
5 said about the measure itself and how -- I mean,
6 when we started this we said the lower end of
7 the scale tends to show higher growth. It's
8 because of the scale and the movement within
9 that scale, not necessarily because of being ELL
10 or being gifted or being higher performing or
11 this. So it makes only natural sense that if
12 that's true and you teach a larger number of
13 students that are at that lower end of the scale
14 and that's where you see more growth in the
15 measure that we're using then that's of course
16 naturally what you're going to see.

17 DR. COHEN: So what you're saying is this
18 could be a methodological artifact, just an
19 artifact of unequal intervals along the FCAT
20 scale. Absolutely a reasonable interpretation
21 of that --

22 MS. BROWN: And you would be seeing the
23 ceiling effect that exists in the instrument
24 itself. It's definitely there.

25 DR. COHEN: You see the ceiling effect,
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1 yes, that's right.

2 MR. TOMEI: It can't be as simple as
3 recognizing measured growth is going to probably
4 relate positively to opportunity for growth.

5 DR. COHEN: That's some interpretation, so
6 that -- that's not saying there's no truncation
7 or no problem with the scale; it's just the
8 world works that way and that's another
9 interpretation. I would suggest that over time
10 as we think about refining this model we look at
11 ways for more fully accounting for ceiling and
12 floor effects in the scale.

13 MS. BOURN: And that's a question I had
14 yesterday and I didn't really vocalize; how much
15 of the variance can be related to prior year
16 score?

17 DR. DORAN: I can tell you. I just looked
18 at the correlations. The correlation between
19 the grade 7 reading, the correlation between the
20 prior scores and the current scores is 0.8, and
21 in the math the correlation between the prior
22 score and the current score is 0.82. That's
23 grade 7 reading and math. So what we do to
24 determine -- if you remember yesterday, we
25 looked at those statistics called the R-Squared

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1 necessarily what you would expect, certainly for
2 math and what you see is that teachers with a
3 bachelor's degree tend to get higher value-added
4 scores than teachers with master's or
5 doctorate's. The number with doctorate is much
6 smaller, so I wouldn't put too much weight on
7 that. But I personally was surprised to see
8 that you had --

9 MS. STEWART: And those were any higher
10 degree, not necessarily subject specific.

11 DR. COHEN: Not necessarily subject
12 specific. Any higher degree is what's reported
13 in the warehouse data.

14 You see Model 3C is the last one here. We
15 saw bigger effects for Model 4. We took it off
16 of this graph just because you couldn't see the
17 differences between these models when we did it.
18 But overall even where you see differences it's
19 a point or two, you know, a point or two in the
20 average value-added score.

21 I don't know much what to make of this next
22 slide. Okay. Another thing we looked at, I
23 know that national board certification can be
24 very expensive and can be controversial, but we
25 did see that there was a -- that board certified

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1 statistics, essentially what that means is that
2 first year score or that one lag accounts for
3 about 64% of the total variance in the overall
4 model.

5 Now recall that those other covariates and
6 everything else, they were accounting for about
7 68% of the total variance, so the regression
8 model itself. That means that the first year
9 score counts for 64% of the variance, those
10 other things -- all of those other things
11 combined are adding only about 4% more of the
12 total variance above and beyond the prior test
13 score alone accounts for.

14 MS. BOURN: So in other words, controlling
15 for all these other covariates by this 4% mark?

16 DR. COHEN: Yeah, that's about right. But
17 to an individual teacher, for example, who has
18 an ELL student it will make a difference.

19 The variables we were looking at before
20 were continuous variables, like the percent ELL,
21 SWD, and so we presented correlations -- it's
22 kind of easy to look at expectations for
23 value-added for teacher by categorical variables
24 and we have a few of them here. This one is
25 highest degree and you see a pattern that's not

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1 teachers tended to get higher value-added scores
2 and those who weren't tended to get lower, which
3 is supporting evidence saying that you're at
4 least tapping into something that somebody else
5 has agreed these are more effective teachers.
6 This is some additional validity evidence.

7 Okay. That's the impact data we have for
8 you. You see how it affects expectations for
9 students and you see which teachers get higher
10 or lower scores there. Are there -- is everyone
11 comfortable with that? Does anyone want anymore
12 discussion about these?

13 MS. EDGECOMB: I don't want any more
14 discussion about it, but I do want to know as
15 members of this committee how is this going to
16 be collapsed, given to us, documented so that as
17 practitioners, communicators, people who have to
18 go back to districts or whomever and everybody
19 on this committee in such a way that we can
20 share this information so it makes sense to the
21 general public? In the absence of all of this
22 discussion and in absence of most of the people
23 we are going to be talking to are lay leaders
24 and we won't have you standing on the side with
25 us whispering in our ears what we should be

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1 saying because I think once this has been done
2 -- even when it goes back down to the
3 fundamental training and the communication of
4 this that putting it in terms of clarity so
5 people can understand it so it's comprehensive,
6 that's going to be critical because I think we
7 have an obligation as part of the decision
8 makers to be able to communicate this.

9 MS. LEMKE: My goal in this project is to
10 be the communications --

11 MS. EDGECOMB: Oh, so we leave it all up to
12 you, okay.

13 DR. COHEN: Just send Harold home with each
14 and every one of you.

15 MS. LEMKE: So the reason I'm here is to
16 make sure that I hear all these discussions and
17 our obligation to you as part of this contract
18 is to produce materials that are user friendly,
19 that are for lay people that they will
20 understand not only the work that the committee
21 has done but what is the model that was selected
22 and, you know, sort of some of the implications
23 of that model and so on and so forth. So we'll
24 be putting together materials both written and
25 also some sort of multimedia presentation of

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1 materials. That will be available for you.

2 We'll also be doing some training so you
3 may be seeing more of me. I'd like to use some
4 of you as a sounding board for some of those
5 materials and get your input and your feedback
6 because you'll understand obviously all that has
7 gone into it, and you'll sort of know the
8 questions that you're getting that you'll need
9 to be communicating about going forward.

10 MS. EDGECOMB: And a glossary is going to
11 be involved in this?

12 MS. LEMKE: A huge glossary and all that
13 kind of stuff, yes.

14 MR. FOERSTER: Any other questions or
15 comments before we move on? Yes, sir?

16 MR. LeTELLIER: Just in general for all of
17 these areas, how are we going to - if we're
18 taking account say we want all these variables
19 in there, the weight that each one would be; is
20 that something that we're coming up with or how
21 does that work?

22 MR. FOERSTER: In terms of what we just
23 looked at?

24 MR. LeTELLIER: Any of these variables that
25 we're using. Am I not clear?

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1 DR. DORAN: All right. So if the variables
2 are included, any particular control variable,
3 the committee doesn't necessarily determine what
4 the weights are. One of the slides that Jon
5 showed yesterday were those numbers that show
6 the deviations, like a 0.16 for every additional
7 day that you're attending the school. Those
8 numbers are actually estimated from the data.
9 They're called (inaudible) effects, they're
10 actually estimated from the data and those would
11 be the numbers that would be applied. So the
12 committee wouldn't have any role in deciding
13 what those numbers should be or how necessarily
14 to apply them. The role of this group would be
15 on the determination of whether they should be
16 included or not and then whatever values are
17 estimated when they are included would be
18 applied in setting the expectations.

19 MR. LeTELLIER: Okay. Thank you.

20 MR. FOERSTER: So your job is to decide to
21 include or not include. How they get weighted
22 is up to the data set and how it all takes it.

23 MR. LeTELLIER: Good. That clarifies it.

24 MR. FOERSTER: Are we ready, Christy? Do
25 you want to go ahead and start the discussion

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1 with the --

2 DR. HOVANETZ: Jon will present the actual
3 variables and then we can have the discussion.

4 MR. FOERSTER: Excellent. That
5 presentation is relevant to statistical
6 significance or not with the control variables?

7 DR. HOVANETZ: Yeah, just to re-frame the
8 discussion, we had talked last meeting and on
9 April 14th quite a bit about which variables to
10 include, not include, and a lot of the
11 discussion revolved around we'd like to see what
12 that looks like in a model. But the decision to
13 be made to include these variables in the
14 evaluation weren't the decisions that we were
15 making to necessarily include them in the model.

16 So we had the conversation about in the
17 variable, a teacher controlled variable, we had
18 that around attendance a little bit. There were
19 some people saying that some teacher controlled
20 components, are they the same? No, it's not as
21 much as a teacher controlled component.

22 We had some conversations policy-wise; does
23 it make sense to set different expectations for
24 different students? Jon just presented some
25 information about what it looks like for gifted

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1 students and ELL students and the differential
2 impact we have on growth expectations based on
3 how we're putting a particular variables. So as
4 we're having a discussion about whether or not
5 the variables are significant, statistically
6 significant, we also have to keep in mind does
7 it make sense to include them from the policy
8 perspective?

9 So Jon will present the information about
10 what is and is not statistically significant in
11 the model, but you all will have to go through
12 and make the decisions about which ones make
13 sense to include in the model, not just based on
14 results but also based on the policy perspective
15 that we've had at the April 4th and 5th meeting,
16 the 14th, and then again today. So keep that in
17 mind as Jon is presenting the data.

18 DR. DORAN: All right. So we're going to
19 go through classification for just a moment.

20 MR. FOERSTER: We're going to go to
21 variables and then come to classification.

22 DR. COHEN: I think we already talked about
23 variables.

24 Let's start. Column A and the next column
25 is Column T. There's a lot of hidden columns

1 That's a case where you may want to leave them
2 in just for -- just because you can't come up
3 with a good substantive reason not to.

4 So I guess have at it. Attendance is
5 important. This is a 'T' statistic which is
6 basically -- Harold, help me out.

7 DR. DORAN: What is the 'T' statistic of?

8 DR. COHEN: That is the minimum 'T' for
9 across all the grade levels, so where attendance
10 is least significant it is widely significant.

11 The odds of getting a 'T' value of 2.0 or bigger
12 is about 5%. The odds of getting a 'T' value of
13 1.0 or bigger is about, what, 0.001. Three or
14 bigger is 0.001. As you get out to 27, there is
15 no way that's due to change, right?

16 DR. DORAN: Jon, the 'T' values of all the
17 grades, it was the smallest, so everything else
18 would be bigger than that in all the other
19 grades.

20 DR. COHEN: Let me just make sure I did
21 that right.

22 MR. FOERSTER: It's all grades.

23 MS. BROWN: All grades.

24 DR. COHEN: No, that's the maximum across
25 all grades. I was looking for where it's never

1 that I can show you if you want to see. What's
2 in between here is the progression co-efficient
3 and its standard error for every grade in math
4 for Model 3C. So it's all there, all the detail
5 about what the actual co-efficients are.

6 What we've done here is we highlighted
7 things that were never statistically
8 significant, not in any grade in math for Model
9 3C. Does that make sense? Everything else is
10 statistically significant in at least one grade.

11 I'll point out that some grade have no students
12 in the -- what we're calling group 9. I think
13 that was the dual sensory disability; is that
14 right? Yeah. So some grade, it's why it shows
15 up like that.

16 So virtually everything is significant
17 somewhere. If you remember, we included up to
18 six teachers up to six classes for each student
19 and for each class we included a measure of
20 class size and a measure of class homogeneity.

21 When you get out to the 3rd, 4th, 5th, and
22 6th class, those things aren't always
23 significant anywhere. I would have trouble
24 knowing when or justifying taking them out just
25 for some classes and leaving them in for others.

1 significant. That's the maximum across all
2 grades.

3 DR. DORAN: It could be smaller.

4 DR. COHEN: It could be smaller. All
5 right. If I were to recommend just a way to
6 think about this, I would think about the
7 student with disability category as a single
8 category rather than the many categories it is.
9 I would think about the class size category as a
10 category rather than for each class separately.

11 MS. WOODHOUSE-YOUNG: Add the numbers up?

12 DR. COHEN: No, no, not add them up. When
13 you're considering whether to keep them.

14 MR. FOERSTER: Yeah, what's at issue here,
15 Tamar, is we've actually got to vote as a
16 committee which of these to keep in. When we
17 adopted Model 3C, I think the intent was we
18 liked the kitchen sink approach and we had lots
19 of things to pick from, but we hadn't really
20 gone through with a fine-tooth comb and said
21 exclude this one, this one, this one, and that
22 one to winnow it down to the actual model. So
23 these are the "kitchen sink" lists of control
24 variables that are in there. Now we've got to
25 take them group by group and say which of these

1 do we want to keep in here and vote?
 2 So I think Jon's suggestion was just to.
 3 Take them in groups.
 4 MS. BROWN: Then how do we read that to
 5 make that decision?
 6 MR. FOERSTER: Well, I think one way to
 7 read it is that anything that's highlighted is
 8 not statistically significant in any great
 9 amount, which is not anywhere. The maximum
 10 T-score for any grade is less than 2.0. So in
 11 no circumstance was class 3 homogeneity, class 4
 12 and 5 size, those were never significant in any
 13 circumstance. So if there is a statistical
 14 argument to leave any of them out, it would
 15 apply to those five things in math. That's
 16 exactly --
 17 MR. TOMEI: This is really stuff that I
 18 tried for yesterday to try to summarize all
 19 these because we looked at one single grade
 20 where there were a number of additional
 21 variables at that grade level that showed up as
 22 not significant. So my concern is can we see --
 23 you know, are they significant at any grade
 24 level in the two subjects that we looked at?
 25 MS. BOURN: So this shows us that in some
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1 grades somewhere it's statistically important.
 2 MR. TOMEI: Everything except homogeneity
 3 in class three and homogeneity and/or size for
 4 class 4 through 6, but even that's an arbitrary
 5 break at that point because it does matter, the
 6 second class and one of the characteristics of
 7 class 3. Offline yesterday I did ask Juan if
 8 there were any fiscal implications of keeping
 9 more or less variables in that mattered to the
 10 State and the answer to that was no. So really
 11 we don't need to be concerned about are we
 12 adding costs to this to the State if we keep all
 13 the elements in, and based on what I had asked
 14 to see yesterday in looking at this, I will tell
 15 you that my reaction to the data is that we keep
 16 it all. That seems to be the right solution to
 17 me is that we keep all of these pieces in.
 18 MS. KEARSCHNER: And I would say especially
 19 now that we have this that the breakdown that
 20 you asked for, I'm even more in that camp and
 21 then combined with the statistical reasoning,
 22 the policy reasoning for me means definite, that
 23 these are things that should be included so we
 24 have that data. How it's treated ultimately in
 25 the formula if there's outliers, those kinds of
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1 things, that can be mitigated by the other 50%
 2 or if it's a new teacher or the other 60% of the
 3 evaluation.
 4 MR. TOMEI: And the argument here again if
 5 you think of all of these collectively not
 6 contributing more than about 4% of the total
 7 variance in outcome, when you look at the data
 8 globally but any one of these whether it's
 9 statistically significant in the model at the
 10 global level could be important to an individual
 11 teacher and there's not a lot of cause to keep
 12 this in, so first of all I want to thank Jon
 13 because I suspect I got a lot more sleep last
 14 night than Jon did doing all of this for us last
 15 night, but this is exactly what I wanted to see
 16 to get a sense for how I think we ought to react
 17 to all of these different potential covariates.
 18 My reaction is we ought to keep them all in.
 19 DR. DORAN: Just to make sure everybody's
 20 on the same page, if you do delete at all, you
 21 could leave "as is" or an additional step you
 22 could do is you could collapse categories. For
 23 instance, you could make the SWD category just a
 24 dichotomous variable where you're either, one,
 25 classified as SWD in any particular category, or
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1 never at all. So you could keep all and
 2 collapse or you could keep all as is, or you
 3 could go through this list and make decisions
 4 about which ones you want to keep or not. So
 5 essentially those are kind of the three pathways
 6 that you could go on.
 7 MS. KEARSCHNER: So these numbers are
 8 different than here because this is just 7th
 9 grade and these are all of them.
 10 DR. COHEN: Yes. Let me just clarify one
 11 thing because Christy asked me a question. I
 12 want to make sure it's clear to everybody.
 13 Yesterday we were showing the effects that the
 14 variables have when we showed this. This is a
 15 'T' statistic which is related to a statistical
 16 significance. These are always going to be
 17 positive because I've taken the absolute value
 18 to find only significant things. These are not
 19 effects and shouldn't be read as such. It's
 20 just a quick way to be able to see which is
 21 significant anywhere. So you take the maximum
 22 and I just want to make sure no one
 23 misinterprets the graph.
 24 DR. LeTELLIER: Can I ask what is the
 25 implication of collapsing, like all the SWDs
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1 into one versus keeping them all separate?
 2 DR. DORAN: Good question. If we were to
 3 keep them "as is", the chart that Jon showed
 4 yesterday, I've got these numbers --

5 DR. COHEN: I can unwrap that and you can
 6 see it.

7 DR. DORAN: If we keep each of these
 8 categories and I forget what SWD is and so
 9 forth, all right, this number here -- these are
 10 the actual fixed effect estimates -- all right.
 11 Standard error and column -- okay.

12 All right.

13 DR. COHEN: Let me give you a visual cue
 14 here. Okay. Those are your co-efficients.

15 DR. DORAN: What this is telling us here
 16 when we leave this as is, a student can be in
 17 one of these categories. They may have had
 18 multiple categories, but let me keep the world
 19 very simple. Let's assume that the world is SWD
 20 10 but nothing else, so when we form that
 21 prediction for any kid who's SWD 10, the
 22 difference in their prediction would be 20.73
 23 scaled score points versus any students who is
 24 not SWD 10, everything else being equal, every
 25 other category being equal. So what we have is

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1 the difference in the expectation for each of
 2 these SWD categories. So the student is SWD 10,
 3 the difference in their expectation would be
 4 20.73. If another student were SWD 13 and
 5 that's all, then the difference in their
 6 expectation would be two.

7 Now suppose we collapse the category and we
 8 turn it into a dichotomous variable, zero or
 9 one. You're either special ed in some category
 10 or in any category or you're not at all. Then
 11 what we would have instead of having a different
 12 co-efficient or a difference in the prediction,
 13 we would have only one number, just say SWD, and
 14 there would be some number there. We don't know
 15 what the number would be until we actually run
 16 the model. It would be a different co-efficient
 17 and that co-efficient would say any special ed
 18 kid will have a difference in their predictive
 19 value of that number no matter what their
 20 categorization is. So kids who are SWD 10, kids
 21 who are SWD 3, kids who are SWD 5 will have that
 22 same difference in the prediction.

23 MR. LeTELLIER: Okay. How difficult is it
 24 if we were to keep them all because, of course,
 25 we can visually see that there's a substantiated

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1 difference between some of these. SWD 12 3.4
 2 versus SWD 10 S20. So if we were to keep them
 3 all individually, how difficult is that to do as
 4 far as when you're tabulating stuff?

5 DR. DORAN: Not at all.

6 MR. LeTELLIER: And is it more beneficial
 7 to do that versus collapsing because what I'm
 8 seeing is if we just generally say -- let's say
 9 the number comes down to a 5 or a 6 and some SWD
 10 5 is 39, I don't know if that's a good thing to
 11 collapse with them.

12 DR. DORAN: Well, what he's asking is a
 13 computational. Is that any harder for the
 14 models to be run and implemented when they are
 15 all kept in versus if they're collapsed to zero?
 16 It's virtually a simple thing to do, just bring
 17 more columns in the matrix and that's an easy
 18 thing to do.

19 MR. LeTELLIER: So that part is easy to do.

20 DR. DORAN: The policy issue or the
 21 implementation issue, you may want to keep it
 22 for different reasons. Essentially, what you're
 23 doing is if you collapse it into a single
 24 category, you are ignoring the differences
 25 between the categorization and some of that

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1 granularity may be important.

2 MR. FOERSTER: To someone.

3 DR. DORAN: After looking at these numbers,
 4 you might say, well, Harold that SWD 5 of 39
 5 versus the SWD of 12 to me is practically a
 6 difference that I care about. That's the
 7 decision that you have to have or the discussion
 8 you have to have at this point.

9 MR. FOERSTER: Did you have a point, Anna.

10 MS. BROWN: I was just going to say that
 11 that's a very important decision and policy-wise
 12 it's very difficult to explain why you would
 13 exclude one. From my --

14 MR. LeTELLIER: Or collapse.

15 MS. BROWN: Okay, or collapse, either way.
 16 Sharing the experience from my district speaking
 17 for thousands of teachers that have spoken to me
 18 about this issue, the number one question is,
 19 are you considering this as a variable? And it
 20 is very certain that the EBD teacher feels just
 21 as strongly as the IND teacher and they both
 22 feel their kids have a greater level of effort
 23 and they better be considered separately. And
 24 it's really not for us to determine that, but
 25 I'm just sharing my --

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1 MS. BOURN: But do we understand that we're
2 saying that the expectation is higher for these
3 students? And that when we control for this, if
4 you look at slide 58, it's not really, really,
5 really big, but there's a teeny bit of a
6 consideration that when you control it for this
7 that those teachers are slightly more likely to
8 have lower value added.

9 DR. DORAN: That's an important point.
10 Let's go through and make sure we understand
11 what the interpretation is and what Ronda's
12 saying.

13 When the numbers are positive, what that
14 means is any kid who is an SWD of 10 has an
15 increase in their expected second year score of
16 whatever that number is if it's positive. If
17 it's negative then they have a lower expectation
18 than a student who is not in that particular
19 category. It does have a difference, then we
20 make sure we understand what that in the
21 quotation is saying.

22 MS. BROWN: I'll just remind you what
23 flagged in my head and it might not be right.
24 But we are doing this with respect to a specific
25 measurement instrument. That is an instrument

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1 that has a specific floor issue. I'm not going
2 to go on record to say that all SWD kids fall in
3 that floor area. However, one of the other
4 things that happened and a lot of teachers ask
5 about from me is, but you're using FCAT, and I'm
6 teaching children that are three grade levels
7 below and you're still having to test them on a
8 grade level instrument. So in that situation I
9 may be totally killing my own argument, but it's
10 still an issue that we need to --

11 So it is positive and, yes, there's more
12 expected, but they're operating within that zone
13 that's already been demonstrated that using this
14 model with this instrument that those children
15 who are in the lower range tend to have higher
16 growth.

17 MS. BOURN: But you are now saying we
18 expect that in your --

19 MR. LeTELLIER: But those expectations are
20 based on actual performance data by these
21 populations.

22 MS. BROWN: Correct.

23 MS. BOURN: To Anna's point, the tool may
24 have to be adjusted. We've already talked about
25 the FCAT going away and, of course, different

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1 assessments for our SWD kids, whatever that is.
2 What we would be doing by accepting each of
3 these would be separate categories for both
4 policy and statistical reasons are that you're
5 being true to that performance. That's the
6 reason that I would vote to support.

7 MR. LeTELLIER: And those policy decisions,
8 they change every year.

9 DR. DORAN: They will change every time we
10 run the model. But I want to emphasize what the
11 two of you were saying. These co-efficients are
12 higher, Anna, like you were saying not because
13 they were arbitrarily assigned but given because
14 this is what was observed in the data.

15 MS. WESTPHAL: For my understanding, this
16 is considering primary disability only. Is
17 there any way or should we consider -- if the
18 two numbers are different, if one might be their
19 primary but the other is having a greater impact
20 on the test score -- for example, language
21 impaired a lot of times goes along with another
22 disability, so if the language is what's causing
23 the -- it's usually not the primary. Does that
24 make sense?

25 MS. KEARSCHNER: Language like we used the
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1 other day, yesterday when we were talking about
2 say you had a hearing impaired student and
3 they've got a secondary disability with the
4 inability to communicate on the test, that
5 causes that score to go down. It's not the
6 primary disability, so how could that be
7 accounted for? And I would say that it's the
8 other 50% where you can tinker with those
9 numbers.

10 MS. BROWN: The evaluation piece.

11 MS. WESTPHAL: The evaluation piece.

12 MS. BROWN: I just think it's really
13 important to strike again that what we see
14 represented here is actual performance data.
15 When the expectations are set in most of my
16 knowledge because it's very limited, the
17 expectations are set based on actual
18 performance. So if the trended actual
19 performance is 'X', then of course we would
20 expect that. Do you know what I'm saying?

21 DR. COHEN: Mm-hmm. I would point out that
22 in some of these categories if you go from grade
23 to grade, they go from positive to negative,
24 from negative to positive, and positive to
25 negative.

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1 MS. BROWN: Yeah, they change.
 2 DR. COHEN: It's not always a positive
 3 expectation; and while I find that difficult to
 4 explain in some way I find comfort in what
 5 Anna's saying which is the data -- you know,
 6 this was run on a model, this was what it was,
 7 and we were consistent in respecting that
 8 outgrowth.

9 MS. BROWN: And we know it has an impact.
 10 Whatever that impact is, we know it has an
 11 impact and therefore should be accountable.

12 DR. DORAN: One thing to make sure we
 13 properly interpret these data, we see if we look
 14 in isolation at this column here, the difference
 15 is 39 versus 2 for those if you contrast those
 16 for those particular categories. We can think
 17 about collapsing but you may or may not want to
 18 do it. You might say, well, I want to see them
 19 separate because of the difference in this
 20 expectations -- but don't look at that column in
 21 isolation because remember a couple of things.
 22 This is not the standard error. In this
 23 particular grade, the difference is 4 versus --
 24 nuts, I should go in reverse. But then these
 25 numbers will change; they change across grades,

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1 they change across years when the model is
 2 re-estimated and they'll change across subjects.

3 So while these numbers can be helpful for
 4 you to think about this, keep those things in
 5 mind. They change across grades, they change
 6 across subjects, and they will change each year
 7 as the model is re-estimated. So it's a useful
 8 heuristic. We need to look at these numbers,
 9 but don't assume that the gap will always be
 10 what you observe here.

11 MS. BROWN: Well, sure, I mean just look at
 12 SWD 14 and look at negative 12 in 5th grade,
 13 negative 32 in 6th grade, if I see the right
 14 column; I don't know. Negative 8, positive --

15 PANEL MEMBERS: (Over-speaking.)

16 MS. BROWN: -- 7th and 8th grades, so it is
 17 -

18 MS. FEILD: You wonder, Anna, if the SWD
 19 impact in the 3rd graders that are ESE that have
 20 had remediation are automatically promoted,
 21 right, to a good cause so they get to 5th grade.
 22 Those kids have, you know, lower starting 3rd
 23 grade scores because of the good cause promotion
 24 may have an effect on -- that SWD 10 is the
 25 autism kids, and notice how the change goes from

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1 20 to negative 20 or something like that.

2 MR. FOERSTER: If you all are comfortable
 3 with the amount of discussion on this one, we
 4 could take a motion that we accept all of the
 5 SWD covariates as they're presented for both
 6 math and reading.

7 MR. TOMEI: So moved.

8 MR. LeTELLIER: Second.

9 MR. FOERSTER: Any further discussion? All
 10 those in favor, indicate by raising your right
 11 hand. Okay.

12 Next category is class size and homogeneity
 13 and I think it's probably safe to take these
 14 together as a group. Any thoughts on removing
 15 the ones that are statistically insignificant or
 16 including them all because it's easier to
 17 explain?

18 MS. BROWN: Devils advocate, there just so
 19 insignificant, why bother to take them out.

20 DR. DORAN: Did you say why bother taking
 21 them out?

22 MS. BROWN: Yeah, what's the reasoning to
 23 need to do it? To remove it?

24 DR. DORAN: Oh, to remove it? They're not
 25 adding anything at all in terms of --

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1 MS. BROWN: But are they taking away?

2 DR. DORAN: They're taking away model
 3 parsimony and that is an important --

4 MS. BROWN: Oh, I understand that.

5 MR. FOERSTER: Could they potentially
 6 introduce error in individual teacher
 7 value-added scores by virtue of their being
 8 there or not being there?

9 DR. COHEN: They have very small
 10 co-efficients associated with them.

11 MR. FOERSTER: Yeah, they are tiny.

12 DR. COHEN: So their total impact on any
 13 score is just going to be small.

14 MR. FOERSTER: Okay.

15 MR. LeTELLIER: So we can collapse those to
 16 all one homogeneity group, one class size,
 17 right?

18 MS. BROWN: And you're talking about still
 19 having one and two?

20 DR. DORAN: This could not be collapsed, I
 21 don't believe.

22 MR. LeTELLIER: And can you just clarify
 23 for me once again why there's different classes,
 24 where that came from?

25 DR. DORAN: There are multiple classes

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1 because kids appear in multiple classes in the
 2 data, right? So the class size variable is for
 3 each of the classes he would be associated with.
 4 The homogeneity is of the kids in the class,
 5 class one that they're assigned to, what's the
 6 difference between the 75th percentile and the
 7 25th percentile in that class one? Under class
 8 two there's a different homogeneity variable and
 9 so forth.

10 MS. BOURN: And the class is for that
 11 subject.

12 DR. DORAN: And course, right, same course,
 13 different teacher.

14 DR. COHEN: No, not necessarily. There's a
 15 difference between a course and a class. I
 16 could tell Algebra 1 at this school, change
 17 schools and be taking Algebra 1 at another
 18 school. That would be two classes with the same
 19 course, right? Or I could be taking Algebra 1
 20 and business math the same time, right, so
 21 there's two courses, two different teachers, two
 22 different periods, so there are two different
 23 classes, right?

24 So the class size has to do with the number
 25 of other kids who are sitting in the same room

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1 in a class with 20 kids that would mean that the
 2 total impact on the value-added score is minus
 3 0.16 points; is that right?

4 DR. DORAN: For every increase in kid.

5 MR. FOERSTER: For every increase in kid.

6 MS. BROWN: No, for each child.

7 MR. FOERSTER: Right, but my co-efficient
 8 is 0.08.

9 DR. DORAN: It's 0.001. So what that
 10 indicates, I mean, let's go over the
 11 interpretation of what that means. This class
 12 size is a continuous variable. It denotes the
 13 number of kids within a class. So if you have
 14 one kid within your class, the difference in the
 15 expectation would be that. For two kids, it
 16 would be two times that. So it increases for
 17 each additional kid in their class and that's
 18 how it changes the expectation, everything else
 19 being equal.

20 DR. HOVANETZ: The bigger the class size,
 21 the lower the expectation.

22 MR. FOERSTER: The lower expectation, but
 23 the thing I want to point out is the difference
 24 in class size of 10 kids, a difference in class
 25 size. If you're comparing apples and apples,

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1 with you at the same time. So whatever your
 2 first class is that has a size and it has a
 3 homogeneity in it, a distribution of prior
 4 student performance within that class.

5 MS. BOURN: So in this example, a student
 6 is in class three included in that data set and
 7 they had three math classes.

8 DR. COHEN: Yes, they have to be classified
 9 as having three or more math classes.

10 DR. HOVANETZ: And looking at the data, the
 11 implications are trivial and small. One of the
 12 policy statements that we're making, we're
 13 saying we're including class size as a variable
 14 and we're including homogeneity as a variable.
 15 So think about it also from the policy
 16 perspective knowing that it is a small impact,
 17 what are we saying when we want to include class
 18 size and what are we saying when we want to
 19 include homogeneity and what are some of the
 20 unintended consequences including those. So
 21 just think about it from the policy perspective
 22 as well.

23 MR. FOERSTER: Could there be an intended
 24 consequence as well? If I'm reading this right,
 25 class size co-efficient of minus 0.08; so if I'm

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1 one class has 18 kids and one class has 28 kids.

2 DR. DORAN: It's less than one scale point
 3 difference in expectation. You have to have a
 4 100 kid difference before you got to an 8 scale
 5 point difference.

6 MR. FOERSTER: And hypothetically how much
 7 money does it cost to have a class of 16 kids
 8 versus a class of 26 kids?

9 I'm making a point that we see empirical
 10 data across an entire state, multiple subjects,
 11 that would indicate that class size isn't an
 12 enormously important factor in terms of expected
 13 growth on the part of the student.

14 DR. COHEN: And you see that it is rarely
 15 statistically significant, and we have it
 16 measured for up to six classes here. You don't
 17 see big effects from that, you don't see big
 18 effects from class homogeneity. It is sometimes
 19 statistically significant. The standard is
 20 about a 1 in 20 chance. We say it's
 21 significant. There's about a 1 in 20 chance
 22 that it's just due to chance and we've got 1, 2,
 23 3, 4, 5, 6, 7, 8, 9, 10, 11 different variables
 24 associated with size and homogeneity measured
 25 across seven grades that day. So that would be

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1 -- you have 77 comparisons. You'd expect 3 to 4
2 false positives. You'd expect just by chance
3 some things to be statistically significant
4 three to four times. So if you're looking for
5 candidates to eliminate this size of homogeneity
6 set of things would seem to be decent
7 candidates.

8 MR. MOREHOUSE: Do you know what their
9 average class size was in that data set?

10 DR. COHEN: I don't know that offhand.

11 MR. LeTELLIER: The one pro for keeping
12 class size that I can see is the fact that out
13 of the different variables that teachers have
14 brought up that are important to them, that
15 would be something that -- I mean, I don't know
16 how many teachers I've heard talking about class
17 size, class size, class size; and if it's not
18 going to negatively affect the outcome then is
19 it politically -- not politically. Policy-wise,
20 is it better to keep it in from the aspect of
21 people saying oh, wow, they're taking
22 attendance, class size into account, et cetera,
23 when they're doing this.

24 One of the things that I think is useful
25 coming forth from this discussion and model is

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1 how teachers perceive the system to be, how
2 parents perceive it, how the general public
3 perceives it, and that's something that -- and
4 I'm just asking the question, throwing it out
5 there, is this something perception-wise that
6 might be of good use?

7 MS. HALL: No, I don't agree because it is
8 in the law what our class size is, and even
9 though that law may change right now we are
10 under what the law says -- 18, 22, 27. That may
11 change, the class size is not -- we are within
12 the confines, and reading and math is going to
13 have those what we are required to do in law. I
14 find that one, they are statistically irrelevant
15 in this; I think part of the homogeneity that
16 was brought up was when a teacher has so many
17 level one classes, but that's really a school
18 based decision. It's really showing us that
19 it's not statistically relevant at all. I think
20 these are areas that if we're looking at what is
21 this system that we have now, looks at students
22 with disabilities, so I say yes, let's keep
23 those in.

24 Class size is really something that we
25 can't control and make statistically little

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1 difference. And our current accountability
2 measure isn't measured in that. I say we remove
3 all class size and homogeneity.

4 MR. MOREHOUSE: This is the concern that I
5 have. When you read the literature on class
6 size, literature identifies optimum class size.
7 The question I have is we don't know what the
8 average class size is in this data set. Was
9 that average class size optimum? If it is in
10 fact optimum, they will expect very little
11 variation and this outcome will suggest that. I
12 don't know what those numbers are.

13 MS. HALL: The majority of districts in
14 Florida didn't make class size, so they are
15 above. Only a handful made it.

16 MS. KEARSCHNER: If you're going to be
17 considering -- if you're framing this around a
18 controlled class size and applying it to reading
19 and math overall, you need to keep in mind that
20 this year in the legislature, they're
21 re-defining what classes, what math and reading
22 classes would be labeled as core classes, and
23 it's only the core classes. So you could have a
24 Calculus 2 class, it's math, and it's not -- and
25 you could have 45 kids in that class because

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1 it's no longer considered a core class. That
2 might not be an actual one off the list, but I'm
3 saying you can't say -- thank you -- so you
4 could see, and I would tell you that if you've
5 got a math teacher, a science teacher, whatever
6 it is, and you've got a class of 45 and you're
7 teaching a lab then that's a lot different than
8 teaching a class with 20. To a teacher they may
9 say I think that does have an effect, and by
10 keeping -- the argument for keeping it in,
11 whether it actually shows up in the data or not
12 as being statistically significant is you've got
13 the data.

14 MR. LeTELLIER: And class size is a pretty
15 big issue.

16 MS. KEARSCHNER: Huge issue.

17 MR. LeTELLIER: If you've got it in the
18 data and you can say to the teacher, here's the
19 results and here's the data, and it's clear,
20 then it makes it a very easy conversation, I
21 think I'm kind of for keeping it in there
22 personally.

23 MR. FOERSTER: I'm going to play devil's
24 advocate. The difference between class size and
25 homogeneity statistics and the SWD statistics is

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1 effect size. In this case some of the
2 homogeneity in class size statistics are
3 statistically not relevant. Both of those
4 things are true here.

5 I think that distinction is important.

6 While some of the SWD statistics may not be
7 statistically significant, their effect size was
8 appreciable in most cases. So to me then you
9 can still make the argument and I think it's a
10 good one to tell teachers absolutely those were
11 taken into account at a level of granularity
12 that speaks to you and the kids in your class;
13 and I think that's a great position to be able
14 to advocate for the decisions that we're making.

15 In this case, it almost to me would feel a
16 little disingenuous because I would know that
17 half of these factors were not statistically
18 significant to start with; and even the ones
19 that were statistically significant had
20 extremely small effect sizes. So it's almost
21 like pandering. I wonder if it's not more
22 constructive to actually say these were
23 considered and they were minuscule; and so they
24 were not in the model. That brings the
25 conversation forward a little bit, I think, to

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1 students and another teacher has 30 students,
2 the difference in the expectation is less than
3 one skill score point difference. So you can
4 have two arguments here, one that says you went
5 to the data and you resolved that it didn't make
6 the real statistical scientific difference. The
7 other pathway is you could keep things in
8 because you believe that they matter and some
9 people will perceive that they matter. Then
10 it's a little harder to defend a thing why you
11 didn't include other variables as well.

12 MS. ACOSTA: I have a question which will
13 help me decide where I want to be.

14 Will this matter -- even though in general
15 we say it's not statistically significant, but
16 will it matter sometimes? For example, I'm
17 looking at class size 5 going to the fourth
18 column. It's 1.967. That's almost two points
19 per student, right? Does that mean if --

20 DR. DORAN: Which column are you looking
21 at, just to make sure? Yeah, because you have
22 effect and you have standard error, like this.
23 So which one are you looking at?

24 MS. ACOSTA: I was looking at the standard
25 error not the effect.

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1 this isn't a factor.

2 DR. DORAN: I would just add one thing to
3 that. Now I'm not saying which direction the
4 group should go, but if you just want to add a
5 thought to your consideration, if the goal were
6 to include variables that had a perceived effect
7 on student achievement, whether or not they were
8 statistically significant or not, then this list
9 would be much, much longer than what exists
10 here. There are many more things that people
11 believe impact student achievement than probably
12 really do.

13 So the other side of the coin is the
14 committee now has data by which you can evaluate
15 whether or not something really matters in terms
16 of forming good statistical projections or not.
17 There's two pathways, I think, here. One is to
18 keep it because people believe it is relevant.
19 Then you have to have the argument of well, why
20 didn't you include other things because I
21 believe those are relevant, too, versus staying
22 within the signs and definitions of did
23 something matter statistically.

24 What we're seeing here, for example, just
25 looking at this one -- if one teacher has 20

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1 DR. DORAN: Okay. Yes, the standard errors
2 are not --

3 MS. ACOSTA: Okay. So are --

4 MR. TOMEI: When we're talking about effect
5 size, I just want to point out that if you look
6 at the SWD it is what it is. For a student that
7 is categorized as SWD 10, that is the effect
8 status for that student. Those class size --
9 the class size one, it's that times the number
10 of students in the class. So the effect sizes
11 -- you're not seeing the actual effect size for
12 any given class on there, so although they look
13 very small that number will change as opposed to
14 some of the other numbers that are what they
15 are.

16 MR. FOERSTER: That point is well taken.
17 I'm multiplying by 10 assuming that a difference
18 of 10 kids in a class is a pretty substantial
19 difference in class size; and if you multiply by
20 10 even then the effect size of any one of these
21 factors is small compared to most of the effect
22 sizes in SWD.

23 DR. DORAN: So for example, looking here
24 you'd have to have a difference in class size of
25 100 in order to get an 8-scaled score point

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1 difference between two teachers. So a
 2 difference of 50 students would be a four point
 3 difference in the expectation between two
 4 teachers. So you have to get beyond pretty
 5 large differences.
 6 MS. BROWN: Tenth grade?
 7 DR. DORAN: Tenth grade. Which variable,
 8 which row?
 9 MS. BROWN: Class one. It's 0.248. It's
 10 still small, but if you go over to 10th grade,
 11 so now you're looking at 10 kids makes a
 12 difference of --
 13 DR. DORAN: Ten kids makes a difference in
 14 this particular grade of 2.5 scale points.
 15 MS. ACOSTA: In a positive expectation,
 16 right?
 17 DR. DORAN: Yeah.
 18 MR. FOERSTER: Isn't that interesting?
 19 DR. DORAN: If you increase class size,
 20 there's a higher prediction because for whatever
 21 reason observed in the data, those teachers --
 22 it means you're a good teacher, more kids. Who
 23 knows?
 24 MR. LeTELLIER: Do you have any ideas of
 25 interpreting that as far as why some are
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1 negative, some are positive.
 2 DR. DORAN: I don't, I don't. There are a
 3 lot of variables that -- in fact, part of what
 4 you're asking is part of the complication. The
 5 more variables you include when you lose that
 6 parsimony, you lose the ability to really cross
 7 what's in the model and think deeply about this
 8 is here, this is here, this is here. That's
 9 part of why parsimony is good because fewer
 10 variables, you can really process, a lot of
 11 variables -- switched co-efficients, differences
 12 between the effects, it becomes hard to
 13 interpret. I don't have an answer for you and
 14 that's partly what we -- yes?
 15 MS. ACOSTA: If we don't know the original,
 16 the class size, if you have a class size
 17 students and you're going to do a lot of
 18 collaborative work, that might not work out so
 19 well. If you have 15 students, you've added 10
 20 students and actually they may learn more
 21 because they're able to do more collaborative,
 22 yes, and all that. But the question is between
 23 15 and 25 and 25 and 35, so does that still
 24 hold? I don't know.
 25 MS. KEARSCHNER: Jon had mentioned having a
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1 lot of people asking questions about will class
 2 size be considered? It is from a policy
 3 standpoint, I think it does matter to a lot of
 4 teachers out there, to a lot of parents who want
 5 to know, you know. It doesn't matter that my
 6 child is in a classroom that has 45 students
 7 versus a class size that has 20 students.
 8 And the other piece that I go back to is
 9 we're looking at an example and only an example
 10 of trying to decide whether it's statistically
 11 important or not, understand that, and the
 12 policy piece, too. But we also are basing this
 13 on reading and math core subjects, being tested
 14 right now with the tools available as opposed to
 15 having a statistical model where the tools are
 16 in flux and they're already saying, you know, by
 17 next year we have to have better data collection
 18 and those things are going to change over time.
 19 If that's an element that we're capturing, it
 20 may give some comfort to people to accept those
 21 numbers.
 22 DR. DORAN: Linda, just to dovetail on
 23 something that you're saying, people might ask
 24 you the question did class size matter. Here we
 25 can actually see whether or not it does and so
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1 here we see does it matter, the answer is pretty
 2 close to not mattering. There's a difference --
 3 you have to have 10 kids before you get less
 4 than one -- closer to a scale to a point
 5 difference. You can see that that's the pattern
 6 here. So not only do you have to answer the
 7 question, but here these are the data that
 8 provide you the basis so that you can evaluate
 9 that question.
 10 MS. KEARSCHNER: And for a teacher who is
 11 asked to carry an extra load, having that number
 12 to go back to may be important.
 13 MR. FOERSTER: Given the effect size, it
 14 wouldn't be important. I hear what you're
 15 saying and I completely buy that argument with
 16 SWD; because the effect size is substantial, it
 17 could make a difference there, but in this case
 18 by including them in the model even if you have
 19 a teacher that carries a particularly large load
 20 and we leave these factors in there for that
 21 reason, the effect size is tiny. Keeping them
 22 or not keeping them in makes virtually no
 23 difference in the score that that teacher will
 24 receive.
 25 MR. LeTELLIER: Because of the variable
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1 that's being used?
 2 MR. FOERSTER: Well, because the data
 3 indicated that the co-efficient on this variable
 4 was so tiny.
 5 MR. MOREHOUSE: Does it matter what the
 6 average size sample was per class?
 7 DR. DORAN: No.
 8 MR. MOREHOUSE: Doesn't matter?
 9 DR. DORAN: It doesn't matter.
 10 Can I ask a question just for my
 11 understanding. The class size policy is in
 12 effect now; is that right?
 13 PANEL MEMBERS: Yes.
 14 DR. DORAN: So classes in the elementary
 15 level can't exceed some particular number?
 16 PANEL MEMBERS: Yes.
 17 DR. DORAN: What was that?
 18 PANEL MEMBER: Eighteen.
 19 DR. DORAN: Eighteen?
 20 PANEL MEMBER: Eighteen to 22.
 21 DR. DORAN: Eighteen to 22. I'm willing to
 22 bet that before that policy was in effect there
 23 were class sizes that were even bigger than
 24 that.
 25 PANEL MEMBERS: Yes.
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1 DR. COHEN: Most schools don't make their
 2 class size targets, though, right?
 3 PANEL MEMBER: We made it.
 4 MS. BROWN: And right now some of them
 5 aren't making it just because they can't move
 6 one student over, that kind of thing.
 7 DR. DORAN: But in large part they're
 8 either close or making it?
 9 MR. FOERSTER: Right.
 10 DR. DORAN: I'm just going to hypothesize
 11 that had we done this kind of analysis when
 12 there were larger class sizes before the policy
 13 you might have seen larger effects, but that
 14 policy sort of mitigated that particular effect,
 15 so since you're living under a policy that's
 16 already resolved that particular problem and you
 17 can't have class sizes larger than 22, you're
 18 not seeing a large effect. There were
 19 classrooms that had 40 kids and we probably
 20 would have seen large effects and you might want
 21 to control for that variable, but the policy
 22 already controls for large class sizes and you
 23 may not need to deal with that through this
 24 model.
 25 MS. BROWN: The only thing I could add to
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1 that and maybe I'm treading on thin ice here,
 2 but I believe there may be some issues with, and
 3 this goes back to the course code directory
 4 decisions, but if some of the courses that count
 5 as reading courses are drama, journalism, et
 6 cetera, those don't have class caps that are
 7 forced by the law like English 1 intensive
 8 reading; therefore, this is the perfect
 9 situation where we may end up with class one may
 10 be your capped class, but class two may be the
 11 class of 40, 60, whatever, because they're not
 12 capped. So am I there or am I wrong?
 13 MS. KEARSCHNER: We can use middle school
 14 social studies, right, for the next -- until
 15 there's a course, didn't we say, in middle
 16 school?
 17 MS. ACOSTA: No, they're on the list to
 18 stay at 22 to 25.
 19 MR. FOERSTER: Yes, sir?
 20 MR. CAMPUTARO: I'd like to go back to what
 21 Harold said earlier about, okay, I understand
 22 from a teacher's perspective we like to see
 23 data, so if we kept it in there and I guess my
 24 score, whatever, my value-added model, and it's
 25 like, okay, you got this score, and then I say
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1 well, maybe they can reduce my class size, we
 2 have the data to show them. But it's not really
 3 significant from what we see, which then like
 4 Harold says opens up Pandora's box. Well, if
 5 we're prepared to show data that's insignificant
 6 or not significant, they're going to want to
 7 know why can't you show us data for everyone
 8 else?
 9 I mean, it's like Lisa said, you're going
 10 to have to present the argument of how come
 11 these were excluded because maybe they were
 12 similar to those numbers.
 13 MS. CAVANAUGH: We didn't have that
 14 discussion last time, though. We considered a
 15 whole host of things and eliminated things.
 16 MR. FOERSTER: Right, for a variety of
 17 reasons. Maybe I misunderstood Harold's
 18 argument. I thought he was arguing that leaving
 19 something in that is known to be insignificant
 20 and tiny effect opens Pandora's box for people
 21 who want to see other things but are
 22 insignificant and small effect size.
 23 MR. CAMPUTARO: Then we're going to have to
 24 pretty much --
 25 MR. FOERSTER: Well, maybe we look at this
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1 and say really these don't matter. And to
2 Linda's point about teachers wanting to know
3 that we've taken that into account, I think it's
4 fair to say we did take it into account, studied
5 it, looked at it statewide, and have compelling
6 evidence that it's irrelevant. And that's a
7 different answer than saying no, we didn't look
8 at it, or no, we didn't take it into account.
9 That's not what happened here.

10 MS. BOURN: Can't that be part of the
11 communication that's sent out?

12 DR. DORAN: To be clear, it will be and
13 we're doing multiple technical documents that
14 will expand on this and show in summary
15 documents that reflect the decisions of the
16 committee and things of -- so, yes.

17 MS. KEARSCHNER: I vote for eliminating it,
18 class size, if it's insignificant, why include
19 it?

20 DR. DORAN: Is that a motion?

21 MS. BROWN: Wait, wait, could I just ask
22 one quick question just look at the statistic
23 because we're saying originally we were told
24 that what is highlighted is not statistically
25 significant, so we can't just say eliminate

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1 decision or a motion we've got to be clear
2 because if we're throwing all of them out then
3 not only do you have to explain that you took
4 out things that are not significant, but why did
5 you take out something that was?

6 MS. FEILD: How could anybody have had six
7 classes?

8 DR. HOVANETZ: That's a good point. One
9 more piece of information. There are very few
10 students that have six courses based on the
11 breakout of the six, so even if the effect size
12 is 5.4, it's not attributed to a lot of
13 students.

14 MS. FEILD: Right.

15 * * * * *

16 (Whereupon, this concludes Day 2, Volume 1.
17 Day 2, Volume 2 will commence without
18 interruption.)

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1 class size because there are some that are and
2 some that aren't.

3 MR. FOERSTER: But the effect size even for
4 the ones that are statistically significant are
5 irrelevant.

6 MR. LeTELLIER: But that's what Harold --
7 remember what he just said about because we've
8 been working under these close stringent caps
9 and now we're loosening the reins on that, where
10 some courses are not going to be core anymore,
11 and that could change those co-efficients quite
12 a bit.

13 MS. BROWN: And even just looking at the
14 co-efficients that are there, say look at the
15 effect size. Look at class six 6th grade, it's
16 5.45. It's huge, I guess, or I don't know.

17 MR. TOMEI: Which class?

18 MS. BROWN: Sixth grade.

19 MR. LeTELLIER: Where are we looking?

20 MS. BROWN: Class 6, row 32, column D.

21 What is that number?

22 MR. LeTELLIER: Plus 5.456.

23 MS. BROWN: It's huge; it's not
24 statistically insignificant. I'm not arguing
25 either way; I'm just saying when we make that

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