

Committee Meeting

OF

SENATE EDUCATION COMMITTEE

*"Excerpt regarding testimony from Lucille E. Davy, Commissioner of Education,
and the public on the Common Core State Standards Initiative and
Federal funding under the Race to the Top program"*

LOCATION: Committee Room 1
State House Annex
Trenton, New Jersey

DATE: December 7, 2009
1:00 p.m.

MEMBERS OF COMMITTEE PRESENT:

Senator Shirley K. Turner, Chair
Senator M. Teresa Ruiz, Vice Chair
Senator Jim Whelan
Senator Thomas H. Kean Jr.



ALSO PRESENT:

Anita M. Saynisch
Sarah B. Haimowitz
*Office of Legislative Services
Committee Aides*

Kevil Duhon
*Senate Majority
Committee Aide*

Victoria Brogan
*Senate Republican
Committee Aide*

***Meeting Recorded and Transcribed by
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(This is an excerpt of the Senate Education Committee meeting held December 7, 2009, regarding testimony from Lucille E. Davy, Commissioner of Education, and the public on the Common Core Standards Initiative and Federal funding under the Race to the Top program.)

SENATOR SHIRLEY K. TURNER, (Chair): We're here now for the main event, which is for us to hear from Commissioner Davy.

And we note that we're coming to the end of a two-year legislative session.

And Commissioner Davy has been invited here today to put things in perspective for us: Where are we in the world of education, and where are we headed -- specifically where we are in terms of the five-year revision of the Core Curriculum Content Standards.

The Department of Education has been working on this revision for many, many months now, but they are not alone. Almost every state in the nation has been working toward developing the Core Standards in math, English, and Language Arts. This is not a mandate that is being imposed by the Federal government. Rather, states are working together cooperatively under the leadership of the National Governors Association and the Council of Chief School Administrators to develop voluntary Common Standards for the nation's K-12 student population. New Jersey has joined in this exciting effort, and we are here today to get a progress report from our Commissioner.

The second half of this hearing can be thought of as: Where are we going? The national recession has hit education hard, just as it has hit most other areas of our economy. The Obama administration, through the

American Recovery and Reinvestment Act, has sought to help the states through the recession while continuing to reward excellence with a number of competitive grant programs in the area of education.

We have invited Commissioner Davy to help the Committee assess the scope and impact of these Federal programs and their grants as we move out of the recession and position ourselves for the coming year. We're looking to continue to provide the best education in the nation. Federal Economic Recovery money was essential to the current 2010 education budget. New Jersey has received over \$1 billion to implement the new School Funding Formula enacted by the School Funding Reform Act of 2008. I understand that New Jersey has also, just last week, submitted an application for a statewide longitudinal data systems grant to develop and implement longitudinal data systems to capture and to use student data from preschool to high school, college, and the workforce.

Last, but certainly not least, is the Race to the Top initiative. This initiative is the largest-ever Federal competitive investment in school reform. The funding will be distributed in two phases. States have until mid-January to apply for the first round. We probably all saw the news reports last week that New Jersey had not submitted this first round application due to the transition between administrations. I think this Committee would like very much to know what can be done and what is being done to get all of the Federal grant money that we possibly can. I know throughout my legislative career here in Trenton, I've always complained that we do not bring back nearly enough of our tax dollars that we send to Washington. So we don't ever want to see New Jersey lagging behind in recovering every Federal dollar that we can.

However, I do not want to waste any time during this short hearing with recriminations that we saw in the press last week. As I stated at the start, I hope for this hearing to be forward-looking and productive.

And now, I would like to welcome Commissioner Davy and her staff. That's Assistant (*sic*) Commissioner--

C O M M I S S I O N E R L U C I L L E E. D A V Y: Deputy Commissioner Willa Spicer.

SENATOR TURNER: Thank you.

COMMISSIONER DAVY: Thank you, Senator.

We're very pleased to be here today. As you noted, we've been working on this during the past four years.

Let me first talk a little bit in general about the standards. We have, over the past several months, been working on the revision of our Core Curriculum Content Standards in all of the content areas. And in all of those areas -- so social studies, the arts, science, career and tech ed, health and phys ed -- we have done the work already to bring our standards to a point where they are now 21st century standards. So what does that mean? It means they now incorporate and imbed within them 21st century skills that young people will need to be successful in the future.

We did not move forward the language arts and mathematics standards, very specifically because of the national effort underway among the states of this country -- 48 of them -- that the Senator referred to in her remarks -- the Common Core Standards effort. So we held up on the math and the language arts revisions so that we could see how the national effort developed; and that it would leave us an opportunity to be part of that if we

so choose. And Willa will talk about that in a few minutes in a little more specifics.

With respect to all the other content areas, we are now underway in what will be a three-year process to implement those 21st century revised standards. We are doing that through very careful work with school districts throughout the state. Our staff in the Office of Academic Standards has been organizing and holding, throughout the state, in multiple locations, several different professional development sessions so that school personnel -- principals, superintendents, teachers, curriculum directors, etc. -- could all learn about what we're asking with this 21st century standards revision, and so that we could provide them with the assistance on a statewide level to accomplish these ambitious goals, but goals that are necessary in order to ensure that our children are prepared for the future.

That work, as I said, is underway and will continue. And there is a very detailed process laid out for the next couple of years as to how these standards are implemented. There's no expectation that everyone will, tomorrow, wake up and change all the standards they've been teaching. There's a complete understanding that 21st century standards, which really require that teaching and learning be done differently and that we work to ensure that children can not only reiterate what they've been taught and repeat what they've learned, but also that they can take what they've learned and apply it to new and different situations. And that will take some doing because it is a very big change, and it's a change that's underway across the country. So over the next few years, as I said, we will work with school districts so that they have an opportunity to gear up and

be ready to meet the challenges of delivering these 21st century standards inside of our Core Curriculum Content Standards.

The work with respect to the Common Core -- I'm going to ask Willa to talk about this, because she's been the person who is now handling this directly.

DEPUTY COMMISSIONER WILLA SPICER: If we could, I have a small sheet that I'd like to hand out if you wouldn't mind. I have plenty of them.

This is the description of how the Core Curriculum Standards -- which we're only talking about math and language arts -- are being introduced and followed through during -- through the states until their adoption, which will be sometime next year. It's important to understand how we're going about it -- or how the whole country is going about it -- because the most important thing about the standards is that those people who wish to speak to these standards, who have something to say, have opportunity to say so to the people of importance.

I'm sorry it's so small. For those of you with young, keen eyesight, this will be fine. But for some of us, it takes a little looking. It's small print, but it comes out of a report.

If you'll notice, there are two parts to these standards. The first part is the College and Career Readiness Standards, and they're on your left. They're the ones that deal with the outcomes. And they've been in the public sector for several months. Those are the outcome statements meant for -- at the end of 12th grade, what will children be able to do and understand. And they started a while ago, as you can see, with the discussion of what should be in them. That was done by workgroups and

feedback groups. Now, the work groups are all the people who have a vested interest in this, who have national reputations, and represent various groups. And they start to work on the Standards. And then there are workgroups that work with them. They examine the work of the other. So one group does some work and then the other group studies it. And then one group does the work and another group studies it. And if you see, the first draft comes to the states for state review -- that is, the people in the state who are connected to math and language arts have a chance to work at it. We send back our data, our comments. They change it, revise it, and they send it back in. They've already done that now with the outcome statements. They've come back in, and they're being -- they were -- we put them up on the Web site so they could take public comment for -- I don't know -- 60 days of public comment. We did not get a lot, but that which we got we summarized and sent back to the workgroups. They then got our comments and those from the other 48 states, and they have revised. And they will have the data back again. They've sent the final copy to something they call the *validation committee*, which will have a final chance to look at it. And that process -- what you see there for the college and career outcomes -- is the same for the levels -- the work on the grade level standards. So you see there are two parts: one is the outcomes, and the other is the grade levels -- what has to be done for each grade level.

They sent them in. We have the first draft of them. We have commented as a state. We sent them back. They are in the midst of revising them and making them better on the basis of the states' comments. They'll send it back to us. We will then put it out or find ways to have as great amount of the public comment on them as we can possibly get. We'll

send it back to them. They'll revise it again after we give them our public comment. They'll send it back; and then they'll send it to a validation committee, which will take a look at it and give it its final pieces; and finally put together the final draft.

When the final drafts have been validated, they'll come into the State, and then the State will take action as to whether they wish to adopt them or not. So if you look at the timeline across the top, you'll see the first thing being done is the College and Career. The K-12 Standards are being done now. The Standards will be validated by a very outstanding group of educators who represent all points of view in the areas of math and language arts. And finally there's adoption by the State.

That process is rather extremely detailed. But it's important, because there are 48 states involved in this -- each state having to make a decision as to whether the standards properly represent their state. And so that kind of detail, in regard to giving everyone a chance to speak to them, is an important factor. And that's what this shows.

In terms of the standards themselves, the only ones we have publicly are the K-12 outlined ones. And if anybody-- They've been up on our Web site now for several months. And if anybody wants to see them, they're available to everybody and have been for a long time. The new ones we don't have yet for public consumption. But we will, within the next several weeks, get the K-12 standards. They will, again, be put up on the Web site, and then the process of commenting will begin.

I'd be willing to take any questions on this.

SENATOR TURNER: Any questions from members of the Committee?

SENATOR WHELAN: Madam Chair, if I may.

SENATOR TURNER: Yes.

SENATOR WHELAN: This document really is specific to the College and Career, as well as the math and language arts.

DEPUTY COMMISSIONER SPICER: It is math and English (*sic*) language -- College and Career.

SENATOR WHELAN: The other core curriculum is completely separate from this.

DEPUTY COMMISSIONER SPICER: They're State-developed alone. And we have seven areas of them that have now been completed, brand new. And they are all adopted by the State Board. And they are also available, I believe now, on the Web site. And when you look at them, you see what's happened to the technology. If you open them up, if you click on any one of them, you'll get some lesson plans for them. And if you click on those, you will get some references that people can -- teachers can go in and use. So they're really quite elaborate, and they're exciting to watch. This is only math and language arts.

SENATOR TURNER: How do the 2009 New Jersey Core Curriculum Content Standards differ from those of five years ago?

DEPUTY COMMISSIONER SPICER: Well, that's very interesting, because the issue that the Commissioner raised before was the fact that they're 21st century standards. In great part, they put a lot of emphasis on problem solving, creative thinking, innovation. They put a lot of emphasis on the ability to think through complex issues more so than they did in 2005. But the most important thing about them, I think, is that what makes them 21st century standards -- not that they deal with some

things that we didn't deal with much -- but they're meant for every child. And they are very high level for all children. So in that sense, they're a little different. They're highly rigorous in terms of what we expect for our children. In the arts, in social sciences, even in career and technology, in science, they're a very high level of standards -- more so. And that's a lot of the change. In some sense, it's also a smaller number of them so that there's more focus on what we expect from children at various grade levels.

SENATOR TURNER: We've always believed that New Jersey was a leader and always at the forefront when it came to education. Now, will we be handicapped or hindered in any way by linking our curriculum to the national standards?

DEPUTY COMMISSIONER SPICER: We haven't seen the K-12 standards. We haven't had a chance to see what they'll look like finally. But from what we've seen, they will be -- they very well may be even more useful to us. One, there's a smaller number. They're very focused on what we want children to do. They move children in the early levels in progressions to higher levels. So it says in these things: "If you can do this, it's because the next year we want you to be able to do that." These are levels of standards that we haven't had before. I do not think we'll lose anything. I think we may gain a great deal that we have not had before. We're not sure yet because we haven't seen them finally.

SENATOR TURNER: Do you think there are other states that are further ahead than we are in terms of core standards?

DEPUTY COMMISSIONER SPICER: Well, it depends on who you talk to. There are some people who would say that Massachusetts is further ahead. But they've also had a lot of people working on these

standards. So I assume that if they are, it's integrated in. I don't think there's another state that's commonly spoken of. But there are times -- some say, "Well, that state does this, and this state does that," but nothing that I can generalize from.

SENATOR TURNER: The Federal government has indicated that it will give states that adopt Common Core Standards an advantage in seeking Federal aid through the RTTT fund. How much has this incentive influenced New Jersey's decision to participate in the national Common Core Standards initiative?

DEPUTY COMMISSIONER SPICER: I think we decided to participate in the Common Core because we believed that we should be part of -- that really New Jersey has no decision to stay out of the national view. New Jersey, whether it wants to or not, these days is part of the United States, as children go across state lines. People come in, people go out. And more importantly, it's probably true internationally also. So when we were asked whether we wanted to be part of the standards for the country -- and through that for the world -- we said yes, we wanted to work at it. We would watch it very carefully to make sure that it properly represents New Jersey. But we wanted our children to have the same things that other states wanted for their children. We did not want them to be behind. We did not want the workforce to be behind. We wanted it to be at the level that was required to compete. So that's the reason we entered.

The fact that it's also part of the application for further Federal pieces is nice. I mean, hopefully it will help us with our assessment and things like that if we finally adopt them. But the reason was greater than that.

SENATOR TURNER: Thank you.

According to the newspaper reports, New Jersey will not be participating in the Race to the Top initiative. Is that true?

COMMISSIONER DAVY: Well, if I could, Senator, you referred to, I think, a few different Federal grant programs. If I could go through them with the Committee, and we'll include in that conversation Race to the Top, if that's okay.

SENATOR TURNER: That's fine. Go right ahead.

COMMISSIONER DAVY: The first one was the one you referred to earlier, which we did apply for last Friday. That was the State longitudinal data system grant. I communicated with the transition team pretty early on, shortly after the election, to discuss these Federal grant proposals, because we felt it was important to get input from them on this work. Because much of it would be work that would have to be carried out by a new administration.

We had planned to bring the data system in-house because, from the work that we had done, we concluded that we could save considerable money by doing so. However, after conferring with the transition team, they asked us-- And at their request, we changed that grant application to be one that would include the use of a consultant, which is the way the data system is currently being done. So we have an outside consultant that's been working with us on NJSMART, which is our data system. And they indicated they wanted to continue doing it that way, and so we submitted our grant in that fashion. And that's how it was filed this past Friday. So we'll wait to see-- That was a \$16.9 million request from the Federal government to expand our longitudinal data system.

The second very important piece is one that you also referred to, Senator: the State Fiscal Stabilization Fund, part two. A little over \$1 billion was given to New Jersey by the feds as part of the Federal stimulus package. And all of that money, as Senator Turner indicated, was booked or spent, basically, in this year's budget -- in FY '10 -- as part of the funding for the State School Funding Formula. So we had already accounted for those dollars.

Now, two-thirds of them have been approved to be given to the State. That was through an application that we submitted last June. It was a very simple application. And we got over \$600 million of the State Fiscal Stabilization \$1 billion total approved at that point in time.

The part two application is for the remaining about one-third of the money, or about \$330 million, which is, of course, very important to us since, as I said, we already spent that money in terms of telling the school districts that they would be able to have that money as part of their State aid this year. So our staff has been working very diligently on that application since it was released. It was released on November 9. And we expect to file it with the United States Department of Education within the next few weeks. It's very important, obviously, for us to not only file it but to be successful and to have that application approved.

It is far more complex and broad-reaching than the part one application, which was a relatively simple yes/no answer kind of application. This requires -- and Willa can certainly speak in a lot more detail -- this requires considerably more work in terms of what the Department plans to do going forward.

Now, with respect to Race to the Top, our initial discussions with the transition team were that they did not want us to proceed with completing the application for Race to the Top, that they were going to, instead, file in the second round. And based on that direction, we stopped the work that we were doing including-- We then stopped the process that we were using, that was underway, to engage a consultant to assist us on the preparation of our grant application. We had been planning to file in January and had been meeting, actually, with stakeholders during the past couple of months before that to discuss various applications -- various elements of the application and parts that we thought would be included. I should also note that the final guidance and the final application on Race to the Top were not released until November 12. So up until that point in time, we were working from the first draft that was issued and really working with that as our guide, knowing full well that the feds had taken many, many comments -- I think 1,100 comments, some of which were 80 pages long -- on the Race to the Top program. So we knew there would likely be some things that would change when that was finalized.

At this point, however, based on the comments that have been made publicly by the transition during the last week in particular, it's very clear that they want us to move forward with the Race to the Top application. And that was the direction that we had initially planned. And hence, we have now restarted the procurement process to engage the services of a consultant to assist us with the preparation for the Race to the Top grant which, in this case, because of the complex nature and really broad-ranging scope of the Race to the Top grant, is absolutely necessary for us to get that work done. We had decided that actually back in the summer

-- that we would need assistance on this. And we're in the middle, as I said, of that process. We've started it. We expect to be able to engage a consultant hopefully by the end of the week and get an application filed in January in accordance with the first deadline.

As the Senator noted, there is a second round in June. So states that either don't apply in the first round or are not successful in the first round will also have a second opportunity to compete for a Race to the Top grant.

SENATOR TURNER: Commissioner, what I'm hearing is that the current administration, as well as the incoming administration, are now on the same page. You are working together to produce an application prior to the deadline, which is January 19 -- I believe it is. I know that incoming--

COMMISSIONER DAVY: In essence, Senator, yes. We had planned to file it. We had been asked not to.

SENATOR TURNER: The incoming Governor indicated, I know, back some time ago, that he wasn't interested in accepting Federal funds if there were strings attached. Are there strings attached to this money?

COMMISSIONER DAVY: Well, there will be lots of strings attached to this money, absolutely.

SENATOR TURNER: But you have gotten clearance that they do want you to proceed and apply for this grant?

COMMISSIONER DAVY: I think what's clear is that -- at least from the press accounts and the public who are reporting on this, and the statements that are being made -- that they do want us to pursue this.

And that was our initial plan. And hence, we will pursue applying for this grant. We will prepare the grant over the next several weeks with a consultant who will work with us, and we will put forth a game plan to continue to move this forward.

One of the elements of reform in our state to this point -- a very critical element -- has been the investment that we've made in early childhood education. And we've done that not only in the Abbott districts, but over the past few years have expanded pretty significantly into other districts beyond the Abbott district boundaries.

We are well aware that the preschool component, in our mind, is a critical one for moving forward in terms of helping give every child access to the kinds of educational experiences that they need to be successful in the future. So that happens to be one of the invitational priorities within the grant application for Race to the Top. And it's certainly one that -- which we laid out in the School Funding Formula -- the expansion of preschool -- certainly would be one that we would expect we would lay out as part of our continued work in moving New Jersey's educational opportunities forward.

I think it's clear that what the feds are trying to do with Race to the Top is help all children achieve at higher levels, and to help all children have equity of opportunity, and access to programs that allow them to succeed in college and the workforce as they go through our public education systems.

As you know, our results, not only as a State but as a nation, to date, have not been as successful as they need to be if we're going to help every child be a participant in 21st century global economy. And so I

believe the feds are trying to push states to really be innovative and reform oriented.

There are also opportunities to integrate the use of other Federal resources that are going to be available: the money from the data grant, for example, that we put in for; the money that districts have been receiving through the American Reinvestment and Recovery Act, the ARR funds for Title I and for IDEA special needs students; as well as the moneys that are going to be available under Title I, Part G, which is school improvement -- for those schools in particular that have not been successful to this point in helping all students achieve at acceptable levels.

So this application will basically provide opportunities for us to lay out how we will move forward in moving a reform agenda that helps all children achieve success.

SENATOR TURNER: Well, we certainly do encourage you very strongly to move the agenda forward so that we can help every child maximize their potential and prepare themselves for the 21st century. But also, in view of the fact that we have an \$8 billion to \$10 billion deficit, we want to make sure that we take advantage of every Federal grant opportunity that there is.

COMMISSIONER DAVY: Well, let me just say that this will not be money that can be plugged in to help fill the deficit, and that's a critical point that I think everybody needs to understand. These dollars will have to be directed specifically to the initiatives and programs that are laid out in our grant proposal. So this wouldn't be an award that could then just be plugged in and used for other purposes. It would have to be for the very specific purposes laid out, much like the data grant. If that's a

successful application, that will have to go to do the work that we laid out in the data grant.

SENATOR TURNER: I think that's probably why it would be a good idea to talk with the incoming administration so that we all understand exactly where we're going and how we're going to get there. And I'm sure that with the Obama administration's Race to the Top initiative, the whole idea is to be more innovative and to think more outside of the box so that we can teach every child and no child will be left behind.

COMMISSIONER DAVY: Yes.

SENATOR TURNER: Because that old time religion is not working anymore. Too many of our kids are failing and not graduating from high school.

SENATOR RUIZ: Madam Chair.

SENATOR TURNER: Senator Ruiz.

SENATOR RUIZ: Madam Chair, through you, thank you, Commissioner.

I have a couple of questions for the Deputy Commissioner.

When you were talking about some of the examples on the -- or generalizing on the Web site -- can you just highlight an example of the specific that has come back through this charted process that is expected to occur in our classrooms? Just one. Do you understand my--

DEPUTY COMMISSIONER SPICER: Let me just check. Do you mean a comment that came to us on the Core Curriculum Standards?

SENATOR RUIZ: What do we see coming back that, in fact, in the years to come, will have to be implemented and will act as a benchmark for--

DEPUTY COMMISSIONER SPICER: Well, there are some specific comments that--

SENATOR RUIZ: Well, I'd like to hear them, because it was very general.

DEPUTY COMMISSIONER SPICER: I wish I could really reproduce some of the comments. But there are-- In mathematics, we're getting a great many comments from a group of people -- many of whom are here today -- who are looking for high standards and worrying that these standards are not high enough. And so they ask about specific things, whether they're there or not. We send them off and make sure that they are.

Then there is-- We get comments from people who believe that not all of our children ought to be able to do these things, and they point out they don't have to do this and they don't have to do that if they're not going on. We get those types of comments on the math materials.

On the language arts, we've given comments ourselves that we need more information, for instance, on making sure that there are texts that show the complexity of the reading levels, and then they put those things in or they answer our questions for us. And that's just the process that's been going on.

I'm sorry I don't have a specific comment. I hate to paraphrase it. That's the kind of--

SENATOR RUIZ: Madam Chair, through you, thank you. That's okay.

My concern is that while we're all doing this -- and I'm sure that everyone would agree that we want to see our children really accelerate

in a 21st century model and be able to compete -- we have to be mindful that we're not even, in some districts, complying with Core Curriculum Standards that exist as of today. So while New Jersey launches this great national campaign, there has to be a balanced scale of understanding that -- do we have the necessary skill set from the professional workforce to implement these models that are going to come before us? What are we doing as far as how much time-- I mean, is the DOE thinking about this in a global perspective? And I know there is a transition team, and it will probably all change. But while we're looking at things on paper that look great -- that that paradigm can just not be set across the board. Is the day during the school year long enough to implement this? Do we have the workforce to implement these college-bound classes? Is our student workforce ready and able? And if not, can we create net programs to accelerate the process? I would love to see all of this on paper come to life and fruition in all of our schools. But the reality as it exists today-- We have severe problems in certain school districts that we can't even meet our standards as of today. How do we fuse both things together?

DEPUTY COMMISSIONER SPICER: Well, one of the things that we know, if we know nothing else, is that assessment drives a great deal of what happens in the schools. I served many years ago on the first committee to require a writing test in the State of New Jersey. And all the teachers said, "No, no, you can't do that. It will be too hard." And the parents said the same. And it was the business community that responded. They said, "You're crazy. Don't even ask the question. We want children who can write. It doesn't matter. You have to change the assessment if you

want to have the writing.” And, of course, we did it. And overnight it changed instruction.

Now, I’m not suggesting to you that overnight this good assessment will produce better, full learning on the part of our children. But I do know that without it we will continue to get what we’re getting. That is, we will continue to get -- “Well, you know, these kids can’t do it. They’re not able to do it.”

Unfortunately, the decision that we believe, as adults, that children can do it, that the schools can adapt -- that it’s necessary before they do adapt. And I would just love to think that there was something we could do in the abstract that would prepare everybody so that they could do all this. But we have example after example of places where the schools have changed, where the teachers have learned.

Can I talk about the physics teachers?

COMMISSIONER DAVY: Yes.

DEPUTY COMMISSIONER SPICER: We have 54 kids--

SENATOR KEAN: You better now. (laughter)

COMMISSIONER DAVY: I was going to, so I’m glad you are. It’s good.

SENATOR KEAN: It wasn’t subtle enough. (laughter)

DEPUTY COMMISSIONER SPICER: We have 54 teachers in Jersey City, Paterson, and Newark who are teaching physics to freshmen, and they’re doing it successfully. They have these kids able to pick up the math. Do you know how much math is involved in physics? These are kids who have real gaps in math. But they’re making it up because they have to

be able to do the physics. And they're being taught physics in a way that is new, that has not been taught in the past.

Now, these things happen because somebody believes that we can change what happens in these schools and that, as we do, our children will respond. And they do respond. And I know it's not going to happen overnight. I've been in this field for 50 years. But I do believe that it's the will, not the knowledge, that's at the heart here.

SENATOR RUIZ: I agree with you 100 percent. And your comments -- a response, Madam Chair, through you. Let it not be mistaken that I don't think that my children -- when I say "my children" I'm referring to 42,000-some-odd kids who attend the City of Newark School District and beyond, in the Township of Hillside. I don't believe for one second that my children are not capable. What my concern is, is that during that physics program that you're talking about we are sending teachers back to school to get the necessary--

DEPUTY COMMISSIONER SPICER: Exactly.

SENATOR RUIZ: What I'm saying is that there are things in place. I hope that it's not just going to be: "Here are the standards," and then we're going to try to catch up, because there's--

You're shaking your head. You know -- we're voluntarily signing up science teachers to go back to school and get the requirements to teach physics.

DEPUTY COMMISSIONER SPICER: We're running two-day workshops in biology and algebra to make sure that we change this follow-the-page curriculum to these-are-the-things-that-are-important curriculum. And we can do them in-depth. And we're teaching teachers how to teach in

a different manner to those kids who do not learn in the abstract. We have lots of kids -- and they're all over the place -- who don't learn in the abstract. They learn visually. And when we teach them all as if they were going to learn in the abstract, we run into just the problem you talk about.

Now, that's what we're doing. I mean, we're working very hard at it. It's the reason why the staff development is so important. And it's all part of this change. I couldn't agree with you more that this is hard change. The change is that we want kids that we have not taught before to be successful. So, yes, we're doing-- We're not just sitting around and saying the tests will come. We're working very hard at it, and lots of other people are too. Local districts are beginning to work hard at it also. And some of the foundations have stepped in.

So there is a kind of feeling that we can do it -- the kind of will that's there. It's very exciting, and I hope it continues. It's very important that it continue.

Thank you.

COMMISSIONER DAVY: Senator, I think you've raised a critical issue here. It can't be, as it oftentimes has been in the past, that the State issues some edict and then expects that magically it's going to change all across the state. I think the work that we've done -- and Willa and many of the folks who work with her in the Department have worked very, very hard to bring about the kind of State support that I think in the past wasn't always available to districts. Through the workshops that she's discussed-- This Physics First program is one that we supported in a very significant way, including bringing those three school districts together to be participants in that initiative. And certainly it would be our hope that that

kind of program could be expanded over time. What we had to do was provide the tools. It's not enough to just say, "Go build the house." We have to do more than that. And to this point I think our staff, and we, have been working very hard on that because, from the very beginning, we understood that if we were going to raise the bar of expectations, we had to do that in a way where we also helped support districts do that successfully.

DEPUTY COMMISSIONER SPICER: More than correct.

SENATOR TURNER: Senator Kean.

SENATOR KEAN: Thank you, Madam Chair, and through you, Madam Commissioner, I appreciate you being here today. I want to thank you for our conversations of last week and the many years before on many different issues related to education. On behalf of the residents of District 21 and your former peers in the municipality of Westfield, I'd like to thank you for your service to the State. And I appreciate your forthrightness regarding the ability to work both with the incoming and outgoing administrations on the importance of pursuing these opportunities in January. And I want to thank you for your candor on the phone over the course of the last week on this front. And I look forward-- And your statement here today. So first, thank you.

The second issue: Given that the incoming administration is going to be focusing a great deal on assessments and making its own judgement on standards-- But this may be the easiest of all opportunities, since there is nobody who has been nominated to succeed you, going forward. What would your recommendation be as this administration hits the ground running? You're offering up an opportunity to say "where we need to go." As you're looking, what would your recommendation be on

one or two points on this area? What would you recommend to the incoming administration?

COMMISSIONER DAVY: I think there's a lot of work underway that I would recommend they continue to move forward on. This idea of 21st century standards is an important one. And to get back to what Senator Ruiz was just discussing, the idea of not only setting forth high expectations for all students, but for providing the support to help make that happen.

I also think that early childhood education is probably the most important investment that this State has made and that this State can make going forward. I visited probably more preschools, for whatever reason, and preschool classes during my term as Commissioner than any other grade level. And I will tell you that in every classroom that I visited, no matter where it was, no matter how poor the neighborhood, I saw children who, with the proper curriculum, with a teacher who was certified and trained to work with young children-- I saw children throughout the state, no matter where I went, do the same things that my children did at 3 and 4 -- my children who had every opportunity in the world to help them succeed. I saw little ones count by twos to 50. I saw them-- Well, I read to many of them, and then asked them questions, and had them all answer questions from a story I read to show that they were already developing the listening skills and the comprehension skills that are necessary, asking questions about vocabulary and things like that. I watched them wait their turn in line and raise their hands when I asked questions. I saw them sing songs together and talk about things in the world around them. I witnessed enough to know that that has been a very smart investment for the State.

And it's, I would argue, the reason why our children have succeeded to this point in the years that follow.

Now, obviously, early childhood education doesn't have a quick payback. It has a long-term dividend. And in the world in which we work here in government, people are oftentimes looking for a quicker fix and something that shows results a lot faster. In my mind, early childhood education doesn't give you those kinds of results. But from everything we've seen, it is certainly the right course of action. So I would certainly hope that that continue to be a priority and an investment that the State invest in, going forward.

SENATOR KEAN: Thank you.

Thank you, Madam Chair.

SENATOR TURNER: Thank you.

As I understand it, there's a total of about \$5 billion that's available through the Race to the Top grant overall.

COMMISSIONER DAVY: It's about \$4 billion. Some of the money has been set aside for an assessment -- development of assessments, which is separate. And about \$650 million has been set aside for a program called Investing in Innovation, or i3. And that's a grant program that states are not eligible to apply for, but districts and other third-party providers can apply for.

SENATOR TURNER: That was what I wanted to ask you. What kind of programs or projects would be eligible for that Race to the Top money?

COMMISSIONER DAVY: For Race to the Top?

SENATOR TURNER: The overall.

COMMISSIONER DAVY: Well, the i3 -- that's for districts to move forward to seek additional dollars to expand programs that are already successful, things that they have tried that worked. It sort of gives them more dollars.

SENATOR TURNER: Such as?

COMMISSIONER DAVY: Let's say you have a great program for mathematics to prepare students to take algebra, and you've only been able to pilot it in one school or in a handful of classrooms. If you've got results that show it works, maybe you'd move that forward.

Willa, do you have--

DEPUTY COMMISSIONER SPICER: You can move from one district to another. So you've got a program that works, and you're willing to share it. You can apply for moneys to scale it up across the state. But it's only local districts and nonprofits that can do it together.

SENATOR TURNER: Have the school districts been notified and encouraged to apply for that money?

DEPUTY COMMISSIONER SPICER: Yes.

COMMISSIONER DAVY: Oh, absolutely.

DEPUTY COMMISSIONER SPICER: Mainly encouraged. And a lot of the nonprofits too, because they can work together to do the evaluation that's necessary.

SENATOR TURNER: Okay. What other innovative programs would qualify for the Race to the Top dollars?

DEPUTY COMMISSIONER SPICER: Well, the Race to the Top is a little different, because it's asking for what statewide reforms we're willing to make in the State of New Jersey.

SENATOR TURNER: What are the reforms we're willing to make? (laughter)

DEPUTY COMMISSIONER SPICER: Well, that's part of our discussion. But the first one that we have that already exists, that we can talk about is-- The first thing they ask for is: do we have any alternative routes for teachers and administrators? And we have. We have one of the best ones in the country -- both alternative routes for teachers and alternative ways for certification for administrators. So in that sense, that part of it is easier than most states would have. It asks us how we're going to use information about student performance, and we have not done that at all. It would take some consideration and discussion of that. It asks us what we will do with the schools that have the most need, and we will have to figure out what we're going to do. We have to do that anyway, because we have another grant that requires us to look at these schools in need and figure out how to turn them around. These are the ones that I think you were talking about -- where for years and years we've tried to turn the schools around. And when I say turn them around, I mean make sure that all the children in them can read, and write, and do math at a level that allows them to compete with the rest of the children in the state. And we don't have a lot of examples out there of where that's been possible. And that's one of the real issues in all of these (indiscernible) funds -- how are we going to do that. And we do have the experience of other states and where it's been working. We have that experience, and we will try to use it.

SENATOR TURNER: Do they also have a category for how we will, I guess, reward good teachers?

DEPUTY COMMISSIONER SPICER: Yes.

SENATOR TURNER: And are we doing anything in that area to provide some incentives?

DEPUTY COMMISSIONER SPICER: The only State incentive that we use is National Board for Professional Teaching Standards, where we provide support for teachers to apply for that. But I don't think we have any others.

Do we?

COMMISSIONER DAVY: No, but we could, in the application, propose something like that.

Two points that we need to remember about this application: The State will need to explain how it can sustain whatever reforms it proposes through Race to the Top. So that's going forward -- how you will continue it once the Race to the Top dollars are no longer available. And it also needs to-- You need to be able to demonstrate that you have the participation and willingness of districts to participate, and not just the school superintendent, but the board of education president, as well as the local association representing the teachers in that district. So that's another component -- that you have to have the agreement of the districts that are going to participate -- that they will march forward to implement the reforms. So something could be proposed as part of this grant application with respect to differentiating pay. You might pay teachers-- Potentially, you could propose paying teachers more to teach in a school that might be a low-performing school and things like that. That's part of what has to be developed through this process.

SENATOR TURNER: I know that the Secretary of Education has a great desire to see more charter schools, more choice schools. Are we within the realm of qualifying for some of those dollars?

COMMISSIONER DAVY: In my mind, we've provided lots of opportunities for charter schools; we continue to. We're in the process right now of providing a shorter application approval timeline. It's really still within the parameters of our regulations currently. But we, in the past, had basically waited until the closing date to accept applications and to begin to approve them. Now we're providing for what I would call *early decision*. So just like applying to college, the deadline to apply is still January 1, but if you get your application in on September 30, you can find out earlier if the college is willing to accept you. We're doing a similar kind of thing. There's still a deadline of March 15 for applications for charter schools, but we told people if they got them into us by October 15, we would give them an answer sooner. And by getting an answer sooner, they could then kind of put the rest of the pieces together and potentially open their school sooner. So in that way, we've been encouraging and promoting more charter schools.

The other component -- and I think the Senator (indiscernible) hasn't already (indiscernible) the Committee -- there's a bill regarding continuing the innerdistrict public school choice program as well.

SENATOR TURNER: Make it permanent.

COMMISSIONER DAVY: And to make it permanent and to allow for some expansion of that. Because there were limitations of only one district per county. Those are greater opportunities for choice.

I think that the Secretary wants to make sure that there are opportunities for parents to have other choices. And I would say that we certainly have had public school choice options available in New Jersey probably for the last decade or better -- probably last decade-and-a-half.

SENATOR TURNER: Thank you.

Any other--

SENATOR WHELAN: Madam Chair.

SENATOR TURNER: Yes, Senator Whelan.

SENATOR WHELAN: Thank you.

If I may, I'm still not clear, through you, to the Commissioner--

The i3 is a district-by-district application for a grant. The Race to the Top comes into the State, and then does the State distribute district by district, or is it just spread out? How does that-- Let's assume the State is fortunate enough to get a significant portion of dollars from the Race to the Top fund. How is that money then dispersed?

DEPUTY COMMISSIONER SPICER: There's two parts. At least half of the money has to go into the local districts who choose to work with you. For instance, you're going to pilot a new method of working with teachers.

SENATOR WHELAN: Pardon me, Deputy Commissioner.

DEPUTY COMMISSIONER SPICER: That's okay.

SENATOR WHELAN: So the local district would apply to the DOE and say--

DEPUTY COMMISSIONER SPICER: Before the application, we would have to have a set of districts that have already agreed to work with us if we were to get the money.

SENATOR WHELAN: That responsibility is on the local district and you communicating with them, and that they were--

DEPUTY COMMISSIONER SPICER: Well, we haven't yet, but we will quickly.

SENATOR WHELAN: Okay. And you said there were two parts. I interrupted you.

DEPUTY COMMISSIONER SPICER: Well, the second part is the money that comes into the State to work on the State aspects of whatever it is we're going to do. So if you're going to do something with turnaround schools, there's money for the State to pick up consulting work, as well as for these local districts.

SENATOR WHELAN: All right. And I would just want to add not so much a question but a comment. I certainly agree with the Commissioner's analysis that early childhood education should be the number one, and maybe the number two priority for where we go. I'm happy to hear that the early childhood kids are raising their hands. My sixth graders don't raise their hands. (laughter) That may be more my teaching style than anything else. I don't know.

COMMISSIONER DAVY: No, sixth graders are tough.

SENATOR WHELAN: But I would add to that. Again, my experience over the years, both anecdotally and from literature I've read-- As they leave early childhood, into Kindergarten to those primary grades, we have to maintain what I think has been a commitment in a lot of these tough districts to the smaller class sizes.

I mean, I go back in teaching phys ed, you cover all the grades. I mean, I remember you had classes of 35 kids in a class -- third grade.

Now, at least in Atlantic City and Pleasantville -- the two toughest districts, per se -- you're seeing 13 to 15 kids in a class. It's making a huge difference. So early childhood education, smaller class sizes, I think, are, for me -- if there's a second or third priority, if early childhood is the first two -- the smaller class sizes at that primary level. And I don't teach the primary grades, so it's not so much impacting me any more. But I think that's where we have to go.

COMMISSIONER DAVY: Well, we certainly built that into the funding formula, as well as the programmatic regulations that are connected to the formula, particularly for districts that are not achieving at the levels that we know they must. We built in there smaller class sizes. I don't think there's any research that really says there's a magical number cutoff. But certainly we want it to be under a certain range so that the teacher does have the opportunity to meet the needs of all the children in the classroom.

SENATOR WHELAN: If I may, Madam Chair, just to expand. Again, my experience is that the problem is at either end. The kids who have more difficulty learning don't get the attention they need, and the brightest kids don't get the attention they need -- those kids who should be going into a physics class in ninth grade -- because the classroom teacher is overwhelmed. They have 35 kids, and they concentrate on that middle pack, if you will, of 18 or 20 kids. And the ones on the extreme end -- both ends -- are the ones who are suffering. I'm glad to hear that that's also a part of the application and, hopefully, would be part of whatever memo you may leave for the new administration. And we'll certainly advocate for that from this end.

Thank you.

SENATOR TURNER: Thank you.

I'd just like to add that not only is it important, in my opinion, to have early childhood education, but also smaller class sizes, as Senator Whelan indicated, particularly for the at-risk kids.

But in addition to that, I think we need to ensure that we have highly qualified teachers in these at-risk districts. Because I've found that in most of the suburban districts, they have the highly qualified teachers. But in the urban districts, that is not the case. So I think that it's important that we have highly qualified teachers, as well as smaller class sizes and early childhood education.

But ultimately, we need to have greater interaction, contact with the parents. That's where the rubber meets the road. Because we have to get the parents of these kids into the schools, working cooperatively with the school and home. Because without the parents, these kids are not going to have the opportunities that they need. Because parents need to be there to encourage their kids and to help them do their homework. And for whatever reason, many parents in the urban areas don't come to the parent-teacher conferences.

SENATOR WHELAN: Absolutely.

SENATOR TURNER: They don't feel as if they're well-received in the schools. So I think we've got to make a greater effort to connect parents with the learning of their children and contact with their teachers in the schools.

DEPUTY COMMISSIONER SPICER: We have done very well on highly qualified teachers in the State of New Jersey, even in the highest

poverty areas. It's 98.6. Trenton, for instance, has only eight teachers who are not qualified.

SENATOR TURNER: Only? They shouldn't have any.

DEPUTY COMMISSIONER SPICER: And they're working on those. Four of them have been there for 25 years or more.

But what's harder -- and this is what Race to the Top really requires -- we have to have highly effective teachers also. And that's a little harder. And Race to the Top asks us to deal with that issue and to figure out how to go about that. Hopefully we'll find a way.

SENATOR TURNER: Are there any innovative programs to cooperate with the home, the parents, getting them involved in the learning of their child?

DEPUTY COMMISSIONER SPICER: Yes, there are lots of programs out there. They're all very different from each other. Most of them, unfortunately, are in elementary schools. And it's hard to convince people not to allow the children to abandon their parents in the middle school and the high school. So it's hard to keep the parents in with them.

COMMISSIONER DAVY: But that's a statewide thing. It's a problem all over. That's not just in an urban setting.

DEPUTY COMMISSIONER SPICER: No, no, that's everywhere. To keep the parent involved in the student's education. Usually they get involved only if the kid is doing something wonderful, like is the star football player; or doing something terrible, like they're in trouble all the time. And we need to make school, really, an easy place for parents to come to, even teenagers.

SENATOR TURNER: Well, part of the problem in the urban areas is, far too many of the parents are school dropouts themselves.

COMMISSIONER DAVY: Exactly, and it's not comfortable.

SENATOR TURNER: So they do not really place a premium on getting a high school diploma.

COMMISSIONER DAVY: Exactly.

SENATOR TURNER: So we need to engage those parents, and work with them, and encourage them to work with their children so that they will, in fact, pursue a diploma and not drop out.

DEPUTY COMMISSIONER SPICER: We need the help of outside agencies to do it too. We need the churches and the other organizations around that have an influence on parents to help us get them in. There's been a great deal of effort along those lines.

SENATOR TURNER: It takes a village to educate a child.

DEPUTY COMMISSIONER SPICER: Exactly.

SENATOR TURNER: Any other questions or comments? (no response)

If not, thank you very much, Commissioner, Deputy Commissioner, for your comments, your thoughts, and all of the work you're going to do to make sure that we grab every dollar we can.

DEPUTY COMMISSIONER SPICER: In the next six weeks.

SENATOR TURNER: Yes, you'll be working non-stop. No Christmas for you. (laughter)

COMMISSIONER DAVY: Thank you. We've been through a couple of those already.

SENATOR TURNER: We have one last group who would like to testify. That's the New Jersey Coalition for World Class Math.

Would you come forward, please?

Let's start off with who is leading off.

Would you introduce yourself and your colleague?

AMY FLAX: Amy Flax.

JILL GLADSTONE: And I'm Jill Gladstone.

Thank you very much for the opportunity, Madam Chair.

Good afternoon, members of the Senate Education Committee.

Thank you for the opportunity.

My name is Jill Gladstone, and I'm a member of the Bridgewater-Raritan Regional School District Board of Education. But I'm not here today as a representative from my district, but as a co-founder of both the New Jersey and U.S. Coalition for World Class Math.

Before I go on with my testimony, I just wanted to mention that I have copies of three other written testimonies that I can give to you. One is from Dr. Sandra Stotsky, a professor of education reform. It's testimony prepared for the Ohio Senate Education Committee from last April. And another is from the mathematics department at New Jersey Institute of Technology. And we also have testimony jointly written by two mathematics professors, one from Mercer County Community College and one from Middlesex County College. They asked that we bring that forward.

Our Coalition was founded last year, not because new standards were being written for 2009-- I'm sorry, our Coalition was founded last year because new standards were being written for 2009, and not only is

New Jersey's track record for academic standards poor, but the latest draft for math was yet more of the same. This is not just based on our opinions. We would like to present evidence to support our thesis and why we believe a different approach must be taken when the Common Core Standards arrive.

In 2006, the Thomas B. Fordham Institute awarded our math standards a *D* with scathing comments. To quote, "New Jersey's content coverage is poor in the extreme, but we need hardly concern ourselves with it. The State's entire approach is fundamentally anti-mathematical."

Our English standards earned a *C*, commenting that the high school standards "show little to no interest in providing New Jersey students with any literary information."

With an *F* grade earned in U.S. History, it is clear that our standards hardly define a thorough education. Our State's overall grade for our standards was a mediocre, at best, *C-*.

Even with this input and excellent standards from such states as Massachusetts and California from which to model, how has the Department of Education managed the latest revisions?

On the same day the State Board adopted the new social studies standards this past September, professors and educators from across New Jersey were already finding gaps and omissions and came ready to testify to their concerns. Here is a brief excerpt from one: "The failure to require students to know anything about Alexander the Great, the Fall of Rome, the Federal Reserve Bank, the presidency of Andrew Jackson, the creation of the State of Israel, to name a few, would be a serious mistake."

And another: “There are 323 Cumulative Progress Indicators for students, and the phrasing of them are bereft of any serious effort to engage students in historical thinking, understanding the relationship between the past and present, or requiring students to construct maps, analyze documents, engage in inquiry, or do historical research.”

I urge you all to read the public testimony and written comments to the State Board on September 16, 2009.

The newly revised 2009 science standards do not explicitly document measurable student outcomes or list exactly what students should know. Our children deserve focused, grade-by-grade detailed standards that also include expectations of high school science courses. Like math, they are a mile wide and an inch deep. We could have and should have modeled California and Massachusetts.

A product of poorly written standards is seen throughout our State’s post-secondary institutions. College remediation rates in New Jersey are stunning. About 80 percent of incoming county college freshmen are placed in remedial classes, with some pushing 90 percent. At our four-year public colleges, about 50 percent of students must take remedial classes in reading and math before they can take credit-bearing ones. The consequences can be very devastating as research shows only about 30 percent of students enrolled in remedial courses will graduate with a college degree.

Currently, there are 2,000 Middlesex County College students enrolled in remedial arithmetic courses that are at the 4th to 5th grade level; not algebra, but basic arithmetic. What were those students taught mathematically throughout their K-12 education if not the basics?

New Jersey should have well-written, rigorous, coherent, and content-rich standards that model the A-rated states, such as California and Massachusetts, as well as the best international standards.

Our Coalition believes a review of all of the evidence presented above, in addition to other research we have done, clearly demonstrates the need for change in how standards are written, revised, reviewed, and adopted in New Jersey. It is especially critical for a better process to be in place with the imminent release of the Common Core Standards.

We look forward to working with both the Legislative and Executive branches to ensure a thorough and thoughtful process is put in place to respond to this need.

Thank you.

SENATOR TURNER: Thank you.

MS. FLAX: Good afternoon, Chairwoman Turner, and members of the Senate Education Committee.

My name is Amy Flax, Co-Founder of the New Jersey Coalition for World Class Math. My background consists of electrical engineering, telecommunication systems engineering, and mathematics education.

I had the privilege of participating as my Coalition's representative on the New Jersey Department of Education Math Task Force last spring. I hope to articulate the necessity for having clearly documented procedures for writing, revising, reviewing, and adopting standards, whether they are national or State standards.

Here are a few rhetorical questions about business to provide us with a frame of reference: Should a drug make it to the public market

without proof of its safety and effectiveness? Should a venture capital firm invest in a new product without a business plan?

Now, let us apply a business model to the business of education. Our New Jersey Department of Education is the corporation; the taxpayers are the shareholders; the customers are our children, community colleges, universities, and the workforce. Our return on investment is how New Jersey's children perform or fail in the future global economy.

The government regulates industries for the public safety. The FDA regulates the food and drug industry. How effective is our Department of Education in regulating the industry of our public school education?

The 1996 and 2002 math standards have failed our children for the past 13 years. In 2008, why were some of the unsuccessful authors asked to revise our math standards?

Here is a brief timeline of events that clearly reveals poor decision making and mismanagement.

First, the DOE had the same writers responsible for our failed 1996 and 2002 standards revise the first 2008 draft. They made minimal changes, ignoring the data that exists on high-quality and proven successful standards. This lack of revisions perpetuates failure.

At the January 2009 State Board of Education meeting, Commissioner Davy announced to our surprise that the Department of Education would be discarding the 2008 math standards draft which had been under revision for well over a year. Commissioner Davy said that a new draft would be crafted based on international and national

benchmarking. Although this was viewed as a positive step, it clearly demonstrates that no process exists.

In February 2009, the DOE released their new math standards for public review. While reviewing the standards and preparing comments, we discovered that they cut and pasted from other states' math standards without doing their homework.

In March 2009, the DOE formed a Math Task Force to “find the balance” between two opposing views: the supporters for the 2008 math draft and those who want a departure from the status quo. Is there a compromise? Standards are either well-written or they are not. The DOE Math Task Force met four times between March and May. The New Jersey Department of Education provided no leadership, they set no clear expectations for success, and no accompanying timelines or expected outcomes.

On June 1, 2009, New Jersey agreed to participate in the Common Core State Standards Initiative, CCSSI. The NJDOE made a bold assumption that the work of the CCSSI will be exemplary and appropriate to meet our children's math and ELA needs, thereby abandoning the work of the Math Task Force and any further work on our State's own math or English-language arts standards.

It is public information that states can add up to 15 percent academic content beyond the Common Core Standards. How will that be determined in New Jersey? Will the authors of the failed 1996 and 2002 math standards dictate this 15 percent?

The DOE's actions articulated above demonstrate the Wild West philosophy in the business of educating our children. We have every

reason to believe that this unregulated process exists for all Core Curriculum Content Standards and will most likely be replicated for the Common Core State Standards. Businesses fail, but we cannot fail at the business of education. Why is it that New Jersey's Department of Education is exempt from best business practices?

It is time to successfully regulate the business of education. Our State's greatest investment is our children. New Jersey's future and the future of our nation depend on the education of our children.

I ask you, the Senate Education Committee, to write and pass a bill that will ensure streamlined and effective procedures when writing, revising, reviewing, and adopting any curricular standards. This will help to provide a thorough and efficient education for our children.

Thank you for the opportunity to speak today.

SENATOR TURNER: Thank you very much.

Will you introduce yourselves, please?

A N N E C L A R K: I'm Anne Clark.

S A R A H - K A T E M A S K I N: And I'm Sarah-Kate Maskin.

SENATOR TURNER: And you're from?

MS. CLARK: We're with the New Jersey Coalition for World Class Math.

SENATOR TURNER: Okay.

MS. CLARK: Good afternoon, Chairwoman Turner and members of the Education Committee.

Thank you for this opportunity to share our ideas today.

My name is Anne Clark. I have a master's degree in chemical engineering and worked for a major U.S. Corporation for 11 years in

engineering, manufacturing, and finance. I have a son at Mendham High School. And in my almost four years in New Jersey, I have been working hard to improve our schools.

The Common Core State Standards Initiative math and English language arts final drafts are due in mid-January with public comment to follow for 60 days. At some later time, after the National Validation Committees have reviewed and approved the standards, they will be sent to the states for adoption.

I will briefly outline the thorough and thoughtful process our Coalition would like to see implemented for the review of these proposed standards here in New Jersey.

Although Governor Corzine and Commissioner Davy signed the memorandum of agreement for our State, the legal responsibility for development of Core Curriculum Content Standards still resides with the Department of Education, and legal responsibility for adoption still resides with the State Board of Education.

We ask that the Department of Education assemble a validation committee for each subject area comprised of key stakeholders in education, including parents, teachers, community college professors, university professors of education, university professors with subject matter expertise, and standards development experts. The validation committee would be charged with evaluating the Common Core Standards in relation to those that have been judged to be the best in the U.S., as well as judging them in relation to international benchmarks.

The validation committee will solicit public comment in New Jersey, with public hearings if time allows, or solely written input if time constraints prevent this useful dialogue across the state.

The validation committees will document this input and their analysis, and report their findings to the Commissioner and the State Board of Education. The Senate and Assembly Education Committees will be copied on all documents and are urged to conduct hearings as they see fit. The validation committees will present their findings to the State Board and make their recommendation to adopt, amend then adopt, or reject the Common Core Standards.

We believe that the Race to the Top will require New Jersey to adopt standards that are substantially coherent with the Common Core Standards. But we believe adopting world-class standards for our State is more important than the extra points that we stand to earn on the Race application.

We will be watching closely what other states are doing, as we have a nationwide network of concerned citizens following every step in each of their own states. If we see states that currently have the highest rated standards hesitate or decline to adopt because the Common Core Standards are a step backward, it should give us great pause. Nothing prevents New Jersey from joining with other high-standards states like Massachusetts to develop common standards as part of a regional consortium.

We believe the Department of Education and State Board must be prepared for a thorough and thoughtful review of the Common Core Standards early next year. We hope we have clearly conveyed our

expectations for the steps that will be required if New Jersey is to have a better foundation for education in our State.

Thank you.

SENATOR TURNER: Thank you.

MS. MASKIN: Thank you, Madam Chair and Committee members, for this opportunity to share our Coalition's thoughts regarding our current State standards, the Common Core State Standards Initiative, and Race to the Top.

My name is Sarah-Kate Maskin. I have been teaching for 17 years, and I have three children in the Ridgewood Public Schools.

Our Coalition has been working tirelessly to hold the Department of Education and our State to the highest standards for math education. Development of world-class academic standards is one of the many areas to be reformed. We also need world-class assessments and, most critically, a world-class teacher corps.

The Race to the Top is a \$4 billion competitive grant program to encourage and reward states that are implementing significant reforms in the following four education areas: enhancing standards and assessments; improving the collection and use of data; increasing teacher effectiveness and achieving equity in teacher distribution; and finally, turning around struggling schools.

The hope is that Secretary Duncan will place some bets that will pay off. It's a very free market approach, but there are minimum requirements for entry, one of them being adoption of the Common Core Standards.

It is unfortunate that New Jersey isn't applying for Phase 1 of the Race to the Top funds, potentially missing out on \$200 million to \$400 million feeding into our schools.

One of the key messages we would like to convey this afternoon is that we have no opposition to common standards developed amongst a consortium of states. However, they must be fewer, clearer, and higher standards, and we must not endorse them until we are given a fair chance for a thorough and thoughtful examination before adoption in our own State.

The Gates Foundation has just announced that they are going to give \$1 million to the National PTA to push for adoption of the Common Core Standards in just four states, one of them being New Jersey. This is a rather heavy-handed approach to push support for standards that we haven't yet had an opportunity to review.

We ask that a clear message be sent by our Legislative and Executive branches: excellent education is an imperative here in New Jersey, and we will not blindly accept standards or assessments due to pressures from outside sources, including CCSSI and Race to the Top, without appropriate review within our State.

Here are the key points regarding our Coalition's collective testimony today. Our current Core Curriculum State Standards have been failing our children, producing ill-prepared high school graduates. There are no documented procedures providing the road map to follow when writing, revising, reviewing, and adopting academic standards. With the Common Core State Standards Initiative upon us, there must be a New Jersey Common Core Validation Committee, independent of the national

Validation Committee, to examine the quality of math and English-language arts common core standards. This committee's critical review must be objective and unbiased to discern if the national standards will provide the necessary framework for our children.

Finally, we must not adopt the Common Core Standards in New Jersey if they are not of the highest caliber. We suggest joining Massachusetts and working with them on the academic standards they are currently revising in case the Common Core falls short.

There are two actions that would address our concerns, and we would welcome the opportunity to work with the Legislative branch and the DOE in the future regarding these issues. The first action is for the DOE to assemble the New Jersey Common Core Validation Committee by the first of the new year. And the second action is to write and pass a bill that will ensure streamlined and effective procedures when writing, revising, reviewing, and adopting any curricular standards.

There is no do-over for the millions of students who make their way through New Jersey's public schools. After all, they get but one chance.

And if I might ad lib for a quick moment, back to Deputy Commissioner Spicer's talk earlier, I would like-- I had one question that's kind of rhetorical. But it would be nice if maybe we could get an answer at some point in the future. Why does it take a national effort to improve the quality of New Jersey's standards? And my second question is: If we don't adopt the Common Core Standards, which is one of the prerequisites for applying for Race to the Top funds, what then? What plan does our DOE have in place to address the fact that the Common Core might not be up to snuff here in New Jersey? And they've already said they've kind of

abandoned the work of our math, English, and language arts Core Content Standards. I'd like to know if there's a Plan B.

And finally, to answer someone's question earlier on: What about Massachusetts? Massachusetts has proven over and over again their top-ranked student performance, for their content in curricular standards, for their teacher training, and for their assessments. So Massachusetts, in my opinion, is a benchmark for us to look to.

Thank you very much.

SENATOR TURNER: Thank you very much.

But I'd like to just correct something that you said regarding New Jersey not applying for the Race to the Top funds. The Commissioner, today, indicated that they are going to be moving ahead and will have the application in prior to the deadline. So we're hopeful that New Jersey will not be left behind.

MS. MASKIN: Thank you.

SENATOR TURNER: Thank you very much.

MS. MASKIN: That was good news to hear today.

SENATOR TURNER: Thank you very much.

Senator Kean.

SENATOR KEAN: Thank you, Madam Chair.

It certainly was good news for a lot of us who are focusing on that on a bipartisan basis.

Through you, Madam Chair, I'd like to thank the members of your Coalition who came into my district office and engaged in a lively conversation on these and some of the other subjects that we need to prominently work toward. I'd like to thank the Chair for including this as

part of the testimony, part of the discussion -- subject today; and also setting forth some very important areas that we need to work very cooperatively with the incoming administration, outgoing administration -- some areas that we need to focus on for the harmonization of standards for all of our students, in every single zip code, as we work toward making sure that there are really -- as you call them -- world-class standards in every category, and children are achieving those scores; but also pursuing the opportunities that should be available to every single student that graduates from every single school in every single corner of the state.

So I want to thank you for your leadership on this front. I want to thank you for coming down here today. And I'm surprised you found parking on a day like today. (laughter) But thank you so much for your leadership here, and coming down, and really being an extraordinarily important part of the conversation within this last year -- of organizing. Thank you for your insight, your advice.

And I also thank you, Madam Chair, for including this as part of this discussion today.

SENATOR TURNER: And thank you, Senator.

SENATOR WHELAN: Madam Chair, if I may.

SENATOR TURNER: Senator Whelan.

SENATOR WHELAN: I want to echo Senator Kean's remarks, in terms of thanking you for being here.

But I want to make a comment and then raise an issue, frankly.

My comment is: With all due respect, I think we're painting with too broad a brush here. Yes, there are very significant issues, not just in math, but across the board in our schools. We see the statistics that --

you refresh our memory of children who graduate high school, go to college, and need remediation work. But that's not the whole story.

We know, for example -- with all due respect to Massachusetts -- New Jersey's number one in high school graduations, in terms of going to advanced placement in college classes. So there are a lot-- And I could go on with other examples. I don't want to belabor the point. But there are a lot of good schools, a lot of good teachers, a lot of good students doing a lot of good stuff, who go to Princeton and elsewhere, and they're receiving college credit for courses they took.

Where I'm a little confused, and the concern I would raise-- It sounds like you're not happy with what New Jersey has done, and you're not happy with what the Federal government is about to do. So I'm not sure where that leaves us other than to say, number one, as a practical matter, financially, frankly, we're going to need to be somewhat in concert with the Federal government, because we're going to need those dollars, very bluntly. So, again, I don't know where that leaves us. If we're not happy with what New Jersey has done, and we're not happy with what the feds are about to do, where do we go?

MS. FLAX: Could I answer that?

SENATOR WHELAN: Sure.

MS. FLAX: On the first part: not happy with what New Jersey has done--

MS. MASKIN: Is accurate.

MS. FLAX: --is accurate in how we write our standards. There really are no procedures on how you do it. There is no true involvement of the post-secondary institutions in the way we write standards today.

Mostly it's the educators. And if the community colleges are seeing high remediation rates, those people should be part of the discussion and in the process of writing academic standards. You should have mathematicians and English professors, because they understand their subject areas. You should have academic content experts in the sciences as part of the process.

SENATOR WHELAN: Pardon me for interrupting. Speaking for myself, I'm fine with that. All I'm saying is, let's acknowledge that there is really a very strong positive story to be told in terms of New Jersey education.

MS. FLAX: Oh, absolutely.

SENATOR WHELAN: Maybe we have missed the mark. And the reality is that a lot of those students who are going to the advanced placement are going to the Princetons, and Penns, and so on, as opposed to the community colleges.

MS. MASKIN: We wouldn't be here today if we didn't feel that way. We all have children in the public schools, not private, not parochial, not charter. I'm a teacher. I make my livelihood out of the public institution of educating. And New Jersey can be so much better.

And in terms of the finances, you are absolutely right. And our Coalition, all along, has been advocating for modeling proven success instead of wasting taxpayer dollars to form another task force, and sit there and discuss the opposing viewpoints. There are states that do have well-written standards. And, again, our conversation is about the standards.

I believe, Senator Ruiz, it was your question: Could you give us an example of how something in the 21st century standards is different from what there was five years ago? Our standards are written in a way that

if Mr. and Mrs. John Doe wanted to pull up on the DOE Web site what their 1st grader is going to be responsible for learning, they would have no way of knowing. They're written in strands, not by grade level. And I believe the work of the Common Core is actually going to address that.

So our concerns are really about the quality, the content, and the process when it comes to writing the standards, which is what our local school districts are responsible -- legally responsible for adhering to.

SENATOR WHELAN: I get that.

MS. MASKIN: I'm sorry, does that answer-- It does not answer your question.

SENATOR WHELAN: I don't want to debate with you because I think, ultimately, we could certainly find more common ground than not. But if you're a public school teacher, you've probably heard the expression: You don't fatten the hog by weighing it, right?

MS. MASKIN: Yes.

SENATOR WHELAN: We can't educate our kids if all we do is assess, assess, assess. If we have assessments, and we test, and that's all we do, they're never going to learn anything. So while you're concerned over the process and the outcome of the assessment piece, I hear that. And if there are ways to do a better job, including involving the colleges-- What I thought I heard earlier was that if we don't like the Core Curriculum that comes from the feds, there is up to a 15 percent range that you can change, and so on. So I think that would give you-- Because a lot of it is going to be boiler plate, quite honestly, you and I both-- I'm talking to you as a teacher. You and I both know this. I teach also.

MS. MASKIN: Okay.

SENATOR WHELAN: So there's going to be some flexibility. So while, yes, today we happen to be talking about assessment, let's also recognize that there are a lot of positive outcomes -- probably as many or more positive outcomes. When you measure New Jersey -- where our kids graduate from high school in the national rankings -- maybe we're not number one, like Massachusetts might be in math, but we're generally in the top five to 10 across the board. So I just think that needs to be said in the context of this conversation.

Let's do a better job.

I won't belabor the point, Madam Chair. I apologize for going on.

SENATOR TURNER: It's all right.

SENATOR WHELAN: Let's do a better job in establishing whatever the assessments may be. Let's look at the Federal curriculum standards that come down. If we need to adjust them within that 15 percent, fine. But let's also remember, there's a lot of good stuff going on.

MS. GLADSTONE: I just wanted to, if you don't mind--

The reason we started-- We saw the first draft of what would have been the 2009 math standards. And they were identical to the current-- And the calculator was still in 2nd graders' hands. I've heard so many parents in my community, as a Board member and just a parent-- Their children are not learning how to add because the calculator is given to them. Their children are not learning standard algorithms and certain procedures -- how do we multiply two numbers. They were learning alternatives, which might be good, but you still-- The mathematicians say you have to learn building blocks, standard algorithms.

Massachusetts and California -- their math standards do not even have the word *calculator* until 7th grade. So when we saw the revision of the math standards still had the calculator in 2nd grade, an alarm went off. I'm thinking of another five to seven years of parents seeing their kids not really get proficient with computation. And now we have kids graduating, in arithmetic courses.

So, yes, New Jersey does a wonderful-- We have wonderful schools and teachers. I'm proud to be in Bridgewater-Raritan. We're a wonderful district. Lots of kids are taking AP courses, doing well on the SATs. There's a lot of tutoring going on in some districts and some communities too, in communities where parents have the means to tutor and supplement. In the communities where parents don't have the means to get a tutor, to go to Kumon or Sylvan to learn some of the basics, the standards are holding those kids back. So that's when we started. And we saw the process, and we saw how certain individuals were involved. That's how we all came here. It's all about the process. So we just wanted to make sure, going forward, that we include content area experts in review-- The community college professors from Middlesex County and Mercer who provided testimony -- they were never -- nobody from community colleges were asked to be part of the math standards revision process. So it's just about going forward and doing it the right way so that everybody has a good education.

Thank you.

SENATOR TURNER: Thank you very much.

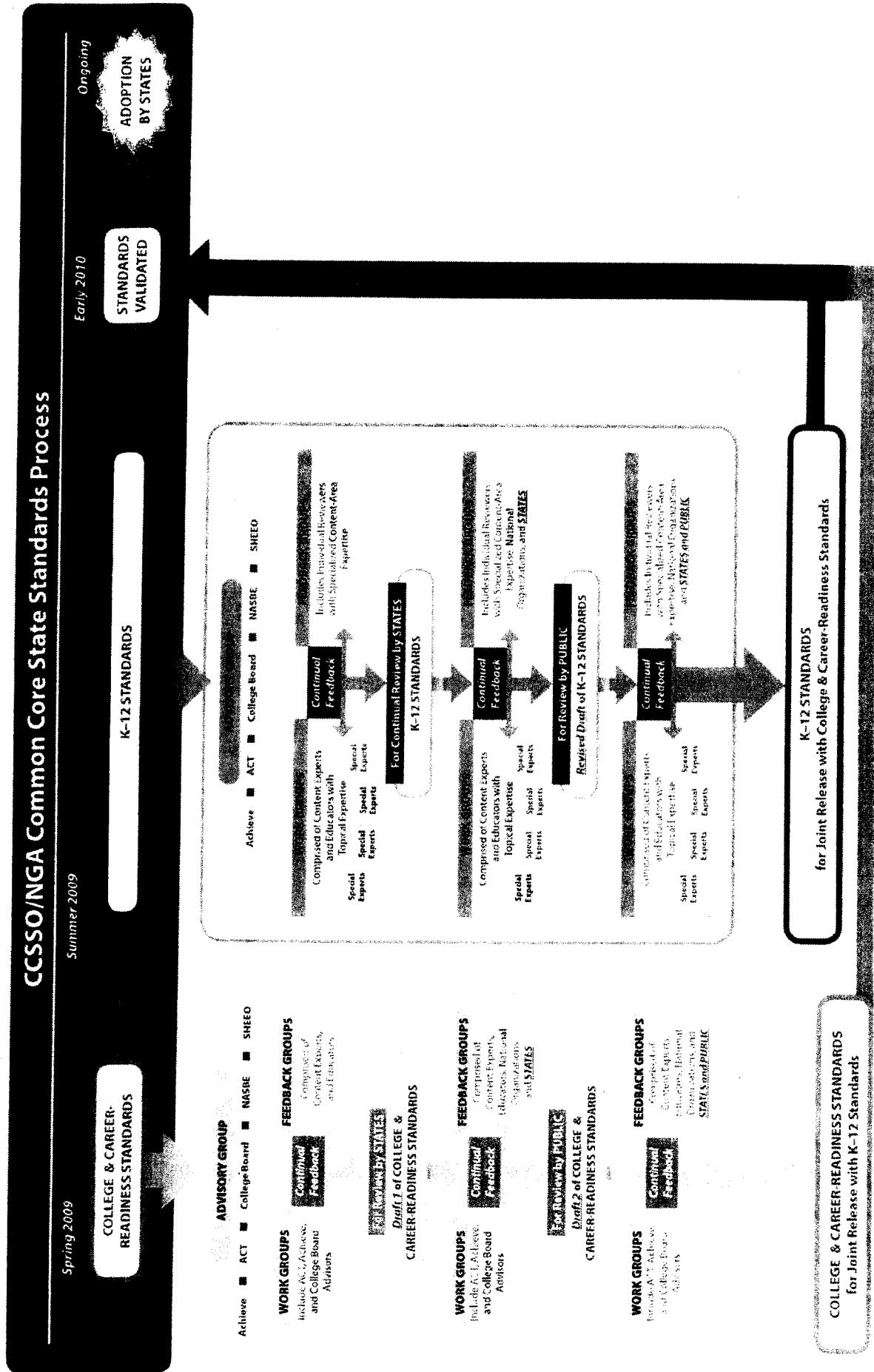
Thank you for your testimony, and thank you for coming here today. There are a lot of good things going on in New Jersey, but we still have a lot more work to do.

Thank you very much.

The hearing is adjourned.

(MEETING CONCLUDED)

APPENDIX





College of Education and Health Professions
Department of Education Reform

201 Graduate Education Building
Fayetteville, Arkansas 72701
(479) 575-3172
(479) 575-3196 (FAX)

Invited Testimony Prepared for the Ohio Senate Education Committee

Why Ohio Needs World-Class Content Standards for K-12, and
How To Get There

Sandra Stotsky, Ed.D.
Professor of Education Reform
21st Century Chair in Teacher Quality
University of Arkansas
April 15, 2009

Dear Chairman Cates, Ranking Member Sawyer, and members of the Senate Education Committee:

I appreciate the opportunity to speak with you today about state standards and aligned accountability systems. You face a huge challenge as you think about ways to improve Ohio's academic standards. The standards you have today are mediocre at best. The governor's budget seeks to make drastic changes in them. Many thoughtful people are concerned that the direction of these changes would make Ohio's K-12 academic standards worse, not better. I am here today to recommend resources and procedures that will help you to get world-class academic standards. But I would like to tell you first how the state that is widely regarded as having the best academic standards in the country got them.

The Position and the Charge: I have spent over a decade evaluating the quality of state standards across the country and advising many states on how to create academically strong standards. My expertise in this area is based on my work as Senior Associate Commissioner at the Massachusetts Department of Education from 1999-2003. In that role, I was in charge of complete revisions of all of the Bay State's preK-12 standards, teacher and administrator licensing regulations, teacher tests, and professional development criteria. A line item in the state budget for the specific position I held had been funded by a chiefly Democratic State Legislature in January 1999 at the request of then Governor William Weld, a Republican. I was hired for the position by the Commissioner of Education, David

Driscoll, a Democrat, in March, a choice that was enthusiastically supported by the Chair of the Board of Education, James Peyser, a Republican.

Thus, I worked in an authentic bipartisan environment. I was expected to enhance the academic rigor of all of the Department's documents for preK-12 that had been developed to implement the education reform measures enacted and funded by the Massachusetts legislature in the 1990s.

The legal framework within which I worked was the Massachusetts Education Reform Act of 1993, a comprehensive piece of progressive legislation that linked a clear measure of accountability to state funding in every component of preK-12 and teacher education. Its overall goal was to increase both preK-12 student academic achievement and the academic quality of the state's preK-12 teaching force. My goal was to improve the state's major curriculum frameworks, its regulations for licensing teachers and administrators and for approving their preparation programs, and the teacher tests required for licensure, drawing on the soundest scholarship or research evidence I could find in every subject area and in the field of education. How to recognize sound scholarship and research was exactly what I had been trained for in my graduate work at Harvard's Graduate School of Education in the 1970s.

The first components the Department needed to get right to increase student achievement and teacher quality were clearly the curriculum frameworks in each subject area: mathematics, English, reading, science, history, geography, economics, civic education, foreign languages, and the arts. Why are curriculum frameworks with strong academic standards the beginning and the end? Because they heavily shape (or should) the academic components of all the other documents a state department of education develops for preK-12. These include student assessments in basic subjects, guidelines for state-funded programs for preschools, English Language Learners, and instructional technology, and regulations for teacher and administrator preparation programs, licensure tests, and professional development. State standards also influence directly the content of classroom curricula and course configurations, even though departments of education cannot mandate specific curricula and instructional strategies, in theory the province of local school boards.

What I Found: My first step was to review critically the Department's existing curriculum frameworks, guided by authoritative discipline-based commentary on what the school curriculum should contain and how its content should be sequenced (especially in mathematics and science), as well as by whatever

credible educational research I could locate. Each subject area suffered from a number of deficiencies. Although some were subject- specific, generic deficiencies were more serious and afflict most states' standards, regardless of subject. I highlight here the three most serious problems in the original drafts or frameworks I examined.

*Statements on skills, processes, and strategies cluttered the documents. Educators on the original standards development committees had spent most of their time arguing about, and developing prescriptions for, how teachers should teach or what strategies and skills student should learn, not the specific intellectual content to be taught from grade to grade. As a result, much of what was in the original documents or drafts was unassessable.

*Academic experts in the disciplines had played only a minor role in shaping the content standards, and what passed for a content standard was often vague or inaccurate. In addition, many content standards were organized and sequenced incoherently from a discipline-based perspective.

*As a result of poorly designed or vague standards, many of which were not actually standards, essential intellectual content was often lacking or hard to see. In English/reading, it was mostly invisible because of the failure to specify an increasingly demanding sequence of significant texts and/or authors to help teachers and schools construct an authentic English curriculum; in mathematics, essential topics were spread over too many grades and diluted by less important topics; in science, authentic content was diluted by non-content issues; and in history and the social sciences, content was expressed at too high a level of generality, leaving teachers in the dark as to what specific events, people, trends, places, and times should be taught within an appropriate narrative framework in history, geography, economics, U.S. government, and civic education.

My staff and I concentrated on the six following objectives in revising the state's original standards:

- *To make disciplinary content the central focus in each subject area
- *To specify the disciplinary content to be taught by teachers in each subject area, grade by grade, or course by course in high school mathematics, science, or history
- *To craft intelligible and assessable standards in a coherent sequence
- *To organize the high school standards for each subject in ways that reflected the normal disciplinary training of teachers of that subject

*To make clear that acceptable teaching/learning strategies included teacher-directed as well as student-directed strategies

*To include as many examples as possible showing how a standard might be implemented in a classroom lesson so that teachers could see exactly what the standard meant and how critical thinking, problem solving, and other skills were naturally intertwined with the content being taught and developable when teaching to an intellectual objective

What I Did: What was done to ensure a set of strong and coherent academic standards in each subject? First, we eliminated all so-called standards above the primary grades (preK-2) focusing chiefly on skills and learning processes or strategies. They were and are not standards chiefly because they are generic in nature, content-free (or not sufficiently content-specific), and unassessable in isolation. That is why attempts to add a layer of explicit skills, processes, or strategies to classroom instruction and state assessments will point teachers in the wrong direction and retard student acquisition of the knowledge base needed for their appropriate use. Basic academic content is both foundational to critical thinking, problem solving, and effective oral or written communication as well as inseparably intertwined with the development of these skills. These skills can be effectively deployed only after students have acquired the specific content that guides the choice of a specific skill to use in a specific context and how it is to be used.

Second, we arranged for academic experts in each area to work directly on the revised standards or to review them. Teachers were regularly consulted on developmental appropriateness, teaching load (number of objectives at a grade level), and grade level placement. But specific content in mathematics, science, history, geography, economics, and US and comparative government was determined chiefly by mathematicians, scientists, economists, historians, geographers, and political scientists, with assistance from experienced and well-trained high school teachers in English and history, especially.

Third, we re-organized the way in which middle and/or high school standards were presented, so that schools could see what should be covered in subject-specific courses in US or world history, science, and mathematics.

Empirical Results: Let's get quickly to the proof of the pudding. On the 2007 NAEP tests (commonly referred to as the Nation's Report Card), Massachusetts students scored first in grades 4 and 8 in

mathematics and in grade 4 in reading, and tied for first in grade 8 in reading. The Bay State's low-income students also made stunning gains. When the scores of low-income students were compared *with the scores of low-income students in the other states*, it turns out that the Bay State's low-income students are tied for first place in mathematics in grades 4 and 8 and in reading in grade 4. And in grade 8 in reading, they are tied for second place. These dramatic gains by student subgroups also turn up in scores on our state tests. For example, in 2001, when the high school graduation requirement kicked in, only about 15% of black and Latino tenth graders scored at the proficient/advanced levels on the state's grade 10 mathematics test. In 2007, the percentage of black and Latino tenth graders who are proficient/advanced was about 45%, a three-fold increase.

Results on international tests in mathematics and science given in 2007 were even more stunning. Massachusetts 4th graders ranked second worldwide in science achievement and tied for third in mathematics; its 8th graders tied for first in science and ranked sixth in mathematics. The Bay State also leads the nation today in the percent of its public high school students taking and passing Advanced Placement courses with a 3 or more--almost 21 percent--a larger percentage than most other states in the nation and well above the national average of 15.2 percent.

These impressive results are due to more than world-class standards, however. Several other factors contributed to the so-called Massachusetts Miracle. The academic knowledge base for teaching to the state's strong content standards in mathematics, science, English language arts and reading, and history/social science was fully embedded in the state's revised teacher licensing regulations, teacher licensure tests, and criteria for state-funded professional development. The revised or new subject area licensure tests for elementary teachers, in particular, weighted mathematics and science more heavily than before, and we eliminated all pedagogical items from all subject area tests. In addition, we mandated a dedicated test of research-based reading instructional knowledge for all prospective early childhood, elementary, and special education teachers. All these changes in our licensure regulations and tests have led to stronger preparation programs and an academically stronger teacher corps in K-8 since 2002. But, there is one more factor that is obvious to everyone in the Bay State--the state's generally acknowledged high quality student assessments, which are based clearly on our strong content standards. Without strong content standards as the central and overarching component of systematic educational reform, no "miracle" would ever have occurred.

Resources for 21st Century Content: Let me first suggest some key resources (all public documents) Ohio should draw on to ensure 21st century content in world-class content standards. I will indicate key documents or reports in the four major subjects in the school curriculum.

For English or reading, the best resources to draw on are the contents, examples, and reading lists in the curriculum frameworks for Massachusetts (2001), California, and Indiana. Texas's 2008 standards and their organization, as well as the English and Communication standards in Achieve's American Diploma Project and the examples for its backmapped benchmarks, can also be very useful .

For mathematics standards, there are no better resources than the standards for California, Singapore, Minnesota, Indiana, and Massachusetts. The recommendations in the National Mathematics Advisory Panel's final report of 2008 should be followed as much as possible, as should the recommendations in the report by the Panel's task group on Conceptual Knowledge and Skills. Curriculum Focal Points, issued by the National Council of Teachers of Mathematics in 2006, should also be consulted.

For science standards, the best resources are the 2006 Massachusetts science standards, and those in California, New York, Indiana, and New Mexico. And for history and the social sciences, the best documents for specific details are California's standards, the 2003 Massachusetts history and social science standards, and the National Civic Standards issued by the Center for Civic Education in California.

Procedures for Developing Content Standards: Let me now recommend a few generic procedures that can help ensure that strong content standards emerge from a revision of Ohio's K-12 content standards.

*First, the state superintendent and her team should prepare a **critical review** of the content standards in each subject, referring to the most highly regarded standards documents in the subject (national and international), as well as research reports. This review should point out the major features that the best documents share and differ on, as well as the strengths and weaknesses of the state's documents. Feedback on the state's document should also be solicited from the state's teachers, parents, and others by means of an extensive online survey. The review should be sent to the State Board of Education, the legislature, and the Governor's office detailing exactly what general changes are recommended to strengthen current state documents, together with a rationale for the recommendations based squarely on the documents and reports that have been reviewed, as well as a synthesis of the solicited feedback.

*After approval or amendment by all relevant powers that be, the state superintendent should designate several people to be in charge of the basic drafting process. In each subject area, a content expert or two (with a Ph.D. in the subject) should work with a high school chair/teacher and a K-8 curriculum specialist to draw up the **first draft of the standards**, in sections over a span of several grade levels. One staffer should be in charge physically of the draft document at all times. A first draft cannot and should not be written up by a group of people at a meeting, or staffers without Ph.D. expertise.

*The state superintendent should establish a **small review committee of about 15 teachers** for each document. District superintendents should be asked to recommend a well-regarded, experienced elementary, middle, or secondary teacher of that subject. In other words, 15 school districts should be represented, with equal numbers at each level, on each committee. As each section of a document is drafted, the relevant committee should review them together to assure appropriateness of grade level placement and teaching load, and to raise or address questions about content and curricular sequence.

*The revised draft should go for **review by academic experts** (people with Ph.D.s) and relevant groups (e.g., in mathematics, the Mathematical Association of America), who are asked to send back comments with their names attached to assure responsible feedback. All feedback should be posted on the ODE website. Changes to the document to address reviewer comments should be based on agreement by the drafting group and approval by the state superintendent.

*The draft of the standards that goes out for **public comment** should also be sent to all the academic experts again. After the public comment period, the state superintendent and her staff should provide the State Board of Education, the legislature, and the governor with a summary of the feedback and a **rationale for the final shape of a the revised document**.

Thank you Chairman Cates, Ranking Member Sawyer, and members of the Senate Education Committee for this opportunity to speak with you today. I look forward to your questions and comments.

December 7, 2009

In 1996 the New Jersey State Board of Education adopted the first set of "Core Curriculum Standards". They were designed to provide the school districts with a set of benchmarks (skills and content knowledge) in which students should demonstrate proficiency upon graduation. To assess whether the students have mastered the content, they are given standardized test such as the NJ ASK or HSPA to determine the level of proficiency. The scores on these tests are not realistic, for they are scaled. Assessment is a critical part of the learning process. It must be directed at what a student knows and what a student needs to move successfully through a well-defined mathematics curriculum. To this end, any testing, whether it is a state or national assessment in specific mathematics content (Algebra I/II.) cannot be developed with scaled scores as the reporting device. It is unconscionable for educators to give students a passing scale score knowing that the probability of future success for students with such a passing score is highly unlikely.

"Proof that high schools are failing is the number of first-year college students who take remedial classes", Education Commissioner Lucille Davy said. "In two-year colleges, 80 percent need remedial math or English classes; in four-year colleges, 40 percent to 50 percent need them."¹ Not much has improved since this statement was made.

New Jersey high school graduates believe that the diploma they hold proves that they are ready for college-level academic work. Parents believe it, too. The truth is that their public-school experience has lied to them about their level of competence in mathematics with the grades they received and the courses they took. These students have never learned what they should have, and probably could have, learned because the curricula to which they have been exposed are misguided. A student's K-12 experience should provide a mathematics curriculum that prepares them for college-level mathematics. The lack of good mathematics standards adversely affects mathematical literacy, and also limits students' future educational and career opportunities. For a state purporting to prepare students for 21st century work skills in an increasingly technological society, the skills of our students simply do not measure up.

They come to college, especially to the community colleges, needing remedial mathematics in large numbers. The cost of developmental education across the nation is estimated to be between 1.5 and 2 BILLION dollars a year, money which could and should be spent on more innovative teaching strategies. Not only is the cost outrageous, but data have shown that only about 37 percent of students enrolled in developmental courses will graduate with a college degree. President Obama has also pledged support to the movement to "fix" remedial education for, as he stated, "it is such a drain on state dollars".

Looking at the cost of developmental education in New Jersey, the number of students enrolled in developmental courses has risen this past fall as the placement score to test out of remedial (developmental) mathematics courses was raised statewide. The cost in resources is staggering. Taxpayers have a right to be outraged, and colleges should be

allowed to charge back school districts for every student who needs remediation. In a 1998 study by Breneman and Harlow,² the cost of remedial education in New Jersey was listed as 50 million dollars. So what is the estimated cost today? **On average**, a community college will run 70 remedial math courses per semester: 70×3 semesters \times 25 (on average) students per class \times 19 community colleges = 99,750 students taking remedial math over the course of a year. The most recent data from the U.S Department of Education (2004-2005) puts the cost of remediation at a two-year school at between \$1607 and \$2008 per student.³ Assume \$1800 per student (a little less than the average cost figure), and mathematics remediation is costing the community colleges somewhere around \$179,550,000. We are spending this money and still it presents a barrier to these students in completion of their college degree. The potential economic benefit of improving students' academic outcomes should be a wake-up call to the importance of reforming school curricula.

The table below shows the remedial rates at New Jersey community colleges and four-year colleges and universities for 2004.

Community College	Remediation Rate (%)	Four-Year College/University	Remediation Rate (%)
Atlantic Cape	77.6	Kean	70.0
Camden	81.0	Montclair	54.0
Cumberland C	80.0	New Jersey City	62.0
Gloucester	73.2	NJIT (estimated)	40.0
Salem	92.5	Ramapo	23.0
Bergen	81.8	Rowan	21.0
Essex	91.4	Rutgers	33.0
Hudson	67.9	Stockton	14.0
County College of Morris	76.0	The College of New Jersey	8.0
Passaic	96.3	William Patterson	72.0
Sussex	75.0		
Union	67.0		
Warren	75.0		
Brookdale	79.8		
Burlington	73.8		
Mercer	83.0		
Middlesex Community	78.5		
Ocean Community	67.7		
Raritan Valley Community	78.0		
STATEWIDE COMMUNITY COLLEGES	77.8	STATEWIDE FOUR-YEAR	40.0

Based on the data, it is evident that what we are doing is not working. We cannot solve the problem by pointing a finger at any one factor. It is not only the standards, but also teachers who can not teach what they do not understand. With the current shortage of

qualified mathematics teachers and the current state of the mathematics standards in New Jersey, one has to ask the following question: if K-12 education now results in little development of the skills that lead to an understanding of basic mathematics, where will future teachers acquire the skills needed to teach future generations? We have already had a generation of students who have passed through mathematics curricula in New Jersey who are not mathematically literate. Some of these same students become the teachers of future K-12 students and the degradation of mathematics knowledge continues. Courses for prospective teachers do not create robust mathematical knowledge. Whatever standards, texts, and written curricula are proposed is only a resource: it is the teachers' understanding of the subject that matters most in the teaching of mathematics. The training of prospective teachers of mathematics needs to be reviewed by both mathematics departments and schools of education. As one high school teacher, who took a course from George Polya, put it: "The mathematics department offers us tough steak which we cannot chew and the school of education vapid soup with no meat in it."⁵ That statement is still meaningful, even though it was written fifty years ago. We cannot continue to ill prepare teachers and then send them into the classroom with the expectation that they will teach for understanding. This is asking them to do the impossible.

Let's stop the blame game, for we know that college remediation is a serious education issue facing our state, and is a direct result of the failed mathematics curricula used in the state. So how do we solve the problem? This will require great effort and concentrated political push. New Jersey is known for its high property taxes, the high cost of car insurance, and in addition for the highest per pupil spending in the nation. It would seem a logical conclusion that throwing more money at the problem is not the answer. College readiness starts in kindergarten and, if the state standards are to be a guide, they must be aligned to the demands of college work. High standards improve teaching and learning. The time has come to stop treating standards, assessments, teacher recruitment, and accountability as separate silos, to stop taking a triage approach to education, to stop clamoring for more money as THE solution, and to work toward a response that provides a lasting solution. Why can't New Jersey be noted for something positive by creating a plan that can become a national model? This can only be accomplished if all the stakeholders (K-12, community colleges, four year institutions, parents and politicians) are called to the table to form a committee that will explore all aspects of creating a solid set of standards that provide for mastery. There is a need to review pre-service programs, especially in the area of math courses and professional development criteria, and to explore best practices. A teacher needs to provide clear and exact explanations, to be "an instructor, one who imparts knowledge, a director of learning."⁴ To deskill teachers, to claim that they are facilitators only who will guide students to "discover" facts, is a denial of responsibility and accountability. The result of the existing mathematics programs is that students entering college do not have mastery of basic facts, have not learned study skills, and are confounded by the demands now being made of them.

So where do we start? The current state mathematics standards do not recognize the link between skills and application of math facts. "Facts versus higher-order thinking" or "basic skills versus conceptual understanding", part of the debate we hear these days, is a

false choice. In mathematics, skills and understanding are completely intertwined. It is an understanding of theory and technique that allows students to solve "real-world" problems. If there are gaps in students' knowledge, this process breaks down. Basic skills are absolutely indispensable for understanding more sophisticated processes. There has been a flurry of activity involving writing new mathematics standards: first within the state and then the move to join the national common standards movement. Much of this activity has been done without input from all stakeholders involved. The community college representation has been especially lacking.

Any new mathematics standards, besides being rigorous and coherent, should:

- require that students learn specific facts and skills, including estimating an answer;
- be teachable and make teachers responsible for directing learning;
- be taught through an organized sequence that uses mathematical language, symbols, and algorithms;
- support learning more complex mathematics by first developing mastery of basic components;
- develop a skill set that allows the possibility for development of more abstract thought and sophisticated problem solving; and
- establish a base of knowledge that, unlike technology, never becomes obsolete.

Another avenue is to have the community colleges work with local school districts. One such example: Middlesex County College is piloting a program to test seniors with ACCUPLACER and develop a program to remediate before entering college. The time is now to start using our educational funds more wisely.

Yvonne Greenbaun, Mercer County College
Maria DeLucia, Middlesex County College

1. The Press of Atlantic City, Friday, August 18, 2006
2. Breneman, D.W. and Harlow, W.N. (1998, July). *Fordham Report: Remediation in Higher Education: Costs and Consequences*, 2(9). Washington, D.C.: Thomas B. Fordham Foundation
3. <http://www.deltacostproject.org>
4. Webster's Unabridged Dictionary, Copyright 1979, Simon & Schuster, p.1871
5. George Polya, "Ten Commandments for Teachers", *Journal of Education of the Faculty and College of Education of the University of British Columbia*, (3) 1959, pp. 61-69.



New Jersey Institute of Technology
University Heights
Newark, NJ 07102-1982
973.596.5782
973.596.5591 fax

COLLEGE OF SCIENCE & LIBERAL ARTS

Department of Mathematical Sciences

December 7, 2009

Mr. Chairman and Members of the New Jersey Senate Education Committee,

The Department of Mathematical Sciences at New Jersey Institute of Technology has been engaged in a number of activities to improve the quality of math education in our State. One of our faculty members, Professor John Bechtold, participated in the New Jersey Department of Education Math Task Force last spring. Another member, Professor Bruce Bukiet, has an NSF-supported grant to foster Teacher Education Collaboration for High-Need Schools in New Jersey. Our faculty's passion for mathematics has led to ongoing discussions within our department on teaching and learning of mathematics at all levels.

Thus, on behalf of the members of the Department of Mathematical Sciences at New Jersey Institute of Technology, I am writing in regards to the pending adoption of a new set of K-12 math standards.

As mathematics professors, we are very concerned with the state of K-12 math education in New Jersey. Two recent developments, in particular, have served to emphasize the magnitude of problems that currently exist.

1. The study conducted by the New Jersey High School Redesign Steering Committee two years ago found that 80% of students in our Community Colleges, and 40% of students in 4-year colleges, require math remediation.
2. More than 86% of NJ students who took the National end-of-course Algebra II exam last year failed, and are therefore not ready to do college-level math. Furthermore, only 4% of students were deemed to be well-prepared.

These numbers are shocking and, quite frankly, embarrassing. We are in the midst of a crisis that threatens to cripple New Jersey's ability to compete in our technology-driven society.

The draft of Common Core Math Standards under consideration is far superior to what currently exists in New Jersey. To that extent, we support the State's decision to partner with a consortium that includes balanced representation from all stakeholder groups to produce a set of high-quality standards. However, there are still urgent matters that need your consideration.

Though presented as College- and Career-Readiness Standards, there is an obvious omission in the draft, in that it does not describe a pathway for students to pursue careers

in STEM fields. Presumably, each State will have to define such a pathway for its students. In addition, each State that adopts these standards has the opportunity to modify them by 15%. It is imperative that, if New Jersey decides to adopt these standards, we need to articulate a strategy for how standards are reviewed, written and edited.

We urge you to consider formulating a clear plan for writing, reviewing and editing state standards. Furthermore, that formal process needs to include the perspective and expertise of our State's mathematicians.

Please do not hesitate to contact us if we can be of assistance in this endeavor. We look forward to working with you to help make New Jersey a leader in mathematical literacy.

Respectfully,



Daljit S. Ahluwalia
Chair, Department of Mathematical Sciences
New Jersey Institute of Technology