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
1 (Whereupon, this is an uninterrupted
continuation from Volume 1, to-wit:
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* * * * *

4 DR. DORAN: Good morning, everybody.
Welcome back to day two. We have some very
thoughtful and helpful questions coming in from
the web yesterday, and so we had something over
70 people watching on. We'll try and do our
9 best. We want to thank you folks for watching
online as well as here in the room.

11 We covered a pretty tremendous amount of
ground yesterday. Let me just refresh us in
terms of where we have been. We started six
14 weeks ago with a more policy oriented and
thought experiment oriented-type discussion on
what are the different model types, what are
some of the issues about value-added modeling,
what are some of the models that seem most
sensible, and we had some pretty interesting
conversations surrounding those kinds of
policies and model -- genres of models. From
there during that six week period, we ran a
number of different value-added models in both
23 math and in reading, eight different model types
across seven different grades. That is well in
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3 excess of over 115 models or so.
2 We started the day yesterday with a
description showing the teacher effects and the
school effects estimated across the different
models and showing that the behavior of the
6 models all of them across all grades in both
subjects behave similarly, it would be virtually
impossible to present the results over a hundred
models to this group within a two day period.
So we used that comparison of the models and how
11 they behaved similarly to justify our reason for
focusing only on grade 7. We chose grade 7 only
because it's in the middle, and models in grade
4, grade 10, reading and math. So it's a
relatively good sample of what we're looking at.
16 There were no models that behaved very, very
differently in different grades. If they would
19 have, we would have pulled those out, brought
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
precision. We looked at the standard errors and
which of the models produced smaller average
25 standard errors. That's an important statistic.
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4 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
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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We want you to try and press us to find the straightforward answer. Then from there we're going to look at some consequences. We're going to look at consequences in terms of expectations, what are the different expectations, conditional on different kinds of students, predictions for growth for students that are ELL, gifted, and so forth. We'll show you those data. We also have correlations of the value-added effects from all of the models with things that you think are correlated with the value-added model. So things that you think would be related to high value-added effects, we show those correlations within as well as some other factors. We'll go through the slides. Whenever we finish that, we'll turn the microphone back over to Sam who will facilitate a continuing conversation on now that we have most of the information, what are the lingering issues? Where do you need more data? Where do you have more questions? I want to remind you that Jon and I have data -- not everything, but we have a substantial amount of data we can look at. We also have a discussion, if I recall properly, one of that. I seem to remember a discussion on that, and hopefully the data today will renew our minds of some of that.

DR. DORAN: We're going to show you district by district of value added effects by district. Okay. That's this second one. That is what you're going to show them, right?

MR. COHEN: I'm prepared to show.

MR. DORAN: I've put him on the spot. Any other questions before we start the day?
being as transparent as we can possibly be.

All right. We're going to turn it over to Jon and we'll go forward.

DR. COHEN: Impact of school effects.

Round 2. Let's try this again. I guess when Harold said I'm going to tell you the impact of teacher's scores of school effects, I'm going to answer that question now, and when I say I'm going to answer the question, I'm not really going to answer the question.

I'm going to do my best to make clear the question and then we can work towards an answer. A bunch of us were talking earlier this morning about it and Sam raised this example. Suppose you have two schools and one is a very high growth school. All the kids are learning an extra ten points -- we won't choose a number -- an extra ten points, and you have another school that's a very low performing school. All of those kids are learning like ten points less than elsewhere in the state.

If you take a teacher from school A, the high performing school, and move them to school B, assuming that the same teaching methods work and they do, yes, and you need individualized instruction and all that, assuming everything else is the same can that teacher produce -- will that teacher produce the same results, 10% more than the average in that second school? Right. So you take a teacher from school A, put that teacher in school B, will that teacher produce the same results. One side of the question. I don't know the answer to that. I suppose we could probably pay teachers to participate in an experiment and move them from school to school, but how you apportion school effects and what you do with school effects in the model really depends on what your answer is because it might be that you take that teacher from school A where they were doing the same as other teacher in the school and give them 10 extra points of achievement and move them to school B where everyone else, their students are 10 points less than the state average, and you might find that they hit zero. They get up to the state average and is 10 points more, or will they have the absolute value of 10 points more.

Sam, is that -- are people clear within the question here? Is anyone not clear with the question? Okay.

I'm going to open up a spreadsheet. All right. It actually didn't take all that long for this spreadsheet together.

MS. BROWN: Can I just throw out a little point of thought? I want to be careful because I know when we get into school effect a lot of times what we're really trying to get at is we don't set up a model that incentivize teachers to leave our most needy schools and stay in other schools because they could get a better effect. That's what we are all trying to get at. But we also have to be careful that we understand the terms because in the value-added world, the term high growth, which would be a high performing school, or low growth which would be a low performing school in value-added, that's not identical to high achievement as in greatest percentage of level three and above readers and low achievement, because you can be a high achieving school with zero growth in your students.

Therefore, you would be low performing in value add, but you could be a lower performing school achievement-wise, maybe in a very urban poverty school but have high growth and be

considered a high value add school. So it's important to understand the difference between those two terms as this conversation rolls forward, I think. Okay. Sorry.

DR. COHEN: That's true, and in fact, at least with the data here in Florida, you tend to see higher growth among lower performing students.

MR. FOERSTER: To give an example, I think we're all thinking we're in a great school that has high growth, you know, plus ten points average and I think -- myself, I was guilty, also. I'm gravitating immediately toward the schools in my district that I think are great schools. The truth is probably those aren't the schools that are going to have the high growth rates. They're going to be the lower performing fewer kids at three and above kinds of schools, so if we're all sort of making that assumption I think that's a really valuable point to re-calibrate our thinking about --

MS. BROWN: Yeah, because it's actually sometimes the middle-of-the-road schools that are raising that bar of achievement, getting to that high level of achievement and they got

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there because they have high levels of growth.

MR. FOERSTER: Right.

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

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

MS. BROWN: Well, I think you have to remember for the purposes of this discussion what we're talking about is focused around value-added school effects and teacher effects.

Therefore, when we use the terms "high performing" and "high growth", you just have to remember that a school that's getting a lot out of their kids, not necessarily a school that has the highest levels of achievement as defined by our state test.

MR. LeTELLIER: That's kind of what I was getting at yesterday because I've talked to several of you individually at lunch, et cetera, but it's the fact that we don't want to handicap a teacher with 30 children and all your children have a high performing school and you're a kids becomes a really big deal.

different expectations of growth for different student growth to be fair to the teacher without affecting the student in a negative way.

When you go to reconcile them while there is the complication in there, though. Here's the thing that is the benefit as I understand it about value-added, then they'll be in sync, right? So disparity then.

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

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

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

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

MR. LeTELLIER: In how it appears.

MS. BROWN: Exactly.

MR. LeTELLIER: Absolutely.

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

MR. FOERSTER: I don't mean to throw a complication in there, though. Here's the thing that is the benefit as I understand it about having them distinct and separate. Right now we can take into account different expectations of student growth to be fair to the teacher without impacting our actual expectations on kids because those models reside in separate silos.

When you go to reconcile them while there is the benefit of being consistent, which I completely buy, the policy implications of setting different expectations of growth for different kids becomes a really big deal.

MS. FEILD: The only problem is that if you have a high performing school and you're a teacher with 30 children and all your children...
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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18

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
deliver a 50/50, right? Is that what your model
up here does?
16 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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19

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
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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20

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

All right. So we start -- I made up the schools and we can change this if you want.

School 1 has a minus 50 point common component, so on average students at that school are 50 points less than the state average in growth.

School 2 is exactly the opposite; it's a more effective school with higher growth, 50 points above the school average, and this particular teacher, we'll call him teacher Harold who's the good teacher, Harold has a 100 point effect, true effect. Under any world, this teacher is going to increase the student's achievement by 100 points, what the teacher is causing.

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

Remember, we're in the world where only the teacher matters. We take Harold and his class magically transport them to school two. That's the really higher growth school and you see School 1 has a minus 50 point common component to the teacher because we know that's the thing that matters and if you do that you'll get unbiased estimates in both schools of about 100 points. And we know that Harold induces an extra 100 points of learning among his students and so that's the right answer.

Now we move over to the parallel universe where there are real live school effects that Harold can do nothing about. If we attribute all the school effects to Harold, we're going to estimate his effectiveness at only 50 points in the lower growth school and 150 points in the really higher growth school with his class and they have --

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

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

MS. ACOSTA: I just want to add also sort of a way to look at that from a policy American Court Reporting 850.421.0058
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
16 Do you in some way limit the teachers at
17 the higher performing schools? And you may have
18 to, at least as I understand it, in order to
19 make sure that we're fair to the people at the
20 lower performing schools.
21
22 MR. LeTELLIER: I think part of looking at
23 this, it's -- maybe it's kind of how you look at
24 what school effect means. If we're looking at
25 it here, it may mean one thing. If we're
26 looking at it from the way we're all thinking in
27 a general term, we know the school has a
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26
27 positive effect. What does that mean, you know,
28 using this nomenclature, I guess, just trying to
29 put that together with how we're putting
30 together a model. If I'm reading the chart
31 right, the more that you add a school effect,
32 the less that a teacher has a chance to show
33 growth.
34 So different from what we're thinking,
35 which is schools do affect the situation. In
36 the model here, the more that you add from that
37 the less, you know, the spread -- so to speak is
38 less for how a teacher can look good or bad, I
39 think, because as you go higher with the school
40 effect then obviously that will prevent the
41 teacher from getting too low as well, correct?
42
43 MS. HALL: I have a question. You're
44 talking about schools here in this model and in
45 school 1 it's minus 50 points compared to the
46 State. Now that's not my understanding; I just
47 want to make sure that we're clear is that when
48 we're talking about a school effect at negative
49 50, I'm talking about the entire growth that has
50 happened at my school in relation to what's
51 happening in the classroom. My teachers have
52 shown growth with their students because we have
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28
29 two lags and they've made growth; and so we can
30 measure that. That same model is applied to the
31 entire school, but you're describing this as
32 compared to the State. So I just want to make
33 sure that I'm clear because now that's whole
34 'mother differential that's coming into. Now my
35 growth is now being compared to the State and so
36 I just want to make sure --
37
38 DR. COHEN: It is in fact -- all of these
39 are comparative. Remember the progression line
40 with the scatter plot we put up before? That
41 State level if you create an expectation and the
42 value-added, so that comes under the expected
43 growth and we're looking at the value-added, the
44 amount of extra growth beyond that or less
45 growth relative to that statewide expectation.
46 So there is a State component there.
47
48 MR. COPA: Just one clarification. State
49 average based on the parameters of the model.
50 So it's not just one number, simple average.
51
52 DR. COHEN: Yes, given the two years prior
53 achievement and the --
54
55 MR. COPA: Everything we have in the model.
56
57 DR. COHEN: Okay.
58
59 MS. TOVINE: Which model -- which one is
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29
30 the truest representation of a teacher effect?
31
32 DR. COHEN: In which universe? See, that's
33 the essential policy choice because we don't
34 have a technical answer. Are there things in
35 the school that the teacher can't affect that
36 influence student achievement? If the answer to
37 that is no, then this is the right model and
38 this is going to be the truest unbiased
39 estimates. So this is what you want to do if
40 that's true. If there are no things -- let me
41 start over.
42
43 If there's nothing at the school that
44 affects students that the teacher can't
45 overcome, if the teacher is the only influence
46 on learning at the school, then you're in this
47 universe and your unbiased estimate comes in --
48 PANEL MEMBER: The same.
49
50 DR. COHEN: -- when all the effects are
51 attributed to the teacher.
52
53 MS. STEWART: I'm trying to get this clear
54 in my mind, but I think - my thought is if this
55 is a super star at a low growth school, I'm
56 having trouble with their being penalized by
57 including the school effect. They naturally are
58 affected by the school effect because they're
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there, if in fact we believe that there is a
school effect. The reverse is true as well. If
a less than highly effective teacher is in a
high growth school, we're hiding their lack of
ability to get that student growth that most of
the teachers in that school are getting. So you
have swung the other direction and they've even
been in that school that had the great school
effect and in spite of that they were unable to

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

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

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

MS. STEWART: Or what I’m saying is there
is a school effect, but in spite of that school
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effect they either had really high growth in a
low growth school or the reversal of that.
That's really what I'm saying, Jon; I may not be
saying it well.

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

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

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

MS. STEWART: I understand.

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

1 PANEL MEMBER: That's a school effect.
2 PANEL MEMBER: School effect.
3 DR. COHEN: Let me ask a couple of
4 questions just to make sure I understand what
5 you're saying.
6 So do you believe that there are
7 independent school factors not associated with
8 the teacher that affect the students' growth?
9 MS. STEWART: Yes.
10 DR. COHEN: Okay. Then we are in this
11 world, okay. So we're in this world but that's
12 okay because there are different estimates we
13 can get in this world if we want by doing
14 different things. Now, the teacher, Harold, is
15 a 100 point value-added teacher. We know that
16 that's true. You don't have to perform to give
17 him an unbiased 100 point estimates. You may
18 prefer, I think, to give him one of these other
19 estimates.
20 MS. HALL: I think for clarification is
21 that when you get a number where you have 101
22 and 101. What they're saying is is that the
23 most accurate measure, and so the half-and-half
24 when you attribute half of the measure to the
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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 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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a less than effective teacher to look better
than they are because they're in a school that
has a very high effect. So if we're setting up
that system fairly where there's unbiased scores
then we're okay with that. I'm hoping that that
solves her question.

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

MS. BROWN: Yeah.

MS. WOODHOUSE-YOUNG: That's important.

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

MS. BROWN: That's a good thing.

MR. LeTELLIER: Yeah. But I was looking at
this and something struck me, which is we're
assuming that we have to take and do this as a
50% or that we have across the board with all
schools. What if the school effect was measured
by some sort of a rubric or point system?
Therefore, you're -- because we would all agree
at some schools they are managed better than
others. If we're going to say that some
teachers teach better than others then some
schools are managed better than others. I mean,
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at any level you can make that assumption.
If we make that assumption, is there a way
to take and make -- we all know that there's a
school effect of some sort. Is there a way to
take and make some sort of a sliding scale --
that would be my question to you guys -- that
would make sense so that maybe at one school
when it's all added up at the end of the day we
found that this school had a 10% effect upon the
kids, school B down the road, the school effect
was more like a 40%. Is that at all possible?

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

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

MS. BROWN: But doesn't that go, too, to
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school is 'X', what contributed to that?

MR. LeTELLIER: So are we saying --

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

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

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

MR. LeTELLIER: Yes.

MS. BROWN: How would you know that?

PANEL MEMBERS: (Over-speaking.)

MS. EDGECOMB: Anna, I think you've
answered my question. I hope you haven't
because I want to change it a little bit. Does
it have to be half and half? I don't want to
talk about on a sliding scale like you talked
about, but I think it is philosophical about
what do we believe is the biggest factor here?
Do we attribute then a higher number to that?
DR. COHEN: No, there's nothing magical about a 0.5 other --
MS. EDGECOMB: Okay, whatever. And if we believe that, and we do believe that the school effect is important but maybe not as important as the teacher effect, can we do a half-and-half, 25, 75, I mean, can you do that?
DR. COHEN: Any numbers you like.
MS. EDGECOMB: Well, now, is that a guess or is that --
MS. BROWN: No, no, I -- MS. EDGECOMB: We have to decide philosophically what we believe, and then we can, I think, then we move to attributes where we assign to that that would indicate philosophically where we are.
MS. BROWN: This is what's important, I think, because when you look at these numbers the implication is there's a range from 0 to 1.
The closer you are to 0, that's the skew you would see in the third universe to the right, and the closer you are to 1, that's the skew you would see. But that's because the universe is half-and-half.
MS. EDGECOMB: Right.
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MS. BROWN: If you made a fourth universe that was 80/20 was 90/10, whatever it is. Then if your attribution equals your universe belief, you would still have an unbiased score.
DR. COHEN: That's right.
MS. BROWN: That's what everybody needs to hear, I think. If that's correct then you can say we believe there are school effects, we want to err on whatever because it's got to be common, it's not something you can say each school's different --
MS. EDGECOMB: Right.
MS. BROWN: And so if we say, okay, 10%. We're going to put -- 10% is from the school, 90% is the teacher and 10% is the school. We'll give a little bit of credit for the way the environment is. Then there's a way to do that, then the attribution is 0.9 or whatever it is, and you can still have the 101-101, both teachers or teachers look the same in both schools.
DR. COHEN: That's exactly right.
MS. BROWN: That I think was the crux of our worry.
MS. EDGECOMB: Yeah, and I think thinking...
MR. FOERSTER: In real world one. Okay.
Where I'm going is that in world two the same
formula still seems to hold. Teacher effect in
that case is equal to the actual growth
demonstrated by the kids minus the school
effect.
MR. TOMEI: Whatever the percent is.
MR. FOERSTER: Right? Because you're
assuming that in this case the teacher effect is
still 100, but because our formula is teacher
effect equals actual growth minus school effect
you run it all through school one, the school
effect is minus 50 points.
DR. COHEN: Right, and this is all good as
long as you don't confuse school effect as
you're using the term right now with a common
component within schools that we estimate.
MS. BROWN: Yes, because that assumes that
everything in the school effect is the teacher
had nothing to do with it.
MR. FOERSTER: Common component.
DR. COHEN: Yeah, so --
MR. FOERSTER: But we are using those terms
interchangeably through the course of this
correction, right?
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DR. COHEN: Even here there's a common
component, right? The common component in this
world, also, because in school one they tend to
have teachers associated with lower growth. The
average teacher is causing less growth, not as
good teachers.
MR. FOERSTER: Right.
DR. COHEN: In school two, the average
teacher in that school is causing more growth,
so there is a common component but it's not a
school effect. It's only because of the things
the teacher is doing.
MR. LeTELLIER: Is another way of saying
this that once you put the school growth in
there that the teacher is responsible, let's say
maybe 80/20 as you're saying, the teacher is
responsible for 80% of the growth if it was
split like that.
DR. COHEN: I think that's right, yes, and
80% of the average growth observed at the
school, something like that.
MR. LeTELLIER: So we just need to come up
with a percentage then that we feel comfortable
with, whether or not it's all school versus the
teachers in with that 20% or whatever.

In the second column you're saying teacher
effect is still 100 points. What creates a
teacher effect of 100 points in this universe is
actual student growth down at the bottom row of
50 points in school one because school one has a
common effect, I guess, of minus 50, and in
school two that same teacher would have to
generate an actual growth, average growth per
cid of 150 points to get a teacher effect of
100.
MS. BROWN: But if the school is
| 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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| 51 | school then the teacher effect if it's 100 is |
| 52 | going to be actual student growth minus the |
| 53 | school effect, right? So in the case of school |
| 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. |

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terms of teacher effect as reported relative to actual growth, you know, and I think the relationship really is just this teacher effect equals actual growth minus school effect; we're arguing about co-efficient. We don't have to decide that today.

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

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

MR. FOERSTER: Do you want it decided today?

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

MR. FOERSTER: Okay. Sorry.

MS. HEBDA: Not in the next ten minutes necessarily, but you do need to get there. So I think maybe the next discussion if that's where you want to see how long it would take you, you might need maybe the next discussion for the committee is what you need, what you see data-wise that maybe could help you talk about apportionment.

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

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

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

MS. FEILD: Are there existing bands used in other states that utilizes school effect, and if so, what does the research show in either states that have used it, are they apportioning 50-40%, do we know?
that for senior high, did you?
that Harold just commented on, you didn’t run
this item at this point?  Where are we?
discussion?  Are we not ready to take action on
there and we put it to a vote?  Do we want more
already has been.  So I'm looking for direction.
Hebda has indicated that it would be advisable
implicit.  We chose 3C and 3C has school effect.
co-efficient?  It seems that's the work at hand
here.  We're all in accord that we want the
decision; of the school effect how much gets
apportioned to the teacher and how much gets
apportion is weighted for the schools.
Mr. Foerster:  And that's the danger of
making that number too high, right?
Dr. Doran:  Just so you know, as you weight
the school effect weighted lower, the
correlation between the new teacher effects, the
weighted teacher effects and the teacher effect
only model, it also gets lower.
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Mr. Foerster:  So at this point what is the
pleasure of the committee in terms of defining a
coefficient? It seems that's the work at hand
here. We're all in accord that we want the
school effect in the model.
Mr. Tomei:  Why don't we vote on that since
we never made that official, right? Or do we
have to?
Mr. Foerster:  Did we? Actually, it's
implicit. We chose 3C and 3C has school effect.
So what's at issue is the apportionment and Ms.
Hebda has indicated that it would be advisable
that we get that done today. I'm not sure that
we're going to see any data that really is going
to inform the discussion any more than it
already has been. So I'm looking for direction.
Does somebody want to throw a number out
there and we put it to a vote? Do we want more
discussion? Are we not ready to take action on
this item at this point? Where are we?
Ms. Feild: I'd like to ask if the analysis
that Harold just commented on, you didn't run
that for senior high, did you?
Dr. Doran:  Just grade 7 math and reading.
Dr. Cohen:  So, Harold, one more time. How
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| 62   | point is this: It is a school effect, but once that door closes it's me and those kids and I don't want that school effect so high because it's just not true. We've got - you know, I'm a teacher and a child advocate.  

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

   DR. COHEN: Doretha?  

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

   MR. TOMEI: The way the test data are designed, you can run those in every 10% increment and aren't you going to see a relatively linear association with the correlation between the teacher only and -- American Court Reporting 850.421.0058 |
| 63   | MS. BROWN: Absolutely.  

   PANEL MEMBERS: (Over-speaking.)  

   MR. FOERSTER: No, it will go down.  

   DR. DORAN: So as we apportion that --  

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

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

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

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

   PANEL MEMBERS: (Over-speaking.)  

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

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

   PANEL MEMBERS: (Over-speaking.)  

   MR. TOMEI: We have to decide how much of the school effect ought to be attributed to American Court Reporting 850.421.0058 |
| 64   | teachers based either on what we think is actually happening or what we think would happen in an ideal setting where the teachers are truly powerful in helping the school move forward.  

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

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

   DR. COHEN: Ma'am, Nicole?  

   MS. MARSLA: Just in the opposite a little bit, one of the ways that I'm looking at this is in looking at the teacher effect there's more teachers in that school affecting that student than just the one who's being judged as language arts and math. As a social studies teacher, I cover reading and that should be included in the American Court Reporting 850.421.0058 |
| 65   | school effect because my teacher effect isn't affected. So part of the school effect is still the other teachers. I mean, it's not just these over-arching factors that we keep going back to.  

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

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

   MR. FOERSTER: Right, right. Okay. We're. Talking about how much of the school effect we're going to factor into the calculation for teacher effect. The stronger you believe that the school effect really, really, really matters and that it is independent of the efforts of an individual teacher, the closer that co-efficient needs to be to one. The less strongly you believe that or conversely the more strongly you believe that the individual teacher really has a lot of bearing on how that school effect comes out, the closer that co-efficient needs to be to zero, which takes you closer to a teacher only model.  

   I really am on the bus. There isn't a American Court Reporting 850.421.0058 |
data-driven opportunity here. It's philosophical. We're going to pick a number and we're going to live with it and we can change it later. Sandi?

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

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

MR. LeTELLIER: I move for 80/20.

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

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

MR. FOERSTER: So you want the co-efficient to be 0.2, a relatively small number out there.

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

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

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

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

MR. FOERSTER: It informed us only in that what we would expect to be the case, which is that the heavier you weight school effect, the less strongly correlated the calculated teacher effect is to a teacher-only model, that correlation gets weaker. You would expect that to be the case because you're driving further away from it, and all his calculations illustrate is that's true.

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

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

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

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

MR. TOMEI: If you think about things in a school that are truly independent of the teachers, if you believe school leaders make an impact, then that's a piece of the school effect that shouldn't be attributed to teachers which is one of the arguments, that there's some school effect that's independent. On the other hand, if you believe that the essence of what happened in schools really is in large part of control of the teachers both depending on what they do in their individual classes, which is a teacher effect, and how they work together as a collaborative learning community, which is how they influence the school effect, they have an ownership or part of that. Then again the philosophy here is how much of that school effect do you really think can be controlled collectively by the teachers if they're working effectively as learning communities?

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

24 

the school effect plus all of their teacher 

work or how they can work if a great learning 

community is established in a school.

8 

MS. STEWART: But, Lance, it's not enough 

to second the motion.

10 

MR. TOMEI: I'm not saying that 80 is the 

right number, but I do think it's something more 

than 50 in my mind. Again, it's such an 

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 

saying that of the school effect we're only 

taking 25% of it into account because we believe 

that the other 75% is teacher. So we're talking 

about a co-efficient on the school effect of 

0.25, and everybody clear about what that 

implies philosophically?

22 

MS. MARSALA: We're talking only the single 

teacher in their classroom who's being held 

accountable, not all the other teachers who are

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1 

also working toward that common goal, and that's 

the big thing we keep losing when we say 

teacher. Not all the teachers who are working 

with that student, it's just the one in that one 

classroom in language arts and math for reading.

6 

MR. FOERSTER: That is one of the 

articulations of what we're talking about here.

8 

If you believe the collective has a really 

strong bearing on student growth then you are in 

favor of a co-efficient on the school effect 

that's closer to one. If you believe 

fundamentally that the impact of individual 

teachers, or as I understand Lance's discussion, 

their working together to create this effect; if 

you believe that that is a stronger force then 

you want the co-efficient on the school effect 

to be smaller.

18 

MR. TOMEI: So if we pick 75/25 which has 

just been suggested, that means every teacher in 

the school is going to be credited with 75% of 

the school effect plus all of their teacher 

effect that's measured independently --

22 

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

23 

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 

school, 75% to the teacher, which is what I 

think I just heard, then every teacher gets 75% 

of the growth attributable to the school effect 

and 100% of their teacher effect growth. I see 

heads shaking.

7 

PANEL MEMBERS: (Over-speaking.)

8 

DR. COHEN: All right. Let me just ask 

this because it's clear the committee is saying 

things and not always meaning the same things 

when they say it.

12 

Do you believe that whatever is common in 

school, that common component, raise your hand 

if you think it's mostly attributable to 

teachers?

15 

All right. Then you want to say that you 
want to add 75% of the school effect back into 

the teacher effect. So it will be your teacher 

effect in this model will have a mean within the 

school of zero, plus 75% of the school effect 

which will be non-zero. So that -- Lance has it 

right; you want to move it from the school 
effect to the teacher effect.

23 

MS. MARSALA: He was subtracting. Lance 

was subtracting that's why he was starting from 

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hybridized universe we're between zero and one, and the closer you are to universe one where it's individual teacher that co-efficient is closer to zero, and where you're closer to universe two where you believe it's all going to the school, that co-efficient is closer to one.

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

Okay.

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

**MS. BOURN:** Can we just do it in general terms? Are we really talking $P_{sub-S}$ where $S$ is the score? So teacher's score is equal to $T_{sub-E}$ teacher effect minus $S_{sub-E}$, which is the school effect -- put an $X$ in front of it for the co-efficient, and then let's define $X$. Where $X$ is going to be the apportionment of school effect and then the philosophy is how is that attributable to teacher versus school?

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

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

**MS. BOURN:** But it's pretty close.

Wouldn't it be --

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

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

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

**MS. FEILD:** See, I thought it would be reversed; I thought it would -- if we're talking of $75/25\%$, I thought it would be $0.75 \times$ the teacher effect plus $0.25 \times$ the school effect. The sum of those two equals the teacher.

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

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

**MR. FOERSTER:** That's the point of confusion.

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

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

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

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

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

**MR. FOERSTER:** How close is it?

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

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

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

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

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25. 'effect' but what we mean by that is actual growth as calculated by these residual individual kids, la-la-la, relative predictable upon actual growth generated by that teacher minus --

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

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

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

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

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

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

32. DR. DORAN: I would go about this a little differently. Suppose -- this is all helpful, but I was thinking about this and maybe it's...
to the teacher, okay? We start with that. I think that's what you're talking about and then we -- if we estimate with Model 3 where we've got school effects, also, then our teacher effect becomes T1 minus S, which is the school effect, and we get a school effect, right? So now T1, your model where you attribute everything to the teacher, is equal to T1 minus S plus S, so we can go -- we can get back from Model 3 back to Model 1 using this formula, right? 

MS. BOURN: T1 is teacher --

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

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

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

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

MS. BOURN: Yeah, the subscripts are fine.

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

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

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

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the teacher value added score is equal to the
actual growth as calculated as the average of
the residuals minus some proportion of the
school effect.

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

MR. FOERSTER: Absolutely.

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

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

MR. FOERSTER: Is it close?

DR. DORAN: It's close enough, but let's
just make sure that there's clarifying statement
that there's actually another component that's
used.

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

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Whereupon, a short break was had.

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

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

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

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

MR. FOERSTER: Is there a motion on the floor?

MS. BOURN: It was 25/75.

MR. FOERSTER: Did that get moved?

MS. NOYA: No.

MS. BOURN: Yeah.

MS. NOYA: It did not get moved.

PANEL MEMBER: It was not seconded.

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

PANEL MEMBERS: Twenty-five.

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

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

MR. FOERSTER: And that's a bad thing?

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

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

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

MR. FOERSTER: Less important.

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

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

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

If you're an elementary school, we have three county schools -- I mean three community schools, and you're teaching in those

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1 communities, and when those jobs are filled up you're going to the county elementary school. In that county elementary school, there are definitely some challenges. So for me, I can't vote for anything that doesn't get us as close to one as possible because if we don't take into account the school effect, that is disabling our teachers any way you look at it. I've run the numbers for the 'A' schools, I've run the numbers for the 'F' schools and I just can't vote for anything that's not as close as one as we can possibly get.

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

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

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

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

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

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

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

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

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

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

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

MS. ACOSTA: Yeah, yeah.

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

Nicole?

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

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

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

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

Lance?

MR. TOMEI: Yeah, I just want to again emphasize, I think if you say that you want that number to be close to one, you're really making two philosophical statements. You're making one statement that you believe that school effect is extremely important, and the other statement that at 50/50 it's neutralized or it's equally shared?

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

The other thing that I would just remind everybody is, and Sam's obviously right; no matter what decision we make here there will be instances where the model will disincentivise (sic) some things. There will be some bias in the model, but keep in mind that this model ultimately will drive 40% of the teacher
evaluation. So if we understand the model and understand that we can’t totally eliminate those, but we can measure that, then the other 60% of how we evaluate teachers can be designed to counter-balance the disincentives create that we want to prevent.

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

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

MR. TOMEI: Well, I think a lot of this has to be done at the district level, but the districts need to be aware of the model and how the model functions and the strengths and weaknesses so they can factor that in to how they design their evaluation system. I think this will be an interim process over time and the whole process will get better. In terms of this apportionment argument, I think that Florida will be the vanguard here. I think other states -- we’re not going to be able to look to other states to see what’s been learned elsewhere. I think other states are going to look to us to figure out what is Florida learning about how to go about this element of a value-added model, if in fact we’re going to incorporate the school effect.

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

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

-- one factor among others.

MR. FOERSTER: Any additional discussion?

Okay, then I recommend this approach and if you have another suggestion I will welcome it. We have a motion on the floor for a weighting of 0.25 which means obviously that’s closer to zero, we want to weight school effects less heavily because we believe teacher effects to be more important. I’m going to look for a second and let it go to a vote. Do not feel compelled to vote at this point. What we can do next is put in 0.35, 0.50, 0.70, 0.80, and hopefully we’re going to find a place where the majority of us say that seems about right to me and we’re done. If we don’t we’re going to need another idea.

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

MS. NOYA: I second it.

MR. FOERSTER: Okay. All those in favor of this question, that that other committee could at least be part of how this issue gets communicated throughout the state.

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

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

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

Again, just like you’re talking about this being one factor of a teacher evaluation, that will be one factor in an overall evaluation of a teacher preparation program going forward or a leadership preparation program going forward. So this model is going to be interacting with lots of different things, not just teacher evaluation and principal evaluation going forward, that's correct. It works the same way.
1. a motion to consider a weighting of -- let's make it an even fraction, 0.33?
2. MS. WOODHOUSE-YOUNG: I'm still a little bit -- even though we may have a number for the school effect. That number 25 is multiplied by a negative number?
3. MR. FOERSTER: We're going to stay out of the woods on the positive/negative.
4. MS. WOODHOUSE-YOUNG: Because it would matter for the score.
5. MR. FOERSTER: Here's the thing. If the school effect is negative, the impact on the teacher will be positive because whatever that teacher has generated in terms of real growth is that much more significant because they did it in an environment where the average teacher effect or teacher value-added score is less than zero. Does that make sense?
6. MS. WOODHOUSE-YOUNG: So, okay, teacher score 100. As Stacey was mentioning, she's at a school where a school effect is negative. So if that number I'm using is one times that negative number, that's going to adversely affect my score.
7. MR. FOERSTER: The co-efficient is simply 25. So, okay, teacher effect can go plus or minus, depending on the school effect. It's not going to change, but then we're saying should we add an adjustment in there because there's something about the school that's happening, and if so how much of what's happening at the school should be put in there?
8. MS. EDGECOMB: By the same token, should we subtract from it?
9. MS. FEILD: But you can subtract and I think that's what we need to make sure we understand. Okay. In the end if a teacher finishes with a teacher effect of X, that X can be positively or negatively impacted by the school effect?
10. MR. FOERSTER: That is absolutely right.
11. MS. FEILD: Okay. So if she gets her score report or whatever and she's got a number, that number can now be altered for her evaluation based on the school effect plus or minus.
12. MR. FOERSTER: To be clear, I don't believe she's going to get a score that is --
13. MS. WOODHOUSE-YOUNG: So, okay, teacher school where a school effect is negative. So if I'm using a smaller school effect even in our situation, those schools will be negatively impacted if the school effect is negative.
14. MS. WOODHOUSE-YOUNG: As Stacey was mentioning, she's at a lower performing school.
15. MS. STEWART: And that's why the districts can play --
16. MS. STEWART: And I think to use Stacey's example, and I'm very familiar with those schools that she describes, a shining star in those schools will be negatively impacted if the student growth of that school is less than that shining star in that school.
17. MS. LE TELLIER: So in which case the smaller school effect even in our situation, what you're saying is that teacher is going to look very good so they don't have to worry about a lower performing school.
18. MR. MOREHOUSE: But are we losing sight of the fact that the administrators -- that evaluation of teacher is not only determined by our model, but it's also determined by administrators, their evaluation. So the evaluation could be changed by that shining star.
still be seen with a very positive evaluation.

MR. ACOSTA: It's not all of it.

MR. FOERSTER: That's a great point. Okay.

MR. LeTELLIER: So what are the pros and cons because I know I was just looking, I was towards the aspect of 20/80 if you remember.

MR. FOERSTER: Twenty percent school effects or 80% school effects?

MR. LeTELLIER: Yeah, 20% school effect, then I didn't raise my hand for the 25 because I got a little confused. That's closest to where I originally was, so can we just literally for the benefit of the group write down some pros and cons of going one way or the other? Would that help or make things easier or harder?

MR. FOERSTER: I will defer to the group.

I think most of us are ready to put a number on this and go on. Okay. So do I have a motion for 0.33, a third of school effects are weighted?

MR. LeTELLIER: I'll move for that.

PANEL MEMBER: I'll move that we make the school effect 20%.

MR. FOERSTER: Do I have a second?

MS. BROWN: Second.

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All those in favor, signify your hand please.

MR. LeTELLIER: I'll move for that.

PANEL MEMBER: I'll move that we make the school effect 20%.

MR. FOERSTER: Do I have a second?

MS. BROWN: Second.

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on a positive side is that in addition to the teacher effect we've decided that the whole school effect is going to contribute to her value added, on top of hers which already includes 100% of the --

MS. FRAKES: And only 20% of that is going to be added to each teacher's value added, on top of hers which already includes 100% of the --

DR. COHEN: It's not 20%.

MR. FOERSTER: I was just looking, I was saying it's not 20%.

MS. KEARSCHNER: If you could just raise your hands again because there could be --

DR. COHEN: How I have it written and the way it was introduced was the committee recommends that 20% of the school effect be added to the teacher effect to reduce the teacher value-added -- score.

MR. FOERSTER: I will defer to the group.

MS. BROWN: Can we not say 'added', but can we say 'adjust'?

MR. FOERSTER: Sure, yeah.

MS. KEARSCHNER: Can I just make sure I understand what we voted on? Are we also saying 80% of the school effect is now being ignored?

MR. FOERSTER: Yes.

PANEL MEMBERS: Yes.

DR. COHEN: Can you repeat that? I'm sorry.

MS. KEARSCHNER: Sure, 80% of the school effect is now being ignored.

BOARD MEMBERS: (Over-speaking.)

MS. BROWN: As far as adjusting, the 80% is not 20%.

MS. FEILD: Maybe a better way to state it.

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by raising your right hand? Going to be close.

So how many members do we have? We were at nine. Was it ten? Nine. Okay. Give me another motion. I will encourage you --

DR. HOVANETZ: If you could just raise your hands again because there could be --

MR. FOERSTER: Okay. We're going to vote 20%. Those in favor of weighting the school effects at 20%, raise your hands, please.

I'm going to vote for this one.

PANEL MEMBER: I count eleven.

MR. FOERSTER: And there are how many members? So the majority.

I want to throw a party and you're all invited. Okay. I think we're done. Eleven people, 21 members, simple majority. So the motion carries. School effects will be weighted at 20%.

DR. COHEN: Just a clarifying question. So does that mean that the bulk of the school effect, 80%, is attributed to the teacher and 20% to the school?

MR. FOERSTER: Yeah, the attribution is 0.20. I think where you're going and how the model actually works and that our simplified heuristic representation is imperfect --

DR. COHEN: I'm just trying to understand.

DR. HOVANETZ: How I have it written and the way it was introduced was the committee recommends that 20% of the school effect be added to the teacher effect to reduce the teacher value-added -- score.

MR. FOERSTER: Perfect.

MS. BROWN: Can we not say 'added', but can we say 'adjust'?

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MS. KEARSCHNER: Sure, 80% of the school effect is now being ignored.

BOARD MEMBERS: (Over-speaking.)

MS. BROWN: As far as adjusting, the 80% is not 20%.

MS. FEILD: Maybe a better way to state it.
MS. BROWN: I don't believe it was ignored, but I'm also very much like this. I'm okay, but what I'm tending to say is that 100% of the school effect is already in the teacher's score. It's in the teacher's effect because how a teacher's residuals roll up, their students' performance is a result of both the conditions that lie in the school and the teachers' ability to impact growth regardless of those situations. And when you — so in the teacher's effect, everything is in there, but by saying we're considering a school effect what I think I'm saying is that because schools can have some underlying conditions that are, we're trying to say in some situations there may be the fact that we could be a not so great teacher, but because the school underlying conditions are just way out there, if we say 100% of that school effect back to the teacher, we could be making not so great teachers look fabulous when in reality the flip side could be true in another situation.

So what we're really saying is let's say what the teacher did and then, yeah, let's give credit where it's due, but what the school has contributed, the leader, the way they hire teachers, et cetera, and making it at 20% it's basically saying we'll put some portion of that back in to kind of level out what that school effect was in everything there. So we're not ignoring the 80% because it's there, because let's look at it -- this is kind of what's tripping me up. I'm looking at this way.

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

So the point that I'm getting at because you can say this multiple ways, you know, if the school is overall low -- and this is kind of where it's hard to get at because we're looking at growth -- value add in its implicity (sic) by looking at prior year achievement tends to level out some of those other factors like income and poverty and those types of things because we're using those prior year test scores. So we're really only looking at the amount of growth being able to be affected. If we're in a really low growth school, you know, the opposite could be I'm in a very high achieving, high SES, high parent involved school, but every person in that school is low growth not because everybody of the ceiling effect. Let's just say there's no growth occurring. So if more than 20% of that school effect is added back in to me, I could be a mediocre, average teacher because my true teacher effect was here, but because of that overall school effect and if I put more than 20% back in, I could now look like I'm like this when in reality my actual ability was here.
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 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 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 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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MR. FOERSTER: Lori, I completely take your point. I'm going to go back to a clarification that Anna made at the beginning of this session which I think is really important. When you say where is it most important to attract teachers to, when we start talking about growth schools in many cases our high growth schools are our low achievement schools.

PANEL MEMBER: That's right.
MR. FOERSTER: They are the quote, unattractive, campuses.

PANEL MEMBER: That's where the greatest growth is.
MR. FOERSTER: Okay. I'm going to do something really weird here. I appreciate your all's patience, by the way, but I felt like the additional discussion was necessary. We've got to own this when we get out of here. I will take a motion to rescind the previous motion and if there is a majority we will rescind that motion and we will start over with coming up with the right number. If there is not a second or a motion or a majority, we're leaving it at 20% and we'll move on.

Is there a motion to rescind the previous American Court Reporting 850.421.0058

PANEL MEMBER: So moved.
MR. FOERSTER: It's been moved. Do I have a second?
MS. KEARSCHNER: Second.
MR. FOERSTER: It's been moved and seconded. Any discussion before we put it to a vote? All those in favor of rescinding the previous motion to weight school effects at 20%, please indicate by raising your right hand.

Simple majority. Excellent. Okay. I think we're done with a discussion. Do I have a motion?
MS. BROWN: Will you just restate what you said one more time?
MR. FOERSTER: Which one?
MS. BROWN: That last clarification about high growth, low growth, harder to do, lower to do, say it again. Part of it was clear and part was confusing and I want to make sure.
MR. FOERSTER: Okay.

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

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

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

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

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

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

MS. BOURN: Exactly.

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

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

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

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

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

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

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

MS. KEARSCHNER: -- diverse schools and everyone of large counties has failing schools.

So whether it's high performing or low performing; the school effect matters.

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

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lot of stuff regarding important decisions and you all have been thoughtful in pretty abstract stuff too.

Yesterday you remember we selected Model 3C, "we" being you. You looked at the models, you said, well, what's wrong with controlling more things? When estimating the school effect, you have to figure out whether to put them back in. We'll do that. We have a lot of covariates. Model 3C, the second to last one in the slides, was the one that you honed in on and made a tentative decision that that's the model we chose.

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

We're going to look at two different kinds of -- we're going to look at the impact in two different ways. Question one: What does this mean in terms of expectations for students? How do the expectations for students vary? And number two, we'll look at teacher impact. What characteristics of a teacher are associated with higher or lower value added scores.

We want to pose some for Model 3C and we want to see how Model 3C compares with the other models. All right. So we're going to start off looking at expectations for students. We have a model that generates a unique expectation for each student and what we see here in both reading and math is we see higher expectations for ELL students.

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

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

MR. FOERSTER: We have, yes.

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

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

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

because attributes of this model are going to come into question.

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

Your point is extremely well taken that its comparison to other models isn't really the point now. The idea is what does 3C mean? What have we bought with this car that we now own?

That having been said, I don't want this to sound like the train has automatically and completely left the station. If we see things in this information that are problematic, we can back up. I want you to know that, but I don't anticipate that that's going to be the case.

Really, I think this is just information purposes only. So we're going to do that for about an hour.

The next hour -- yes, ma'am?

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

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

After we go through the general discussion, we have to come back to the decisions about which covariates to include and not include.

And while I think the consensus at the table is to keep them all in there, it's a big decision. Christy points out, I think, well that a lot of these things are included initially to get a sense of whether or not they are important, but...
we understood that keeping them in the model did
have some policy implications that we need to be
aware of. I think we need to at least spend an
appropriate amount of time talking through those
tings before we conclude yes, in fact, we want
them all in there.
If that's the conclusion that's great; I
just think it needs to be well considered. We
think that'll take about an hour. After that,
time permitting we will move on to a discussion
about classification and how perhaps this
information might be used to classify teachers
and what the classification error looks in Model
3C. That's what this afternoon looks like.
Any questions about what the game plan is?
Okay.
DR. COHEN: Okay. So under all models,
including Model 3C, you'll see higher
expectations.
Next slide here. And correspondingly you
see lower expectations of growth for gifted
students. What you see in Florida and it may be
a -- this character is the FCAT scale, what we
see in Florida every time we do an analysis is
growth is highest at the lowest end of the scale
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and lowest at the highest end of the scale. Do
you remember that scatter plot with the more
discordant at the lower end of the scale and the
higher end of the scale. So you're expecting
some growth in gifted kids on average, but it's
substantially less than growth you expect for
kids who are not identified as gifted.
The thing driving the ELL result, I
believe, and the gifted result is if you divide
achievement just into quartiles, you know, the
top 25%, the next 25%, the next 25%, you see the
typical growth -- remember, the expectations are
coming from the growth we typically observe.
Typical growth is higher in the highest and
lowest quartile and marches downward so slow
it's in the highest quartile. It may have to do
with measurement characteristics of the test,
the ability to measure at that higher end of the
scale.
You see Model 3C doesn't look significantly
different than Model 3B, Model 3A, Model 1A, any
of the models that include two lags in that
characteristic. Everyone good so far?
All right. Now we're looking at reading
and you see exactly the same pattern and I won't
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dwell on it. The next set we expected a good
value-added model would be associated with
things that we would expect to be associated
with more effective teaching and not associated
with other things. So we take another look at
some of these relationships.
The statistic we're presenting here is a
relation, a correlation co-efficient. Many
of you know what correlation co-efficients are
but just to make sure that everybody
understands, it describes the correspondence
between two variables. If a correlation is
positive it means this thing goes up as the
other thing goes up; if it's negative this thing
goes up as the other thing goes down. Very weak
relationship. It would be anything 0.10 or less
is a weak relationship. You'll notice these
relationships between teacher experience and a
value-added measure, so are teachers with more
experience getting higher value-added measures?
These are tiny, 0.01, so barely or not even
statistically significant, not noticeable.
They're just very small which maybe is
surprising, but we -- in our meeting last time
we noted that when you look at the teacher
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experience data over time you see a lot of
teachers whose experience doesn't change from
year to year, which you know it does. They were
in the data last year and they should be one
higher this year.
So you see that, so I expect that teacher
experience that is not currently used for
anything in Florida, I believe that it does not
have any states associated with it, I think it's
maybe just not that well reported. You see the
same thing, very close to zero correlation in
reading scores. So I don't know what to do with
that.
Teacher absences. You all asked if we
could look at the data related to teacher
absences. Once again we see that the
value-added scores are virtually uncorrelated
with teacher absences. This is the correlation
between teachers' value-added scores and the
percent of students in their class who have
disabilities. Model 4, remember that was the
fixed effects model is starting to show some
correlation with that. We're not really looking
at model cores, so we don't want to talk too
much about that.
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Model 3C is virtually uncorrelated with the percentage of teachers teaching who have disabilities. So the value-added score doesn't seem to be really related to that.

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

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

DR. COHEN: Seventh grade math and reading.

MS. WESTPHAL: Okay, 7th grade.

DR. COHEN: You see very similar patterns in all the grades. We looked at all this across all grades, but you don't want me to show you seven times as many as these graphs, do you? I can talk faster.

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

DR. COHEN: It's R.

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

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

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

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

MR. FOERSTER: So insignificant?

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

MR. FOERSTER: Okay. I guess the point I'm making is that though the ELL graphs are larger, the statistical significance is that offhand, but I can find that out for you.

But it's very small; it's not substantively important.

MR. FOERSTER: Okay. I guess the point I'm making is that though the ELL graphs are larger, the statistical significance is that offhand, but I can find that out for you.
and we won't have you standing on the side with
we are going to be talking to are lay leaders
general public? In the absence of all of this
share this information so it makes sense to the
on this committee in such a way that we can
go back to districts or whomever and everybody
practitioners, communicators, people who have to
be collapsed, given to us, documented so that as
members of this committee how is this going to
discussion about it, but I do want to know as
comfortable with that? Does anyone want anymore
or lower scores there. Are there -- is everyone
comfortable with that? Does anyone want anymore
discussion about these?
MS. EDGECOMB: I don't want any more
discussion about it, but I do want to know as
members of this committee how is this going to
be collapsed, given to us, documented so that as
practitioners, communicators, people who have to
go back to districts or whomever and everybody
on this committee in such a way that we can
share this information so it makes sense to the
general public? In the absence of all of this
discussion and in absence of most of the people
we are going to be talking to are lay leaders
and we won't have you standing on the side with
us whispering in our ears what we should be
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saying because I think once this has been done
-- even if it goes back down to the
fundamental training and the communication of
this that putting it in terms of clarity so
people can understand it so it's comprehensive,
that's going to be critical because I think we
have an obligation as part of the decision
makers to be able to communicate this.
MS. LEMKE: My goal in this project is to
be the communications --
MS. EDGECOMB: Oh, so we leave it all up to
you, okay.
DR. COHEN: Just send Harold home with each
and every one of you.
MS. LEMKE: So the reason I'm here is to
make sure that I hear all these discussions and
our obligation to you as part of this contract
is to produce materials that are user friendly,
that are for lay people that they will
understand not only the work that the committee
has done but what is the model that was selected
and, you know, sort of some of the implications
of that model and so on and so forth. So we'll
be putting together materials both written and
also some sort of multimedia presentation of
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materials. That will be available for you.
We'll also be doing some training so you
can be seeing more of me. I'd like to use some
of you as a sounding board for some of those
materials and get your input and your feedback
because you'll understand obviously all that has
gone into it, and you'll sort of know the
questions that you're getting that you'll need
to be communicating about going forward.
MS. EDGECOMB: And a glossary is going to
be involved in this?
MS. LEMKE: A huge glossary and all that
kind of stuff, yes.
MR. FOERSTER: Any other questions or
comments before we move on? Yes, sir?
MR. LeTELLIER: Just in general for all of
these areas, how are we going to - if we're
taking account say we want all these variables
in there, the weight that each one would be; is
that something that we're coming up with or how
does that work?
MR. FOERSTER: In terms of what we just
looked at?
MR. LeTELLIER: Any of these variables that
we're using. Am I not clear?
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That's a case where you may want to leave them in just for -- just because you can't come up with a good substantive reason not to. So I guess have at it. Attendance is important. This is a 'T' statistic which is basically -- Harold, help me out.

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

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

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

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

DR. COHEN: Let me just make sure I didn't that right.

MR. FOERSTER: It's all grades.

MS. BROWN: All grades.

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

DR. DORAN: It could be smaller.

DR. COHEN: It could be smaller. All right. If I were to recommend just a way to think about this, I would think about the student with disability category as a single category rather than the many categories it is.

I would think about the class size category as a category rather than for each class separately.

MS. WOODHOUSE-YOUNG: Add the numbers up?

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

MR. FOERSTER: Yeah, what's at issue here, Tamar, is we've actually got to vote as a committee which of these to keep in. When we adopted Model 3C, I think the intent was we liked the kitchen sink approach and we had lots of things to pick from, but we hadn't really gone through with a fine-tooth comb and said exclude this one, this one, this one, and that one to winnow it down to the actual model. So these are the "kitchen sink" lists of control variables that are in there. Now we've got to take them group by group and say which of these significant, we also have to keep in mind does it make sense to include them from the policy perspective?

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

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

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

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

Let's start. Column A and the next column is Column T. There's a lot of hidden columns in the -- what we're calling group 9. I think I'll point out that some grade have no students statistically significant in at least one grade.

3C. Does that make sense? Everything else is statistically significant in at least one grade. I was looking for where it's never bigger than that in all the other grades, it was the smallest, so everything else would be bigger than that in all the other grades.

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

MR. FOERSTER: Yeah, what's at issue here, in between here is the progression co-efficient and its standard error for every grade in math for Model 3C. So it's all there, all the detail about what the actual co-efficients are.

What we've done here is we highlighted things that were never statistically significant, not in any grade in math for Model 3C. Does that make sense? Everything else is statistically significant in at least one grade. I'll point out that some grade have no students in the -- what we're calling group 9. I think that was the dual sensory disability; is that right? Yeah. So some grade, it's why it shows up like that.

So virtually everything is significant somewhere. If you remember, we included up to six teachers up to six classes for each student and for each class we included a measure of class size and a measure of class homogeneity. When you get out to the 3rd, 4th, 5th, and 6th class, those things aren't always significant anywhere. I would have trouble knowing when or justifying taking them out just for some classes and leaving them in for others.
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

122. grades somewhere it's statistically important.
123. MR. TOMEI: Everything except homogeneity
124. in class three and homogeneity and/or size for
125. class 4 through 6, but even that's an arbitrary
126. break at that point because it does matter, the
127. second class and one of the characteristics of
128. class 3. Offline yesterday I did ask Juan if
129. there were any fiscal implications of keeping
130. more or less variables in that mattered to the
131. State and the answer to that was no. So really
132. we don't need to be concerned about are we
133. adding costs to this to the State if we keep all
134. the elements in, and based on what I had asked
135. to see yesterday in looking at this, I will tell
136. you that my reaction to the data is that we keep
137. it all. That seems to be the right solution to
138. me is that we keep all of these pieces in.
139. MS. KEARSCHNER: And I would say especially
140. now that we have this that the breakdown that
141. you asked for, I'm even more in that camp and
142. then combined with the statistical reasoning,
143. the policy reasoning for me means definite, that
144. these are things that should be included so we
145. have that data. How it's treated ultimately in
146. the formula if there's outliers, those kinds of

148. things, that can be mitigated by the other 50%
149. or if it's a new teacher or the other 60% of the
150. evaluation.
151. MR. TOMEI: And the argument here again if
152. you think of all of these collectively not
153. contributing more than about 4% of the total
154. variance in outcome, when you look at the data
155. globally but any one of these whether it's
156. statistically significant in the model at the
157. global level could be important to an individual
158. teacher and there's not a lot of cause to keep
159. this in, so first of all I want to thank Jon
160. because I suspect I got a lot more sleep last
161. night than Jon did doing all of this for us last
162. night, but this is exactly what I wanted to see
163. to get a sense for how I think we ought to react
164. to all of these different potential covariates.
165. My reaction is we ought to keep them all in.
166. DR. DORAN: Just to make sure everybody's
167. on the same page, if you do delete at all, you
168. could leave "as is" or an additional step you
169. could do is you could collapse categories. For
170. instance, you could make the SWD category just a
171. dichotomous variable where you're either, one,
172. classified as SWD in any particular category, or
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into one versus keeping them all separate?

DR. DORAN: Good question. If we were to keep them “as is”, the chart that Jon showed yesterday, I've got these numbers --

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

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

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

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

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

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

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

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

DR. DORAN: Not at all.

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

DR. DORAN: Well, what he's asking is a computational. Is that any harder for the models to be run and implemented when they are all kept in versus if they're collapsed to zero?

It's virtually a simple thing to do, just bring more columns in the matrix and that's an easy thing to do.

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

DR. DORAN: The policy issue or the implementation issue, you may want to keep it for different reasons. Essentially, what you're doing is if you collapse it into a single category, you are ignoring the differences between the categorization and some of that is very certain that the EBD teacher feels just as strongly as the IND teacher and they both feel their kids have a greater level of effort and they better be considered separately. And it's really not for us to determine that, but I'm just sharing my

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

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

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

MS. BROWN: I'll just remind you what flagged in my head and it might not be right. But we are doing this with respect to a specific measurement instrument. That is an instrument American Court Reporting 850.421.0058.

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

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

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

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

MS. BROWN: Correct.

MS. BOURN: To Anna's point, the tool may have to be adjusted. We've already talked about the FCAT going away and, of course, different American Court Reporting 850.421.0058.

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

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

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

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

MS. KEARSCHNER: Language like we used the American Court Reporting 850.421.0058.

161 other day, yesterday when we were talking about say you had a hearing impaired student and they've got a secondary disability with the inability to communicate on the test, that causes that score to go down. It's not the primary disability, so how could that be accounted for? And I would say that it's the other 50% where you can tinker with those numbers.

MS. BROWN: The evaluation piece.

MS. WESTPHAL: The evaluation piece.

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

DR. COHEN: Mm-hmm. I would point out that in some of these categories if you go from grade to grade, they go from positive to negative, from negative to positive, and positive to negative.
MS. BROWN: Yeah, they change.

DR. COHEN: It's not always a positive expectation; and while I find that difficult to explain in some way I find comfort in what Anna's saying which is the data -- you know, this was run on a model, this was what it was, and we were consistent in respecting that outgrowth.

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

DR. DORAN: One thing to make sure we properly interpret these data, we see if we look in isolation at this column here, the difference is 39 versus 2 for those if you contrast those for those particular categories. We can think about collapsing but you may or may not want to do it. You might say, well, I want to see them separate because of the difference in this expectation -- but don't look at that column in isolation because remember a couple of things. This is not the standard error. In this particular grade, the difference is 4 versus -- nuts, I should go in reverse. But then these numbers will change; they change across grades, American Court Reporting 850.421.0058

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

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

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

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

MS. FEILD: You wonder, Anna, if the SWD impact in the 3rd graders that are ESE that have had remediation are automatically promoted, right, to a good cause so they get to 5th grade. Those kids have, you know, lower starting 3rd grade scores because of the good cause promotion may have an effect on -- that SWD 10 is the autism kids, and notice how the change goes from American Court Reporting 850.421.0058

20 to negative 20 or something like that.

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

MR. TOMEI: So moved.

MR. LeTELLIER: Second.

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

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

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

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

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

DR. DORAN: Oh, to remove it? They're not adding anything at all in terms of American Court Reporting 850.421.0058

whether they're taking away?

DR. DORAN: They're taking away model parsimony and that is an important -- MS. BROWN: Oh, I understand that.

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

DR. DORAN: They're taking away model co-efficients associated with them.

MR. FOERSTER: Yeah, they are tiny.

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

MR. FOERSTER: Okay.

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

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

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

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

DR. DORAN: There are multiple classes American Court Reporting 850.421.0058
because kids appear in multiple classes in the
data, right? So the class size variable is for
each of the classes he would be associated with.
The homogeneity is of the kids in the class,
class one that they're assigned to, what's the
difference between the 75th percentile and the
25th percentile in that class one? Under class
two there's a different homogeneity variable and
so forth.

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

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

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

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

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

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

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

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

MR. FOERSTER: Could there be an intended
consequence as well? If I'm reading this right,
class size co-efficient of minus 0.08; so if I'm
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in a class with 20 kids that would mean that the
total impact on the value-added score is minus
0.16 points; is that right?

DR. DORAN: For every increase in kid.

MR. FOERSTER: For every increase in kid.

MS. BROWN: No, for each child.

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

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

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

MR. FOERSTER: The lower expectation, but
the thing I want to point out is the difference
in class size of 10 kids, a difference in class
size. If you're comparing apples and apples,
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-- you have 77 comparisons. You'd expect 3 to 4 false positives. You'd expect just by chance some things to be statistically significant three to four times. So if you're looking for candidates to eliminate this size of homogeneity set of things would seem to be decent candidates.

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

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

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

One of the things that I think is useful coming forth from this discussion and model is American Court Reporting 850.421.0058

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

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

Class size is really something that we can't control and make statistically little American Court Reporting 850.421.0058

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

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

MS. KEARSCHNER: Huge issue.

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

MR. FOERSTER: I'm going to play devil's advocate. The difference between class size and homogeneity statistics and the SWD statistics is American Court Reporting 850.421.0058
1. **Effect Size.** In this case some of the homogeneity in class size statistics are statistically not relevant. Both of those things are true here.

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

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

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1. This isn't a factor.

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

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

4. What we're seeing here, for example, just looking at this one -- if one teacher has 20 more students and another teacher has 30 students, the difference in the expectation is less than one skill score point difference. So you can have two arguments here, one that says you went to the data and you resolved that it didn't make the real statistical scientific difference. The other pathway is you could keep things in because you believe that they matter and some people will perceive that they matter. Then it's a little harder to defend a thing why you didn't include other variables as well.

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

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

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

8. **MS. ACOSTA:** I was looking at the standard error not the effect.

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11. **DR. DORAN:** Okay. Yes, the standard errors are not --

12. **MS. ACOSTA:** Okay. So are --

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

14. **MR. FOERSTER:** That point is well taken.

15. I'm multiplying by 10 assuming that a difference of 10 kids in a class is a pretty substantial difference in class size; and if you multiply by 10 even then the effect size of any one of these factors is small compared to most of the effect sizes in SWD.

16. **DR. DORAN:** So for example, looking here you'd have to have a difference in class size of 100 in order to get an 8-scaled score point
difference between two teachers. So a
difference of 50 students would be a four point
difference in the expectation between two
teachers. So you have to get beyond pretty
large differences.

MS. BROWN: Tenth grade?

DR. DORAN: Tenth grade. Which variable,
which row?

MS. BROWN: Class one. It's 0.248. It's
still small, but if you go over to 10th grade,
so now you're looking at 10 kids makes a
difference of --

DR. DORAN: Ten kids makes a difference in
this particular grade of 2.5 scale points.

MS. ACOSTA: In a positive expectation,
right?

DR. DORAN: Yeah.

MR. FOERSTER: Isn't that interesting?

DR. DORAN: If you increase class size,
there's a higher prediction because for whatever
reason observed in the data, those teachers --
it means you're a good teacher, more kids. Who
knows?

MR. LeTELLIER: Do you have any ideas of
interpreting that as far as why some are
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negative, some are positive.

DR. DORAN: I don't, I don't. There are a
lot of variables that -- in fact, part of what
you're asking is part of the complication. The
more variables you include when you lose that
parsimony, you lose the ability to really cross
what's in the model and think deeply about this
is here, this is here, this is here. That's
part of why parsimony is good because fewer
variables, you can really process, a lot of
variables -- switched co-efficients, differences
between the effects, it becomes hard to
interpret. I don't have an answer for you and
that's partly what we -- yes?

MS. ACOSTA: If we don't know the original,
the class size, if you have a class size
students and you're going to do a lot of
collaborative work, that might not work out so
well. If you have 15 students, you've added 10
students and actually they may learn more
because they're able to do more collaborative,
yes, and all that. But the question is between
15 and 25 and 25 and 35, so does that still
hold? I don't know.

MS. KEARSCHNER: Jon had mentioned having a
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lot of people asking questions about will class
size be considered? It is from a policy
standpoint, I think it does matter to a lot of
teachers out there, to a lot of parents who want
to know, you know. It doesn't matter that my
child is in a classroom that has 45 students
versus a class size that has 20 students.

And the other piece that I go back to is
we're looking at an example and only an example
of trying to decide whether it's statistically
important or not, understand that, and the
policy piece, too. But we also are basing this
on reading and math core subjects, being tested
right now with the tools available as opposed to
having a statistical model where the tools are
in flux and they're already saying, you know, by
next year we have to have better data collection
and those things are going to change over time.
If that's an element that we're capturing, it
may give some comfort to people to accept those
numbers.

DR. DORAN: Linda, just to dovetail on
something that you're saying, people might ask
you the question did class size matter. Here we
can actually see whether or not it does and so
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here we see does it matter, the answer is pretty
close to not mattering. There's a difference --
you have to have 10 kids before you get less
than one -- closer to a scale to a point
difference. You can see that that's the pattern
here. So not only do you have to answer the
question, but here these are the data that
provide you the basis so that you can evaluate
that question.

MS. KEARSCHNER: And for a teacher who is
asked to carry an extra load, having that number
to go back to may be important.

MR. FOERSTER: Given the effect size, it
wouldn't be important. I hear what you're
saying and I completely buy that argument with
SWD; because the effect size is substantial, it
could make a difference there, but in this case
by including them in the model even if you have
a teacher that carries a particularly large load
and we leave these factors in there for that
reason, the effect size is tiny. Keeping them
or not keeping them in makes virtually no
difference in the score that that teacher will
receive.

MR. LeTELLIER: Because of the variable
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that's being used?

MR. FOERSTER: Well, because the data indicated that the co-efficient on this variable was so tiny.

MR. MOREHOUSE: Does it matter what the average size sample was per class?

DR. DORAN: No.

MR. MOREHOUSE: Doesn't matter?

DR. DORAN: It doesn't matter.

Can I ask a question just for my understanding. The class size policy is in effect now; is that right?

PANEL MEMBERS: Yes.

DR. DORAN: So classes in the elementary level can't exceed some particular number?

PANEL MEMBERS: Yes.

DR. DORAN: What was that?

PANEL MEMBER: Eighteen.

DR. DORAN: Eighteen.

PANEL MEMBER: Eighteen to 22.

DR. DORAN: Eighteen to 22. I'm willing to bet that before that policy was in effect there were class sizes that were even bigger than that.

PANEL MEMBERS: Yes.

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DR. COHEN: Most schools don't make their class size targets, though, right?

PANEL MEMBER: We made it.

MS. BROWN: And right now some of them aren't making it just because they can't move one student over, that kind of thing.

DR. DORAN: But in large part they're either close or making it?

MR. FOERSTER: Right.

DR. DORAN: I'm just going to hypothesize that had we done this kind of analysis when there were larger class sizes before the policy you might have seen larger effects, but that policy sort of mitigated that particular effect, so since you're living under a policy that's already resolved that particular problem and you can't have class sizes larger than 22, you're not seeing a large effect. There were classrooms that had 40 kids and we probably would have seen large effects and you might want to control for that variable, but the policy already controls for large class sizes and you may not need to deal with that through this model.

MS. BROWN: The only thing I could add to

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1 well, maybe they can reduce my class size, we have the data to show them. But it's not really significant from what we see, which then like Harold says opens up Pandora's box. Well, if we're prepared to show data that's insignificant or not significant, they're going to want to know why can't you show us data for everyone else?

I mean, it's like Lisa said, you're going to have to present the argument of how come these were excluded because maybe they were similar to those numbers.

MS. CAVALAUGH: We didn't have that discussion last time, though. We considered a whole host of things and eliminated things.

MR. FOERSTER: Right, for a variety of reasons. Maybe I misunderstood Harold's argument. I thought he was arguing that leaving something in that is known to be insignificant and tiny effect opens Pandora's box for people who want to see other things but are insignificant and small effect size.

MR. CAMPUTARO: Then we're going to have to pretty much --

MR. FOERSTER: Well, maybe we look at this --
and say really these don't matter. And to
Linda's point about teachers wanting to know
that we've taken that into account, I think it's
fair to say we did take it into account, studied
it, looked at it statewide, and have compelling
evidence that it's irrelevant. And that's a
different answer than saying no, we didn't look
at it, or no, we didn't take it into account.
That's not what happened here.

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

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

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

DR. DORAN: Is that a motion?

MS. BROWN: Wait, wait, could I just ask
one quick question just look at the statistic
because we're saying originally we were told
that what is highlighted is not statistically
significant, so we can't just say eliminate
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class size because there are some that are and
some that aren't.

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

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

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

MR. TOMEI: Which class?

MS. BROWN: Sixth grade.

MR. LeTELLIER: Where are we looking?

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

What is that number?

MR. LeTELLIER: Plus 5.456.

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


W

walking [1] - 115:2
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W


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