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# *Subcommittee Meeting*

of

JOINT COMMITTEE ON THE PUBLIC SCHOOLS

SUBCOMMITTEE ON SCHOOL CHOICE

*“On-line learning, cyber school districts, and e-charter schools”*

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**LOCATION:** Committee Room 12  
State House Annex  
Trenton, New Jersey

**DATE:** November 23, 2010  
1:00 p.m.

**MEMBERS OF COMMITTEE PRESENT:**

Assemblywoman Mila M. Jasey, Chair  
Assemblyman David W. Wolfe, Vice Chair  
Senator Ronald L. Rice  
Assemblywoman Joan M. Voss

**ALSO PRESENT:**

Melanie M. Schulz  
*Executive Director*

Sharon M. Benesta  
*Chief of Staff*



*Meeting Recorded and Transcribed by*  
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Hearing Unit, State House Annex, PO 068, Trenton, New Jersey

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**ASSEMBLYWOMAN MILA M. JASEY (Chair):** Good afternoon.

First of all, I want to welcome everyone who is here today. It's very exciting to see such a wonderful turnout two days before Thanksgiving, and I appreciate the efforts, especially of those of you who have come from out of town -- out of state, even.

We would like to open this meeting with very, very brief remarks from our members. And I'd like to let you know that Senator Ruiz sends her regrets. She's recovering from strep throat and, therefore, she's not here, but she did send me her questions. And when we get to that part of the program, I will certainly ask them on her behalf.

So I'd like to begin with Assemblyman Wolfe, who is the Vice Chair of the Subcommittee on School Choice of the Joint Committee on the Public Schools.

Assemblyman.

**ASSEMBLYMAN WOLFE (Vice Chair):** Thank you, Assemblywoman. Can you hear me? Can you hear me? This is Verizon here. (laughter)

Well, I'd like to thank the Assemblywoman for her remarks, and just say that this is a beautiful room that we're in. This is one of my favorite rooms to have a committee hearing in, because it is almost like a scholarly atmosphere that we're in.

This is a bipartisan effort on behalf of the Legislature to be educated ourselves. This is not something like a regular legislative hearing where we're going to tell you about this legislation that's really good for you, and you have to like it or don't like it. But we really need to learn

from you who are the experts in a number of areas, about what you've done and, really, what could be done here in New Jersey, because we intend to improve our educational program more than it has been in the past.

But I want to thank you, and welcome you for being here, and look forward to hearing the testimony. And I don't think you'll hear too much from us as legislators -- we want to keep our mouths shut, hopefully -- I think so -- and really hear from you.

So with that, I will turn it back to Mila -- Assemblywoman Jasey -- and thanks again for coming.

ASSEMBLYWOMAN JASEY: Thank you.

Senator Rice, and then followed by Assemblywoman Voss.

SENATOR RICE: Thank you very much.

First of all, as Co-Chairman of the Joint Committee on the Public Schools, let me welcome all of you who have traveled here to Trenton, and those who've traveled out of state. Let me also acknowledge our Congressman, as well as the speaker, Congressman Andrews and-- It's good to see you, Congressman. I can recall the days -- and I'm sure Assemblyman Wolfe can, too -- when we sat in this old building and you used to come in and testify before us as a young Freeholder, very articulately, and we knew that you had a good future and you've been doing a great job. We really appreciate it.

Also I just want to let the people out on the other side of us know that the Joint Committee on the Public Schools is a bipartisan Committee, established under statute, which is made up of both Houses of the Legislature, and under the leadership of Assemblyman Wolfe -- he and I have been working together a long time. We, at one time, through his

leadership, I asked him to consider setting up subcommittees so that we could have these type of hearings. And he graciously agreed in a bipartisan fashion and we've been working ever since. So that's just a little history of this Committee. We have accomplished, I think, a great deal over the years in terms in getting the Legislature's attention on certain issues, but we also know that we're in a new era right now and I want to thank the co-chairs of the subcommittee -- Assemblywoman Jasey and Assemblyman Wolfe -- for having this meeting because we're talking about a whole new century now of learning.

And finally, I'm very much interested in anything that's going to help our young people learn. But for the members of this Committee, I was a panelist at ETS, invited by the Commissioner of Education and we interacted with scholars from Ohio State and other universities -- Michigan State, etc. -- and I just reminded them that I'm just a guy (indiscernible) SDA districts -- but there's a real concern about minorities and particularly black males dropping out of schools, and this may be another element, if you will, or system that could be very beneficial to the whole repertoire of information we have (indiscernible) trying to put into place.

So thank you very much for coming.

Assemblywoman.

ASSEMBLYWOMAN VOSS: I also want to thank everyone for coming.

Education is my passion; it's been my life's work. And I am always anxious to learn about new things and just in having an opportunity to speak to some of the people here -- the Congressman's daughter is learning online, which I think is wonderful. I've had a little experience with

learning online in the different things that I've supervised, and I'm very, very anxious to learn more.

So I will follow the KISS theory -- Keep It Simple -- and thank you all for coming today.

ASSEMBLYWOMAN JASEY: Thank you.

I apologize for not recognizing the Congressman and the Governor in my excitement about getting this started on time. Because we have such a packed afternoon, I neglected. I apologize.

And I know that the Governor has a train to catch at 4 o'clock so we are under the gun to stick to the schedule. And so I thank my colleagues.

We're going to begin with an overview of K-12 e-learning and school reform led by Susan Patrick, who is President and CEO of the International Association for K-12 Online Learning. And I will ask Susan to make her introductions.

**S U S A N P A T R I C K:** Thank you much -- thank you very much, Assemblywoman Jasey. Is this on? (referring to microphone)

ASSEMBLYWOMAN JASEY: That mike is actually for recording purposes. What you need is the mike with the red light. And for anyone who would like a transcript of the proceedings, let us know that.

Red is on.

MS. PATRICK: Okay.

Thank you, Assemblywoman, Chairs, and members of the Committee. It's an honor to be here.

For the record, my name is Susan Patrick, and I'm the President of the International Association for K-12 Online Learning. We

are a nonprofit organization that represents the districts, the states, and the universities providing K-12 online learning opportunities and courses across the U.S. We have 3,700 members, and our sole mission is to ensure that every student -- regardless of where they live, their socioeconomic background, their neighborhood, their income status -- has access to the very best education available today and a world-class education. And we're seeing that happen and expand rapidly -- new opportunities through online learning.

So pleased to be here. I'm here to provide just a national overview.

Across the U.S., K-12 online learning started in the mid-1990s with two of the first state virtual schools in Florida and Kentucky. We have today 39 states with significant policies and statewide programs for supplemental courses; 27 states have state full-time online schools -- Pennsylvania is one of those states. Those states in orange have full-time online programs.

Today, as reported this year by the Sloan Consortium, 82 percent of all public K-12 school districts offer online courses to students. There are 220,000 students across the U.S. who can access full-time online learning programs, and another 2 million students enrolled in individual courses, whether from a state virtual school, a university like Stanford's online program or Johns Hopkins' online program or, indeed, district programs like the 12 percent of school districts in New Jersey that partner with a virtual high school consortium to open online opportunities.

But the question is: Depending on where you live, what your state policy is, and what your district has the ability to do, really limits what

student options the kids have in K-12 -- whether it's in high school, middle school, or elementary school. And we're trying to look and identify the policies that can help open opportunities for high-quality, online learning to help meet every student's needs.

So online learning is growing very rapidly for an innovation in K-12 education that started, like I said, in the mid-to-late 1990s. Back in 2000, there were about 50,000 student enrollments in K-12 online learning. By 2005, that number had increased to 500,000 student enrollments. Last year there were 1 million, and this year, as I said, over 2 million. And if you look at new blended models of online learning where you take the best offerings and make those available both online and use that face-to-face time, we're seeing that number probably expand to 4 million this year alone.

So 27 states allow students to enroll in full-time virtual school programs. And then some highlights: Michigan has a statewide virtual program that allows any student, anywhere they live in Michigan, to access online foreign languages such as Chinese. In 2006, the governor and legislature in Michigan passed a law to not only allow, but ensure that every student take at least one online course before graduating from high school as part of their more rigorous high school graduation requirements. Why? Because 30 to 50 percent of workforce training is done through online learning, and one in four college students takes an online course.

Given the way the economy has been in Michigan, they wanted to make sure that their students were prepared, had more exposure to online learning taught by highly qualified and licensed teachers in that state. Florida has the largest state virtual school program; no student can be

denied the opportunity to take an academically appropriate online learning course in Florida. In Alabama, every single high school in Alabama has access to more than 30 AP classes thanks to the statewide access program which is online learning. Kentucky also has a Kentucky Virtual School; again, any student in the state of Kentucky can take an online Mandarin Chinese and other foreign language courses. The Mandarin courses are co-taught by teachers in Beijing, and the students interact not only with students across their district and across their state, but globally as well.

Montana is starting a new online program. It's housed in their College of Education, and would like (*sic*) to start to see the movement towards our pre-service programs offering teachers the kind of training to help them teach online, not only after they graduate and start teaching in a traditional classroom, but they bring those skills in online instruction into their face-to-face classrooms. So there's a movement within online education to help upgrade teacher education into the 21st century as well and we're starting to see that happen in Montana.

So why all this growth in online learning? And essentially it gets down to the idea: We can't keep doing the same thing we've always done and expect different results to happen. When we have 40 percent of the nation's high schools offer no AP courses, online learning can help fill those gaps. You have huge teacher shortages -- 40 percent of public school districts in the U.S. need online learning because certified teachers are not available for traditional face-to-face instruction in every single school. Sixty percent of schools and districts need online learning for credit recovery. It doesn't make a lot of sense when we say that a student taking a gateway class like Algebra I is struggling in that class; they go the whole year through

and maybe come out with a 40 percent. We give them the same textbook, sometimes the same environment in summer school, and hope for different results in half the time. We're seeing a huge uptick of online credit recovery and remediation, hopefully earlier on, so we can catch those students when they start to slip-track for graduating instead of having more and more students over age and under credit and at risk for dropping out.

And again, 50 percent of schools need online learning to reduce scheduling conflicts to keep kids on track for graduating on time.

So in a nutshell, some of the reasons that you see the growth in virtual schools and online learning is to meet a diverse group of student needs, and this includes doing more for our gifted students and allowing them to accelerate and maximizing their potential; for increasing college readiness for all students; getting them ready to get into college, but also get them better prepared, not only to enter college but to complete college successfully; more access to AP.

The International Baccalaureate Program is one of our members over in Europe. They started a program three years ago to offer the IB diploma program online. They started with 26 different countries. They are now in 125 countries; can access the IB diploma program online; and when I travel around the U.S., I ask every school superintendent, "Does every student in your district have access to a high quality IB diploma program?" because we can make that true. Not only are they accessing the rigor of those courses, but they're also able to interact and communicate and collaborate with students around the globe and teachers around the globe.

So this idea that we're living in a globally competitive world is also helping drive the need for more global opportunities for our students to learn.

And, in addition to that, it is a significant intervention for our at-risk students. Summer school redesign has taken place at a number of districts around the country online; again, more than 60 percent of districts are moving in this direction with online credit recovery and remediation. They can retake online courses. In Florida, in fact, a student doesn't have to wait the whole year until they are not successful and, of course, if it looks halfway through the semester like things are not on the right track, they can actually come out and re-enroll in that course in a different format and delivery model and get that one-on-one teaching in an online class. So it keeps them on track for their academic requirements.

And last -- and this is really critical -- is that some people are not aware of the incredible role of the teacher in online courses. So when you think about our online programs, the average number of years of experience that a teacher has teaching an online course is eight -- nationwide -- is eight years of experience. These are teachers who know their content; they receive extra professional development to use the technology tools that allow for that personalization and individualization of instruction. They say, often, they have more interaction with their students than they do in a traditional type of class because students are very comfortable in this environment, and are comfortable in asking questions. There's a lot of communication between the teachers and the students. As well as for every open teaching position, many of our online schools are getting 400 to 800 resumes. Teachers are interested in teaching in this new

model, and there's a huge demand for it. It's also a really exciting new professional opportunity for teachers. It used to be the teachers were restricted to a school or a school district within driving distance that had an opening in their area of licensure. And lots of new professional opportunities are opening up in the teaching field, both for adjunct teaching, like you see in colleges and universities for teachers who may have left the profession to have a family, take care of an older parent, and they may just want to teach one or two classes. So we're bringing some of our very best teachers back into the profession and giving them the kind of flexibility that you see in most other 21st century workforce occupations. So that's exciting that these new opportunities are open for teachers.

And with that, again, just this is the model that we've developed. I call it the TPAC model for online and blended learning. When people think about online learning, sometimes they're only thinking about the technology component or the software component, and that's the *T*. It does require technology and the technology platforms to run the programs, but the most important part is that *P*, which is the people: the teachers, the administrators running the programs, the kinds of student support that people provide are the life and blood of these online programs. *A* -- a new model of assessment that can be formative built into the course, as well as new performance-based assessments, of students doing presentations and projects and project-based learning. And the *C*, the last part, is the online content curriculum that is aligned to the state academic standards. All four of those things -- the technology, the people, the assessment, and the content -- are what make up a high quality, online program -- not just a piece of software, but the whole package. And that

has to be managed, and school administration plays a key role, and the policy and the oversight from the policy piece is also critical in ensuring high quality.

So with that, we see a huge growth in online learning, but also in blended models of learning where you're taking the best of both worlds -- you're taking the best of that online content, assessment models, and training teachers to use the new technology platforms and bringing those into new blended learning models in schools.

And I will end on this note, which is: This is the top 10 breakthroughs. The World Future Society is a group that collects future trends and data. Over the next 20 to 30 years that will change life as we know it on this planet. This is the best forecast data -- it's been accurate 97 percent of the time over the last 15 years, plus or minus three years. The only item on this list that relates to education is virtual education, and we're starting to see this as other countries move to be able to connect their very best teachers, their very best content with the students regardless of where they live. It's fundamentally going to change who across -- not only our society but across the whole globe -- has access to a world-class education.

So with that, thank you. And I'd like turn it over to Governor Wise, or back to you. Thank you.

ASSEMBLYWOMAN JASEY: Thank you.

I mean, I'm sitting here and my mind is just going in a hundred directions.

For those who are standing in the back, we do have a few chairs -- you're welcome to come in and pull a chair into the audience. And there

are also rooms-- There are chairs in the room behind us if we run out completely. I don't want you to be standing.

Thank you, Susan.

Please, go ahead.

**G O V E R N O R B O B W I S E:** Thank you, Assemblywoman, and to members of the Committee. It means a lot that you would have us here; it speaks to your commitment.

I'd also like to say it's good to see my former colleague, Rob Andrews -- Congressman Andrews. And Congressman, you had been a participant and a presenter in many, many hearings. It's got to be a point of pride that your daughter is now one of the star witnesses talking about a trend that is rapidly building across this country.

If I could approach this a little differently, and approach it from having sat where you sat up until about six years ago. I was 24 years in public life, including being a member of Congress and Governor of the State of West Virginia. And you face some incredible decisions, as you well know; you've been working with a lot. And so I'm going to run through what I consider the imperative for online learning.

I woke up-- For the last five-and-a-half years, I've been in Washington, D.C. as head of the Alliance for Excellent Education. We are a nonprofit organization with the mission that every child should graduate from high school ready for college and career. And I woke up about three-and-a-half years ago and realized: We're not going to get there from here, and let me show you why.

As you know -- you've been dealing with it -- there are three looming crises in education: first of all, declining state fiscal revenues;

second, mounting teacher shortages -- yes, there were, particularly in certain specialty areas; and increased global demands for skilled workers. We've got demand for rapidly rising skill levels, and yet our educational system is not keeping pace. And I'm going to touch on these briefly in each topic.

First of all, this is what-- Our declining state fiscal revenues-- These are all states, not New Jersey, and it's all budgets, not just education -- but it gives you a picture. This is state revenue increases up until the year 2008 -- that's percentage of increase -- and you can see that states were doing pretty well; 2006 was the flush year. Now comes the recession, and this is the start to decline, and these are state revenues. And I'd like to point out 2009-2010 had something built in: it cushioned it somewhat -- and it was the Federal stimulus package -- \$787 billion that went to states.

These are the projected next three years.

ASSEMBLYWOMAN JASEY: Ew.

ASSEMBLYWOMAN VOSS: Ouch.

GOVERNOR WISE: And so New Jersey is not alone. If you want to feel better, I was in Nevada last week, and they have a shortfall that is 50 percent -- 50 percent -- of their general fund budget.

So this is what I call the General Motors moment: It is where we look at it, and General Motors, two-and-a-half years ago where you look at it and realize the demand for outcome and quality of product -- that is student outcomes -- is much greater, and yet the money to get there is less. So we have to change the way we do things.

In terms of reducing spending, some other statistics: In 2009, states cumulatively, in their general fund, spent almost \$658 billion; in 2010, \$612 billion. And, most likely, going down below that.

Some examples of where it can be cost effective: Now, online our virtual schooling in Wisconsin with the traditional system, national average is around \$10,000 per student; the Wisconsin virtual system is around \$6,500 -- and perhaps we want to discuss this a little more later.

Second major issue: mounting teacher shortages -- yes, and particularly in certain subject areas. The nation faces a very significant supply issue. The number of teachers eligible to retire in the next five to seven years, nationally, is one-third. And a recent study, state-by-state, shows that in New Jersey that number is actually higher -- it's 53 percent. So 53 percent of our teachers are eligible to retire. So if you're working off of the old model, which is the teacher is the sole repository of content knowledge in the classroom, those who have the most experience in that content knowledge are exiting.

If I could show you, this is something-- These are national numbers, but there is also a significant drop of experience in the classroom. If you move from left to right, if you move on the horizontal bar, that is years of experience. So you start with the first year of experience, and you're moving all the way over here to the right, to 45 years. Going up, the vertical one is: that's the percent of teachers with those years of experience. So in this chart, you can see that teachers with the highest bar is around 15 years of experience, and it's about 5 percent of teachers. But you can see that there's a large block of teachers that have a large cumulative experience. So what year was that? Nineteen eighty-seven and eighty-eight.

Let's now move to the present, and see what that line -- what that chart looks like. So the average teacher -- and the typical teacher -- had

15 years of experience in 1987 and 1988. Currently, that line has shifted to, the typical teacher has 1 to 2 years. How do we get the highest quality content into all of our classrooms?

This number is just the state of Georgia; I don't have this number for New Jersey, but I think it's illustrative of what's happening across the country. In the state of Georgia, there are 440 high schools, and there are 88 qualified physics teachers. And remember that a number of them are eligible for retirement. How do we once again, in all of those high schools, get a highly qualified physics teacher?

Challenge three: the pipeline. And Assemblyman Wolfe, you and I were talking about community colleges and alignment of K-12 and higher education. These are the tasks that are currently moving from left to right -- 1960 on the left to 2002 on the right, a 40-year span. What we've seen is that the demand for manual tasks -- truck driving, hair dressing -- those tasks that cannot be handled by a computer but yet, at the same time have, for the most part, they have been steadily declining over the last 40 years. Routine tasks -- these are our money makers. There used to be a saying in West Virginia when I graduated from high school 40-some years ago: There were three Rs -- reading, writing and the road to Detroit to make cars. (laughter). Because when you went to the assembly line, you did the same task for eight hours and got paid incredibly well. Well, you can see that -- and that was the bread and butter of our country -- you can see that that peaked in the 1970s, and is now on the way down.

So what's growing? The abstract tasks, where you have to be able to work as a team. You take three facts and turn it into a conclusion. You synthesize, you extrapolate, at every level of occupation, whether it's

traditional blue collar, white collar, whatever. That's borne out by this most-recent study out of Georgetown University: 1973 is on your left, and all the way over to 2018 on your right. This is the percentage of education attainment at each stage for our economy. So in 1973, 32 percent of all jobs were held by less than a high school graduate -- in other words, a drop out held 32 percent of all jobs. And you can see how that's changing: in 2007, 11 percent.

So this is high school diploma and below. So in 1973, 72 percent of all jobs -- high school diploma or below. So let's quickly move through-- This is anything above the magenta line -- the green, the purple, the blue -- is post-secondary and above, bachelor's degree and that's graduate degree. Look at the shift. So we've gone from 72 percent of all jobs, high school and below, in 1973 to just 30 years later, 60 percent of all jobs require some post-secondary and above.

And so, are we able to deliver the workforce in the face of this? Is our educational system keeping track, keeping pace?

So that's the pipeline. So the benefit -- and Susan and Michael will talk about this more; Susan's already addressed it some -- is personalizing instruction and making it more relevant, and improving the access to courses that prepare students for college. I do want to alert you to one development that's going to be taking place, an announcement next week that's designed to work with you. Let me quickly-- This is a state card that we developed for every state, looking at policies in each state as to how well the state is moving forward in certain areas to encourage online learning and digital learning. I had these in hard copy form as well, and you

can see that in some New Jersey has three of these elements; there are two that it's lacking.

But now let's talk for just a second about the Digital Learning Council, because December 1 in Washington, former Governor Jeb Bush of Florida and I will be announcing the results of the Digital Learning Council. This is 70 members of for-profit, not-for-profit educators, organizations, legislators, are on this-- that have been working for many months -- digitally, I might add -- working for many months to come up with 10 critical elements of what should state policies look like so that we can all be working off the same page.

The 10 elements of high quality digital learning -- you can see the types of people who have been involved in the Digital Learning Council. It's had over 100 meetings, plus the interviews that took place with each-- The hour-long interview with each member even before the meetings. The issues the Council will promote include access for all students; the funding of innovative technology; encouraging high-quality digital content and instruction; how to utilize providers; promoting and giving students credits; the best ways to provide accountability. And so these are the principles that we seek to make sure it's bold and transformational; it's comprehensible -- well, comprehensible is always helpful (laughter), but comprehensive as well; state-focused, because this is a state matter -- state and local matter; elements are all measurable; and there's a long-term road map.

So I want to get back to the real challenge. These are 10 ninth graders anywhere in this country -- these are national statistics, incidentally; they're not New Jersey. What we know is that 3 out of 10 will drop out.

New Jersey actually has a higher graduation rate than the national average, but still, in some areas, these numbers are so. We know that 3 will drop out, and we know that 3 more are going to finish high school but that they will not have the skills they need to function in a modern society. Many of them are going to need remediation when they go to a community college.

And so what the choice for all of us as a country but particularly for those in policy-making roles -- legislators, governors, members of Congress and members of executive branches -- the choice is, in this time of budget shortfall, teacher shortfalls in certain subject areas, as well as the increasing demand -- that General Motors moment -- what do we do? We have two choices: We hunker down and try to do more and try to continue to do the same with less but we're only going to come up with less outcome; or we look at how we're doing, delivering education, and look at where we need to be bold.

And so I really think that the choices for the almost 30 new governors when they deliver their State of the State messages in January, for all governors, all members of the Legislature when you gather in your next session, this is the choice: to be boldly innovative, or continue and be barely relevant. Because that's-- In terms of education, that's where we're going. And so let's come back to our faces: These four were perfectly adequate when I graduated from-- We just needed these four. If these four did okay, the others could probably get jobs; most of them would okay-paying jobs or, quite frankly, we could ignore them and, unfortunately, do.

But today, 90 percent of the fastest-growing jobs, high-paying jobs in this country and 60 percent, as I mentioned earlier, of current jobs require post-secondary. And so that's why we need every one of those back

in the picture. And so the choice for them -- which do you think they want? They want innovation -- to be boldly innovative -- because in a few years we really will need them in our economy but right now they desperately need us.

Thank you for the opportunity to present this.

ASSEMBLYWOMAN JASEY: Thank you.

**M I C H A E L B. H O R N:** Thank you so much. It's a pleasure to be here, Assemblywoman, and members of the Committee.

My name is Michael Horn, and speaking right where Governor Wise left off -- he was talking about innovation. And I actually come to this field from a very different perspective from many people, which is from the perspective of: How do we make innovation far more predictable such that we can all seize hold of it and really innovate ourselves, rather than watch others around us be the ones who innovate?

And as we start to turn from this body of work around innovation along with a professor at the Harvard Business School, who is known as the father of this body of innovation theory, we started to study the questions of education. And what we saw was that in all of the fields we had studied, the only thing that caused transformation reliably was this thing that we called the *disruptive innovation*. Now, it's a horrible name for, quite frankly, a very interesting phenomenon. But what it means -- if we strip away the bad connotations of the word disruptive which, I'm sure, coming from education immediately connotes some very bad things -- is that a disruptive innovation is one that takes a sector where, before, the products or services or parts of the sector were characterized by things that were expensive, complicated, inconvenient, inaccessible, and only served

people with the most expertise or the most wealth. It transforms that sector into one where products and services are affordable, convenient, accessible, decentralized, and far more customizable so it can serve well many, many more people who before did not have access to it. It's a process that's transformed computing from the big mainframe computers that used to dominate computing some 40 years ago to the point now that we have this laptop in front of us that can do more than any mainframe computer could possibly have done in the space of this earth some 50 years ago. It's the process, honestly, that's actually made automobiles far more affordable to our population. We've seen it in service industries as well, as discount retail and so forth have seized these opportunities -- and now online retail. You can go through-- We see it now in post-secondary education very clearly where over 50 percent of Americans are now educated in community colleges, and online universities are being -- seeing the most rapid adoption in the post-secondary space.

Now as we studied some of the problems of K-12 education, one of the things we saw was that online learning had the exact same hallmarks of a disruptive innovation -- this power to transform and grow. And what I want to do is just quickly describe why, but then talk about a little bit about why we're excited about it as a bigger thing than just this transformational thing in terms of the delivery of education.

As Susan alluded to already, the places where online learning is taking off are in the classic places where any disruptive innovation takes off. If you think back to where the personal computer started, where did it first-- When Apple first came out with the personal computer, where did it start? They sold it as a toy to children, right? Because they couldn't afford

the mainframe and mini computers, and \$250,000, \$2 million were certainly out of their budget. But for a couple thousand dollars they could have computing and it was delightful, right? In areas of what we call non-consumption -- places where people literally can't access the leading products or services.

And online learning is doing the same thing. We've heard about the dropout crisis from Governor Wise. Online learning is a great way to start to bring these students back into the fold by meeting them where they are with their needs around their work lives, around their family lives, around different demands -- setting up centers where they can come in. Maybe it's only four hours a day, and then they can do some work at home, and so forth. It's a big benefit there and that's where it's really taken off is one of these areas.

Another area is credit recovery; Susan referenced this earlier. Right now, particularly in urban school districts, when a student fails a course they basically have no way to make up that credit, which means they don't graduate -- let alone the fact that they don't get the learning that they need to actually master and be a productive member society. Online learning has been perfect here because it's been an affordable, accessible, convenient way to get students back on track. And so we've seen a huge take off of online learning there.

The other part Susan referenced -- advanced placement courses, right? Forty percent of high schools, she said, do not offer an AP course. The story is actually bleaker than that: 25 percent of our high schools do not offer an advanced course, which is defined as anything above biology -- so forget about chemistry and physics at a time when we know that we need

to train more people to be proficient in science and engineering and math. Twenty-five percent do not offer a course above geometry -- so forget about Algebra II, forget about Calculus. And 25 percent do not offer an honors English class, period. So now when Governor Wise put up the statistic of 440 schools, 88 qualified physics teachers, you can see why online learning is in such demand and is growing as a classic disruptive innovation.

Just quickly, to talk about the growth that we do see. It's following a classic S-curve pattern. Whenever you see a disruptive innovation enter a field, it starts out in the beginning, people sort of on the beginning of that S-curve, just on that, just on the left hand side there people creep into a market or to a sector -- they try it out. There's got to be a lot of prototyping to figure out how to actually do things for the set of people who are using it. And eventually, if it's a true disruptive innovation, the world flips as the providers, or the new innovation, actually figure out what they're doing. And people rapidly adopt it, and then it levels off at the top when the market is saturated.

Challenges: How do we know if an S-curve is actually developing when we're on the flat, early part of it, right? It could just be a line to nowhere. It could be a very rapid S-curve, a shallow one. It turns out that there's a way to project this and it takes, basically, plotting the percent of the new innovation divided by the percent of the old. So 50 percent divided by 50 percent would equal 1.0. And putting it on this logarithmic axis, where 0.001 is equidistant from 0.1, 0.1, etc., and if an S-curve is developing, the dots will fall out in the straight line such that when the market is only 1, 2, 3, 4 percent, you can project when it will hit 25, 50, 80 percent, and so forth.

And we see an S-curve developing in online learning. In high school, in particular, where these areas of non-consumption are so clear, we project that by 2019, 50 percent of all high school courses will be delivered online in some form or fashion -- all courses by 2019.

So I'm the author of a book that has this projection in it. I call it *Disrupting Class*. And when it came out, everyone said we were crazy -- way too aggressive. And then something flipped about six months in, about when the financial crisis really kicked in, and people said, "You know, you're still crazy" -- which is probably true (laughter) -- "it's because your projection is too conservative, we think." Well, maybe; we don't know. All we know is we can look at the numbers, and 45,000 enrollments in the year 2000; passed 1 million in 2007. A report came out last year that showed that 27 percent of all high school students in the United States took at least one online course in 2009 -- 27 percent. And other research firms are starting to join in in the projections. Ambient Insight is one such firm that projects that 10.5 million students will be taking online courses by 2014. Roughly most people think that the number is between 3 to 5 million today. So change is rapidly happening.

The question was, then, is this a good thing? So we see the delivery, we know that it's going to grow, and the opportunity it seemed to us, was huge. Because if you step back for a second and think about what any educator knows, way before the academics got to the party, was that all students have different learning needs at different times in their lives. There's been tons of ways of describing this over the last 20 years, but if you have two kids, and you see them playing on the ground, you know that they absorb information in different ways; are at different places in their

lives at different points; and so forth. And yet, if you realize that people need these customized learning opportunities, you would say, “Well, our school system must customize for those differences, right?” Not at all, as we all know. And when I was looking at Governor Wise’s chart of the students disappearing, slowly but surely, what it reminded me of was, gosh, the system that we built does exactly what it’s supposed to do. It was built to be that funnel and operate like a factory model to whittle students out over time. And gosh, it does it well. But the world has changed, and so we no longer have-- We need to move beyond this monolithic system that standardizes for every single child, into one that can customize for each child’s differences in affordable ways.

And so this is what online learning -- its huge potential is -- to personalize for those differences. So every child can be where they need to be at the time, and move at the pace that works for them, and so forth.

And on this front, there are some very encouraging things that are happening toward realizing this, because the online learning is (indiscernible) to any disruptive innovation improving in some significant ways.

The first way is that -- you heard Susan talk about it -- when online learning got its start it was largely a distance phenomenon. It connoted distance learning, or virtual, or something like that. We have another chart that we did not put in the book, but that charted the growth of home schooling, which has grown from about 800,000 to roughly 2 million over the last 10 years, depending on who you believe. And it turns out an S-curve has not developed. It flattens at about 5 million students, which is under 10 percent of the K-12 schooling population. And what

does that mean? It means that 90-plus percent of our kids need a supervised, safe place to learn: schools. And so as a result, the online learning is increasingly less of a distance phenomenon and more and more of a blended one. It does not mean distance learning. It is setting itself into classrooms and school environments.

The second dimension of improvement that we see quite dramatically is communication vehicles. When online learning first came out it was awfully hard to communicate with the teacher in some settings; peer-to-peer connections were tough to arrive at, and so forth. But if you just look at the technological leaps forward, how many people I'm sure if we asked in this room use Skype, we'd have a lot of hands shoot up. Video conferencing, chat rooms, and so forth are becoming ubiquitous, and with 3D technology and touch screens and so forth moving along their way it's hard to imagine where this might in 10 years from now.

The third dimension in improvement that we're quite excited about is the improvement in content. The actual, real exciting thing about personalizing is that you can motivate students to really pursue learning, and that's the key thing is to motivate. And from the power points that dominated online learning some 15 years ago when it got its start, we now see things such as full video game-based American History courses coming on the scene. One such course from the Florida Virtual School is called *Conspiracy Code*. In it, students run 10 missions to save American History from becoming corrupted. Many in this room may joke that it's too late (laughter) but, nevertheless, for many students, this is a deeply engaging way for them to access the material and, true to form, it's not for everyone

because as a friend of ours likes to say, “No student fits into one mold” and now, with online learning, they don’t have to.

The second question of this is: Will it actually realize its student-centered promise? And this is contingent on policy in two ways: Our old factory model system has run itself on inputs. We’ve measured the seat time as the major driver of funding and so forth. We’ve measured student-teacher ratios, we’ve measured teacher certifications within the state -- things like that -- that may or may not have to do a lot with learning. The neat thing about online learning is that we can move toward outcome system, where we say we don’t know exactly what those inputs should look like, what the innovation should look like, but we’re only going to pay providers the bulk of it if students actually successfully complete the course. And so we tie funding toward mastery and competency-based learning. And that’s the real part about this: getting away from thinking about this as an input-driven system, and really focusing on the outcomes around these new things.

Are we seeing the learning outcomes for every child that we really want to see, so that we can free up different ways for each child to get that information in accordance with the way that they actually learn, and not mandate a standardized way to approach that? On this, I think there are a lot of questions. The Digital Learning Council that Governor Wise is co-chairing is going to offer some very important recommendations both around access, as well as how to think about that quality so that we really make this student-centric. And that’s the opportunity before this body and before people who draw up the regulations in the Department to really

think about this in new ways, to open up the innovation to truly benefit every single one of our children.

Thank you very much.

ASSEMBLYWOMAN JASEY: Thank you. I feel like my head's already exploding. (laughter)

As I said, we have a really packed afternoon, so rather than take questions now I'd like to hold the questions and bring up our second panel, if that's all right with you.

And for anyone who is standing in the back there, I think we may have a seat up front here, or in the corner.

Next up we have a student panel from New Jersey who are students in online learning from surrounding states. If anyone fits that category, please come up -- I don't have names. And Susan is going to moderate; I appreciate that. There's a second mike there; if you turn it on -- thanks, Sharon.

Are there any other students? (no response) Okay. And there are chairs in the room next door that we can bring in to this room.

MS. PATRICK: All right; well, let's go ahead and get started.

ASSEMBLYWOMAN JASEY: Okay.

MS. PATRICK: We'll do this in a little bit more of an Oprah-style format, and so we'll go down and ask questions. And then, if you're talking about some of your learning experiences and want to add something, or forgot to say something that you were talking about earlier, feel free to just raise your hand and jump in.

Let's start the panel by introducing yourselves with your first name and your grade level. We'll do that first as we go down, okay?

**JOSIE ANDREWS:** Hi, I'm Josie, and I'm in 10<sup>th</sup> grade.

**RACHEL BRADMON:** I'm Rachel, and I'm in 6<sup>th</sup> grade.

**EMILY ELLIOT:** I'm Emily, and I'm in 12<sup>th</sup> grade.

**SAADIA FELICIANO-COOPER:** : Hi, I'm Saadia and I'm a previous graduate from 2010. I'm a freshman at the University of Maryland, Eastern Shore.

**JEWLYIN COOPER:** Hi, I'm Jewlyin and I'm in 10<sup>th</sup> grade.

**ASSEMBLYWOMAN JASEY:** I'm going to ask: Sharon, can you put that-- We only have two mikes here, so if you could put one between the three students at the end, and one to share on the other end. Thanks.

**MS. PATRICK:** And then you guys can hand it back and forth when we're passing it through.

So let's start by--

**ASSEMBLYMAN WOLFE:** Excuse me, before they start. They look pretty smart. (laughter) That's good -- okay.

**MS. PATRICK:** Let's start-- I'm going to ask you what classes you've taken online, and where you're taking those classes.

Josie, I'll start with you.

**MS. ANDREWS:** I'm actually a full-time student at Stanford's online high school, for two years now; so I've taken all of my courses there. Last year was freshman year and I took a biology and statistics course; I took a course called MWA, which is Modes of Writing and Argumentation and it's actually an undergraduate course offered at Dartmouth. And so, it was a wonderful course to take. And I took Latin I, and I took Geometry. And this year I'm in Algebra II; I'm in DFRL, which is Democracy,

Freedom, and the Rule of Law which is kind of like a philosophy course on government; and I'm taking Latin II this year; and I'm taking Honors Chemistry.

MS. PATRICK: Awesome.

And Rachel, what grade level are you in, and where are you in school? And what classes have you taken online?

MS. BRADMON: I'm in Agora Cyber Charter School.

MS. PATRICK: Can you just get the microphone. Thank you.

MS. BRADMON: I'm in Agora Cyber Charter School, and I'm in 6<sup>th</sup> grade, and I've taken math, science, literature.

MS. PATRICK: Is that pretty much all your classes there?

MS. BRADMON: Yes, all the classes.

MS. PATRICK: And where is Agora? Where do you live? You don't have to name the city, but what state are you in?

MS. BRADMON: Pennsylvania.

MS. PATRICK: You're in Pennsylvania -- okay.

And is that -- Emily?

MS. ELLIOT: Yes.

MS. PATRICK: Yes?

MS. ELLIOT: I'm also in Agora Cyber Charter School -- in the high school -- and I've been there for five years and I've taken Algebra I and II, Geometry. Last year I took Trigonometry and Pre-calculus. And I've also taken Biology, Chemistry, Physics, and currently I'm taking Environmental Science. I've also taken Spanish I and II, and this year I'm taking Latin I and French I.

MS. PATRICK: Wonderful, great.

And Saadia, you said you graduated last year.

MS. FELICIANO-COOPER: Yes.

MS. PATRICK: Where did you graduate from, and what classes did you take online before you graduated?

MS. FELICIANO-COOPER: I graduated from Commonwealth Connections Academy.

MS. PATRICK: Okay.

MS. FELICIANO-COOPER: And I was there for 10<sup>th</sup> through 12<sup>th</sup>, so I took all my classes there -- from Algebra II to Pre-calculus, all my honors Englishes, Biology, Chemistry, all my historys, French II through IV, Spanish I and II.

MS. PATRICK: Great.

MS. FELICIANO-COOPER: It was a lot of classes. (laughter)

MS. PATRICK: Terrific.

And Jewlyin.

MR. COOPER: I'm also from Connections Academy in Williamsport, Pennsylvania. I've taken Algebra, Pre-algebra, Algebra I. I've taken Biology, Earth Science; I'm currently on Chemistry; I've taken a whole bunch of World History, which I'm on now. I've taken Spanish I and II and others like Health and basic stuff like that.

MS. PATRICK: And so why did you end up enrolling in online courses? I'm going to ask each of you this question. And how is it different than, maybe, some of the face-to-face courses that you've taken?

Do you want to start back there, and then we'll come back down?

What made you enroll, and how is it different?

MR. COOPER: Well, the schools around where I live -- William Penn School District -- it's not really the best, and it doesn't really prepare you for college. So my parents actually put me in Connections Academy along with my sister, and it helped me much more prepare for college. And I'm doing other things that is involved with the school that I can see really prepares me for it.

MS. PATRICK: And have you taken classes in a traditional, face-to-face setting?

MR. COOPER: Yes. I went to traditional school from kindergarten to 7<sup>th</sup> grade.

MS. PATRICK: How would you say it's different?

MR. COOPER: I would say it's different because I can do it, like you all were saying earlier, you can do it at your own pace. And I can get up, do some at, maybe, 12 o'clock, and later on I could take a break, and I can do more at 5 o'clock or so to get my work done and also do other activities during the day and not be stuck at one place at one time.

MS. PATRICK: Great.

And Saadia, what would you say about your online learning experience when you were in high school?

MS. FELICIANO-COOPER: I think my online learning experience was actually excellent. I attended the William Penn School District in 9<sup>th</sup> grade, and it wasn't a good experience. It didn't have honors classes; we were not pushing forward. We were, basically, working behind; we didn't have as many books. So my parents put me in Connections Academy and from there it was a more personalized education. It was more one-on-one learning because I was behind in math, so I was able to actually

catch up and then be ahead. So I personally believe, now -- I have almost completed my first semester of college -- if I hadn't switched to Connections Academy, I don't think I would have done as strongly as I am now as a freshman. So I think it was a great decision.

MS. PATRICK: That's great.

And Emily, why did you enroll, and how do you think it's different from-- Or, how does it work for you?

MS. ELLIOT: Well, I use to be in a private Catholic school, from kindergarten up to 6<sup>th</sup> grade, but that school closed down as did many of the other ones that would be in my neighborhood. The only other option would be to bus to other schools that would be in rough neighborhoods and would, overall, just not be very good schools. So my mom saw an ad for K-12 on TV, and when she researched it, she was very impressed with the curriculum and that it was a licensed school. So she enrolled me in it, and I've been-- And I actually realized that when I took a placement test to get into a school, that I was actually behind a year in math; and I thought I was getting a good education at the other school but I was actually behind. So I was able to work through that and get up to my grade level, and I have straight As. And I just feel like it's been a way better experience because I can focus on my subjects more closely rather than in the other school where maybe I have one hour in science, one hour in math, one hour in English, now I can-- If I'm having problems in a subject I can focus more on that one, than you don't feel rushed to do it then do another one.

MS. PATRICK: That's great; thank you.

So Rachel, how did you find out about your online learning program, and what is it about it that you like, or how does it work for you?

MS. BRADMON: My dad heard an ad on the radio, and that's how we got into Cyber School.

MS. PATRICK: Okay.

MS. BRADMON: And if I would have gone to a traditional school, they wouldn't have diagnosed me with dyslexia for another three years. So I went from reading 44 words a minute to 120 words a minute.

MS. PATRICK: That's wonderful; that's great.

And so Josie, how did you find out about Stanford's program? I know I go around the country -- a lot of people aren't even aware that universities are offering classes for K-12 students. How do you like it? How is it working?

MS. ANDREWS: Well, I started doing online school a few years ago because I'm actually a full-time performer. And when I'm performing, I'm working seven days a week with hours like 10 a.m. to, sometimes, midnight or 1 a.m. And regular school just wasn't working out because you'd be all over the country and the hours just weren't flexible. And so my parents were very intent on me still getting a great education, and Stanford has made it so that I can get both. Because not only can I take college-level courses, but I can do what I love full time. I did go to normal school from kindergarten until 6<sup>th</sup> grade. (laughter) I like this way better.

MS. PATRICK: What is it you like about it, that's better? How does it work for you? When you're traveling, I mean -- how do reach your teachers, and how do you communicate?

MS. ANDREWS: Well, it's almost like a normal high school schedule, actually. We meet in a program called Centra twice, maybe three times a week, depending on the course. And it's amazing: It's actually like Skype where we can see each other and we can have text chat conversations, and there's a whiteboard that we can write on and we can share slides, and it's almost like a class discussion. But my teachers, because they're all over the world, even -- we have students enrolled from China and from Bulgaria and everywhere -- times are very flexible. And my teachers can meet with me, sometimes at 2 a.m., because they're on California time when I come home from the theater. And it's also interesting getting to take a course about American Democracy with people who don't even live in democracies.

MS. PATRICK: That's really interesting.

Rachel, how would you say it works for you? How do your online courses-- For a lot of people who haven't been enrolled in online courses, they may not know how it works, how you communicate with your teacher, or look up your assignments. How does it work?

MS. BRADMON: We meet our teachers online, like a chat room. And sometimes, in outings, we can see the teachers and talk to them, or sometimes they'll just come to us, or on the phone sometimes.

MS. PATRICK: Great.

And Emily, how do you think it's made a difference, and how does it work for you? How do you interact with your teachers?

MS. ELLIOT: It's made a great difference. Each week, usually at the same time for all of my courses, we do have scheduled classes in a program called Illuminate -- which is a virtual classroom; it has a

whiteboard, we can share slides, and type. And you can use a webcam; you can also talk into the mike. The teachers usually talk into the mike, and students can too, if they have one.

And it's just great. If you have questions, you can ask. And also, what's really great is that the teachers can record the sessions. So if you're sick and you can't be there, instead of in a normal school where you'd have to borrow someone's notes, you can just go back and watch your recording and see everything they went over.

MS. PATRICK: We've also seen some of our programs-- Those teachers go back and they look at the recordings and they look at the student comments and they can see, "Well, maybe I should have explained this in another way," and so they'll start the next day by, "Let's go back over this one piece," and then they get that from-- Because they can watch all the student comments in the chat room, too.

Saadia, how has it worked for you, and how has it, you think, prepared you for college, as you say?

MS. FELICIANO-COOPER: Well, the same as everyone else has mentioned. We had phone calls, live lessons -- recorded live lessons -- and I think it prepared me for college because I was able to reach out to my teachers now; I knew what it was to just pick up and call during office hours and ask different questions, and maybe stop by different classrooms and speak with my teachers. So I think it was a great experience.

MS. PATRICK: Great.

MR. COOPER: Well, yes, basically what everyone else said is similar: You get live lessons and everything, and now that I've been accepted to a program called Kappa League, it's a mentoring program which

has, in different areas around me but my uncle, he knows people at the Chapter so since I'm in online school, I can travel up to New York every weekend and stay with him and be able to participate in the Kappa League events and everything in his area and I get to meet the people who he pledged with and everything. And if I miss a live lesson while I'm on the train or the bus, I can always go back and I can always review just in case I didn't get something as-- I didn't obtain the information as well as I would like to. So I can just always go back and look at it and take more notes, change things.

MS. PATRICK: The one funny thing: As I travel around the country, I speak to a lot of high schools groups and student groups, and if you -- teacher groups, too -- ask the audience one question: If you have one word to describe school, what would that that word be? And in most cases, it's the same word -- and you know what that is?

MR. COOPER: Boring.

MS. PATRICK: Yes, that's what everybody says.

And so it's really interesting. Every time-- And when we do these student panels, we do not do any prep in advance, just so you know. We all just met for the first time. We had a phone call last night telling everybody where to meet and just to say, "Just say whatever's on your mind, and share how this works for you, and be totally open." So there is like no prep.

So one word, just whatever it is off the top of your head, to describe your experience taking online learning courses, what would that word be?

MR. COOPER: Customizable, I guess.

MS. PATRICK: Great.

MS. FELICIANO-COOPER: Flexible.

MS. ELLIOT: Control.

MS. BRADMON: Flexible.

MS. ANDREWS: Accommodating. (laughter)

MS. PATRICK: And I wanted to open it up for questions, for you to--

ASSEMBLYWOMAN JASEY: Yes, I think we should take a few minutes since the students are all seated here before we hear from the teachers. There are members here who would like to ask questions.

ASSEMBLYMAN WOLFE: I have a question.

ASSEMBLYWOMAN JASEY: All right.

ASSEMBLYWOMAN VOSS: You have converted me, because I came in here somewhat skeptical, and I was very anxious to learn about the program. Because as a teacher, I hate a one-size-fits-all kind of situation, because I don't think it meets-- I think every kid needs an IEP -- an individualized education plan -- and that's what I've been fighting for because we do all learn in different ways. And one of my favorite books is *The Seven Levels of Intelligence* because we're not addressing-- We're only addressing one of the seven levels in the school today. So I'm very, very enthusiastic and I think I found my next career. (laughter)

Because I love to teach, and I had seen a little bit -- in Michigan about 10 years ago -- of the kids learning Japanese from a teacher in Texas who was teaching kids in Michigan and I said, "Wow, this is really interesting." The only question I have -- because I can talk about education forever -- the only question I have is, how are the assessments done? I

mean, this is the thing that always concerned me: How do you make sure that it's the student who is answering the questions, as opposed to an older brother or sister, or somebody, because that is my only concern at this point and time.

MS. PATRICK: Yes, so the three-word question that I do for that is: Can kids cheat, right? (laughter) Is that--

Yes, go please.

MS. ANDREWS: Well, we have to participate in every discussion -- that's a rule at Stanford -- where we have to go on camera, and they have to see our face and hear us talk. And also, we have proctored in-person mid terms every semester -- every mid term, every final, we actually have to go in to a local university, and it's actually proctored so they can make sure we know our material.

ASSEMBLYWOMAN VOSS: That's really important. That was my only real concern about-- What about the rest of you? Do you also have to go to a centralized location to take exams?

MR. COOPER: Well, in Pennsylvania, they have state tests and everything, so whenever we have state tests and important tests like SATs and stuff like that, we go -- similar to what she said -- we go to a place that they rent. We actually go with other students, and we go in to a room and we actually take the test and everything. And it's supervised and everything as it would be in brick-and-mortar schools.

ASSEMBLYWOMAN VOSS: More and more people are going for home schooling. And I think this is where more and more people are going to take advantage of the online learning.

ASSEMBLYWOMAN JASEY: Assemblyman Wolfe.

ASSEMBLYMAN WOLFE: Yes, I was actually taking notes.

(laughter) I have a couple of questions.

Now, you Skype?

UNIDENTIFIED MEMBER OF PANEL: Yes.

ASSEMBLYMAN WOLFE: All of you Skype?

UNIDENTIFIED MEMBERS OF PANEL: Yes.

ASSEMBLYMAN WOLFE: Because I was wondering: How do you do a lab science? Someone said physics -- how do you do physics, or chemistry or biology?

MS. ELLIOT: Well, many times in the virtual classrooms our teacher will use a webcam to actually demonstrate what our experiments are to be, because we do experiments where we have to use chemicals. Or environmental science -- have to go out and do field studies -- go get examples and then study them. So that's usually how it goes.

ASSEMBLYMAN WOLFE: Good.

MS. FELICIANO-COOPER: The year that I remember most would be my 10<sup>th</sup> grade year, taking biology. We had, just like she said, virtual classrooms -- settings -- where you had your pre-lab and stuff like that. But I also remember when it was time to dissect a frog, we actually went to a certain location and we were able to dissect a frog and know all that type of stuff.

MS. PATRICK: Josie, did you want to talk about your experience?

MS. ANDREWS: I actually just started chemistry this year, so I'll get back to you on that (laughter) because we haven't quite gotten-- I

know that we had to order a virtual lab that we'll soon be starting to use but I'm interested to see how that will work.

ASSEMBLYMAN WOLFE: Okay, I just have, actually, a statement, and then another question.

I was very glad that a lot of you are taking Latin. My mother was a Latin teacher, and you don't hear too much about Latin these days. (laughter) I know a lot about Latin.

UNIDENTIFIED MEMBER OF COMMITTEE: I took Latin, too.

ASSEMBLYMAN WOLFE: She took it, too.

UNIDENTIFIED MEMBER OF COMMITTEE: Yes, I did.

ASSEMBLYMAN WOLFE: I didn't go to Catholic school.

Anyway, the last question I have is: Do you actually see the other students? I mean, you see them online on Skype, but do you have people-- Who do you talk to when you're not on Skype? Your peers? Who do you--

MR. COOPER: Well, with Connections Academy, there's, I don't know how many trips a year -- it's a lot -- like, almost every week another park or a county is having a trip somewhere. And, basically, you can meet up with the other students and everything on trips and-- I know for a fact that there's one trip at the end of the year -- it's the biggest trip -- that the whole school has, period. And basically they go to somewhere like Knoebels or like Dorney Park or Hershey Park or wherever and a whole bunch of students get together and meet each other and everything.

ASSEMBLYMAN WOLFE: They go to Knoebels Grove? Is it still there? (laughter)

MS. FELICIANO-COOPER: I remember when you attend live lessons each week, you notice certain students are there every week, and you normally chat with them through live lessons, or after live lessons. And like Jewlyin said, there are so many trips. And the one thing I liked about Connections Academy was they pay for your trips. And if you needed transportation, you meet at a certain spot and they had buses. So you get to meet people during trips, test sites, live lessons, and you develop friends during your live lessons because these are your peers and your classmates. So you can message them; and so there are ways to communicate.

MR. COOPER: Also, you are permitted to participate in sports in the local school district. Actually, last year, I played football and I was able to play with a local team and everything, but this year I couldn't because my schedule was loaded. (laughter)

ASSEMBLYMAN WOLFE: I just want to thank all of you. All of us have sat through a lot of hearings, and some of them are pretty boring. (laughter) But you have really been fantastic. I want to congratulate you, and I think you've sparked an interest in all of us, so thank you.

ASSEMBLYWOMAN JASEY: Senator Rice.

SENATOR RICE: Let me-- I don't really have a question, but I do have to agree: The information you provided had to be good, because I spent a lot of years here with Assemblyman Wolfe, and I've never seen him as jovial as he is today (laughter) asking questions and he even didn't realize that history had moved on, that locations are still there that he thought were gone. I just thought that was really wonderful. (laughter)

But I'm really impressed with the students because I'm looking at a diverse population, but I also hear students who are saying that I was

either doing okay, or wasn't doing that well, but I'm doing really great now. It also reinforces what I've been saying for a number of years, and a lot of other people are saying. But for some reason -- maybe because we're not educated; I'm not sure what it is -- but just everyday folks, nobody's paid attention. I've always argued that I can't sit in a classroom all day and look at a blackboard. The day has to be broken up. When we start to take activities out of the traditional schools -- where there's shop on one day, gym or whatever -- we start to do a disservice. When I went to college I couldn't sit up in the classroom all day. And what I'm hearing here is that this program gives you an opportunity to break up your day, still participate in other kinds of activities, and spend the kind of quality time you need to get your work done academically.

And so, I'm impressed. And I didn't even have this virtual, if you will, online type of scenario, it tells me that what it has proven, at least from this conversation if it holds true and measures up throughout the country, that incorporated -- if we didn't have it, what we're being told here should be in traditional schools, regardless.

It's also interesting to note -- because I do pay attention myself -- is that we have folks who have come from traditional public schools who weren't doing as well as they thought they could, are doing great. But we also have someone from charter schools. And we also have someone from Catholic schools. And that's interesting, because folks used to always tell us, "Well, send your kid to Catholic schools; spend all that money, they'll do better." Well, maybe they do, but if I heard the young lady correctly, she went to Catholic school, and then took a test for this and found out she was behind and had to play catch-up and now she's beyond where, I guess,

everybody else is. And so that's an education itself, to show that what we've been doing, we can't do it that way anymore.

And I'll close by saying -- because I know the other guests are coming up -- while I'm listening I like to read, too. And I was telling the Assemblywoman, I think all of us should read *Disrupting Class* because just a few things I've read -- all of this bickering has taken place about how bad the NJEA is, and teachers are, and how the urban schools are failing and why the good ones and charter schools-- This says, you know what? Those may be elements in the process, but then if they are, let's look at those countries that have all those same elements that are out-performing us. In essence, I think, when I've finished reading this, I'll come back to tell me that the things that you have presented to us, are the elements we should be looking at, because those other things are given across the board.

So thank you very much for taking time out to come here. It's good to know you're in this program, because this way we don't have to give you a note to go back to school. (laughter)

ASSEMBLYWOMAN JASEY: Assemblyman Wolfe has another question.

And for the two parents who are here who are taking pictures, if you want to come up on this side and take a good picture before they sit down, feel free to. I like to take pictures myself, so I understand.

Assemblyman Wolfe.

ASSEMBLYMAN WOLFE: Yes, I'd like to ask, maybe, Ms. Patrick or Susan, or the students can answer this: You go to Stanford School, and you're in Pennsylvania -- what's your school called? Agora Charter School, right?

MS. BRADMON: Agora Cyber Charter School.

ASSEMBLYMAN WOLFE: And what is yours?

MS. ELLIOT: The same as hers.

ASSEMBLYMAN WOLFE: Okay; and yours is--

MS. FELICIANO-COOPER: Commonwealth Connections Academy.

ASSEMBLYMAN WOLFE: Okay, so you're in different parts of the eastern United States. Who pays for your education? Your parents pay for it? Does the school district pay for it? How--

MS. PATRICK: That's a great question. Go down--

MR. COOPER: Actually--

ASSEMBLYMAN WOLFE: Because people are going to ask us, when we start pushing this. (laughter)

MR. COOPER: Actually, I don't know how it's paid for.

ASSEMBLYMAN WOLFE: Good.

MR. COOPER: But everything is free. (laughter) (applause)

ASSEMBLYMAN WOLFE: Welcome to America. (laughter)

MR. COOPER: They send us all the needed textbooks; they actually send us computers. They send high school students laptops, so every year I get a different laptop. All the books, all the novels that they send us, everything is covered -- we don't pay anything. And my mom was telling me that they actually-- I believe they actually pay for the Internet or something like that for us to do it.

ASSEMBLYWOMAN VOSS: Tell us more about this.

MS. PATRICK: In Pennsylvania and in those 27 states that allow for full-time online schools, it's part of the charter school law,

generally, and the money follows the students. So just like you go to your charter authorizer, the online programs go to the charter authorizers and get approved with the same quality controls and oversight. And then the funding follows the student just like it does for the charter schools.

ASSEMBLYWOMAN VOSS: That's great.

MS. PATRICK: And so it doesn't cost the families anything for the full-time programs.

And that's true for all four of the students in Pennsylvania. Josie, does Stanford's program (indiscernible)

MS. ANDREWS: That's, unfortunately, not free. (laughter) But it's almost like we have to pay tuition, as if it were private school.

MS. PATRICK: And that's how the higher ed providers, like Johns Hopkins and Stanford, are tuition-based, so when we're out there advocating for a range of online learning opportunities, both supplemental and full-time. Those state programs allow students in those 31 states that have them to pay for supplemental classes, too, that a lot of the higher ed programs are tuition-based right now.

SENATOR RICE: I have a question relating to that.

ASSEMBLYWOMAN JASEY: Okay.

SENATOR RICE: From your experience now, online schools did not come online until after quote-unquote the charter school funding: money follows the children. Online was on before we ever moved that -- not we, but the congressional people and the government -- moved that legislation. How was it being paid for then? And the reason I am raising that is because I've been in government 24 years here; I know how it works. You fund today, you cut tomorrow. And we have these debates about

charter schools, and how far they are going to go, period -- that's State as well as nationally. So if there's a shift, and we say, "Well, most of them are failing anyway, so why even have them? Let's put the money back someplace else," which eradicates, if you will, charter school funding as we know it -- or at least that line -- have somebody who will try to eliminate it, we have to make it up. So the question is: Where was it before that line item, that group, became (indiscernible)?

MS. PATRICK: The answer is that every state policy addresses how they started in a different way. Florida started with a line item for their state virtual school, and then moved to the funding following the children down to the course level. And so all of the states that have full-time online programs like Pennsylvania have the funding follow the children. The states that have state virtual schools that are appropriations, they're all in a tight budget -- they're in tight budget places right now, and so they're having great success. The online AP scores are higher than their statewide averages in the traditional AP classes, which is really interesting. Again, I think it all goes back to the quality of the teachers that are being attracted and reaching students who have never had access before. But we have a publication called *Keeping Pace with K-12 Online Learning* that looks at the funding and the policies in all 50 states and I'd be happy to follow-up with anybody on some of the specifics there.

ASSEMBLYWOMAN JASEY: Thank you. And I think that's a great segue into our next panel.

Students, I want to thank you. I have a lot of questions, but I don't have a lot of time, unfortunately, today to ask you. But we may get back to you at some point. I think having you here and actually putting a

face on something that we're talking about that's very hard for us to grasp is really, really helpful; and I appreciate each and every one of you for coming in, sharing your time with us. And I wish you every success.

And I think, you know, the idea that we need to be boldly innovative -- I think this is a really good place for us to focus here in New Jersey as we move forward and try to figure out how to maximize resources, customize learning for children so that all of our students graduate from high school being workforce and/or college ready. And that's our goal.

So I thank you for coming today, and I would ask for the teachers who are here to share their experiences with us to come forward. (applause)

SENATOR RICE: Assemblywoman, while the students are exiting, I'd just like to say to the Congressman: You know, your daughter sometimes answers like a politician (laughter). The young man over here answers the way I answer -- I just don't know. (laughter) We just get it, you know. Good job.

ASSEMBLYWOMAN JASEY: And Congressman, if you would like to come up and say a few words about your experience as the parent, you're welcome to do that while the teachers are coming forward.

**C O N G R E S S M A N R O B E R T E . A N D R E W S:** I'm here as a dad today, but I do want to thank-- I would want to thank the teachers and the administrators and all those who have given my daughter such a great opportunity, and these other young men and women such a great opportunity.

As a Federal legislator working on education policy, what we're talking about is under No Child Left Behind, when schools do not make

adequate yearly progress and have a menu of options from which they must choose. We're talking about legislation that would add online learning as one of the options for those schools. So there would be, as a requirement, that schools that don't make AYP one of the things they'd have to consider would be opening up online learning opportunities for their children and students. And of course, as Senator Rice just very adroitly pointed out, there is funding attached to that -- supplemental services money under No Child Left Behind. And regular ESEA money could be used for that purpose as a way to help supplement the fiscal challenges I know that you and the Governor are facing.

But mainly today, as a dad, I just want to say how proud we are of these students -- I thought they did a great job. And, you know there's one thing that we wish and pray for as moms and dads: the ability of our sons and daughters to be people who make good, sound judgments and take responsibility. The thing that I'm most proud of in the case of these students is that they need to do this work because they want to learn. There is not a proctor or a hall monitor standing over them saying, "Well, now it's time to do your algebra; now it's time to do your Latin." They either organize their lives and get this done, or it doesn't get done. And of all the life lessons that my daughter has had a chance to learn, I think that's the single-most important one. My wife and I are trying to learn ourselves.  
(laughter)

Thank you for this opportunity and for the service you do for our State. Thank you.

ASSEMBLYWOMAN JASEY: Thank you; thank you, Congressman.

Now, I see we have three teachers. I'm going to assume you can run it yourselves. If you pull this other mike over, you'll have two mikes between the three of you.

And thank you so much for coming. Please introduce yourselves, and give us some insight, in terms of how it works, and what you do.

**CHRIS YERKES:** Good afternoon. My name is Chris Yerkes. I am from Commonwealth Connections Academy in Pennsylvania, and I have been a middle school science teacher for the past four years with them. I've taken on other duties as well. Before that I taught in a bricks-and-mortar school -- I taught Technology as well as Science, so I have backgrounds in both venues.

**ERIC SCHEIB:** Good afternoon. My name is Eric Scheib. I teach with Agora Cyber Charter School. I have been with Agora -- this is my fifth school year with Agora. Prior to that I taught three years with another cyber school -- Pennsylvania Virtual Charter School -- in Pennsylvania as well. I teach Social Studies; I teach high school Social Studies now; prior to Social Studies I taught in the middle school level as well, and I've taught 4<sup>th</sup> grade as well. So I've taught everything from 4<sup>th</sup> grade to 12<sup>th</sup> grade in cyber school. Prior to teaching in cyber school, I taught in a traditional brick-and-mortar school as well, as well as private schools.

**ALYSON SCHEIB:** Good afternoon. My name is Alyson Scheib. I also teach with Agora Cyber Charter School. This is my fifth year. I also taught at another cyber charter school in Pennsylvania for three years prior to that. I am a middle school science teacher, and that's what I've always

been in cyber school -- actually, always been. And I have also taught in public and private brick-and-mortar in Pennsylvania and Maryland.

ASSEMBLYWOMAN JASEY: I'm going to start it off by just asking some questions, because I am very curious about how this works.

I guess I should start by asking about certification. Are you required to be certified, and what's the process there? And then the other question I have for is, how well do you know your students? How does that work? And you can just go down the line, if you wish.

MR. YERKES: As far as our certifications in CCA: Everyone is highly qualified, which means everyone is certified for their area and their teaching. I am certified in elementary, as well as middle school math and science. And then with Pennsylvania we have Act 48, which means we have continuing education that we have to maintain. I finished my master's program as well. And you'll find that, pretty much, across the board with all of our teachers in our school. If they're not-- Most of them are working towards some sort of Master's program and, again, they are all certified within their areas.

MR. SCHEIB: I would agree, pretty much, with everything he said. It's pretty much standard. You need to be a certified teacher; I'm certified in the state of Pennsylvania to teach social studies. Every one of our teachers at Agora is also certified. We are highly qualified -- all of our teachers are certified to teach in their area.

To answer your other question about how do I know my students: very well. I think that's the-- Probably, the biggest thing that's shocked me -- eight years ago when I did this was how well you get to know your students because you have to develop relationships. It's all about

relationship building -- is the key to our success as a teacher. So I know things about students that you wouldn't know in a general classroom, when you have a class with 30 students, five periods a day, that you just don't get to know. And when you're working with these students because you're spending a lot of time working in small groups, one-on-one, talking on the phone with them, getting to know them, getting to know their parents, getting to know their families, you find out all kinds of background history and you find out what's working for them, what their problems are. Kids, families, parents -- they like to share a lot of information, and so probably the first thing I gather from that, that I didn't expect, is that I know these families really, really well. And so you really get invested, and that's probably one of the things that has really stuck with me a long time because I've had some of these students now since I've been doing this -- having the same students for many years; seeing them graduating; and knowing where they've come from as these little middle school students who have gone through high school. So it's a really strong relationship that we make with them.

ASSEMBLYWOMAN JASEY: And just as a follow-up to that question: How many students are you teaching at any given time?

MR. SCHEIB: In my current role -- I also teach Social Studies in high school; I'm also a department chair, so I don't have a full case load like one of our traditional staff. Teachers generally are around -- at the high school level, we probably have about 180 students throughout the day.

MS. SCHEIB: I would agree with that. And moving from student relationships to parent relationships -- that's probably the biggest thing for me. Teaching middle school -- I teach 7<sup>th</sup> and 8<sup>th</sup> grade; I

previously taught 5<sup>th</sup> and 6<sup>th</sup> as well. Getting to know the parents -- and when I was teaching in brick-and-mortar school, that's who you didn't want to talk to. You dreaded the times when you were going to talk to the parents sometimes, because it was usually not good news. But here you build these relationships, and you know everything about their families and they are so willing to share that with you: "My child is struggling with this," and you get to learn all about the family dynamic, who's there, what's going on. And obviously I know my students well, but knowing the whole family is something I really didn't know when I was teaching in a traditional school.

MR. YERKES: At CCA, our numbers are relatively the same. Teachers-- I know for myself I had about 175 kids last year. That sounds like a lot for a teacher, because if you say a teacher in a classroom has 30 kids, they start to panic a little. With 175 kids, it's manageable because you're actually dealing with the kids in a more of a one-on-one individual basis. Because when you're talking to those children, and the families, you're talking to them on the phone, you're talking to them in person one-on-one, you're not dealing with the class as a whole, so to speak.

When I'm teaching classes, I have a live lesson -- that's what we call it -- when they come into the classroom I often only have about 30 kids at most; sometimes 40 kids at one time that I'm teaching as a whole group. And I'll have several of these live lessons that allow the whole entire class to come, so that way I'm breaking that big chunk up into smaller groups, that I can deal with them as a group -- in smaller groups. But on a daily basis, I'm calling those families and dealing with them on a one-to-one basis.

So you do get to know the families, you do get to know the parents a lot more than you would in a traditional classroom. Parents tend to have a little more vested interest in the students' education because they're -- when they especially -- I'm not sure about Agora, but I know with CCA -- there has to be a parent or a responsible adult that is the learning coach. And they're the ones who are responsible to help the kids along with staying on task. So they have to take a vested interest in the student, so we end up getting to know the parents as well as the students more than you would in a traditional classroom.

ASSEMBLYWOMAN JASEY: Assemblyman Wolfe.

ASSEMBLYMAN WOLFE: Yes, I have basically the same question for all of you: Now, where is Commonwealth Academy? Where are you located?

MR. YERKES: We serve the entire state.

ASSEMBLYMAN WOLFE: Oh, you do?

MR. YERKES: And we have offices across the state -- we have - - Harrisburg, Pennsylvania is our main office; we have an office in Pittsburgh, Philadelphia, Lehigh; we are having one in Scranton as well; we have one in Williamsport. That way we encourage-- We actually require the teachers to work in one of these locations. We do have some work from home spots, but most of the teachers work from an office location so they're accessible to students if they should need to come in for a one-on-one or face-to-face instruction.

ASSEMBLYMAN WOLFE: So you're not a charter school?

MR. YERKES: We are a public cyber charter school.

ASSEMBLYMAN WOLFE: When you get authorization to be a public charter school in Pennsylvania, you're authorized to go over the whole state, wherever you want to go? A cyber school -- you can go wherever you want to go?

MR. YERKES: Right. Our district is basically the state of Pennsylvania.

ASSEMBLYMAN WOLFE: That's by legislation? Or that's by your charter?

MR. YERKES: Yes.

ASSEMBLYMAN WOLFE: How about the Agora School? Where are you? Are you all over the state also?

MR. SCHEIB: We're also a statewide school, so anywhere in the state of Pennsylvania we have students. We have an office in Wayne, which is just outside Philadelphia. Our teachers do work from home, so they are, remotely, across the state which is nice (indiscernible), for the same reasons-- We have student teachers everywhere, so we also have students everywhere as well.

ASSEMBLYMAN WOLFE: So let me ask you: So a parent in Williamsport, the Williamsport School District would pay for that child to be part of your virtual school?

MR. YERKES: As Susan said, the money kind of follows the student. What would happen if a student from Williamsport decided to come to our school, whatever dollar value is associated with that student in that district, would then come to us. And what we do in CCA is we will keep 75 percent of that money, and 25 percent we give back to the districts that they come from.

ASSEMBLYMAN WOLFE: Okay, here comes a loaded question: unions.

ASSEMBLYWOMAN VOSS: Yes, that was my--

ASSEMBLYMAN WOLFE: Are you in a union?

MR. YERKES: We are non-union.

ASSEMBLYMAN WOLFE: Are you?

MR. SCHEIB: We are non-union.

ASSEMBLYMAN WOLFE: That's nice. (laughter) Not nice -- sshhh, I didn't say that.

So if you teach in -- all right, you said Williamsport; let's say -- where's one other town that you're in?

MR. YERKES: Philadelphia.

ASSEMBLYMAN WOLFE: Okay. If you're teaching middle school social science, would you get the same pay at both locations, at either location?

MR. YERKES: That I-- We are relatively the same across the board, as far as teaching. I believe that does change a little, depending on location.

ASSEMBLYMAN WOLFE: How about with yours?

MR. SCHEIB: No, we would be the same across the board. So if you live in Philadelphia or if you live in Williamsport, the first-year salary would be the same.

ASSEMBLYMAN WOLFE: And typically, how many teachers would there be at a location?

MR. SCHEIB: Well, we do work from home, so we don't have a specific location. So we have about 300 teachers at our school, so they are spread out across the whole state of Pennsylvania.

ASSEMBLYMAN WOLFE: Do you meet with them at all?

MR. SCHEIB: The teachers?

ASSEMBLYMAN WOLFE: Yes.

MR. SCHEIB: Yes, we have regular professional development that we do virtually, but we also have in-person -- about four or five times a year, we have in-person professional development.

ASSEMBLYMAN WOLFE: Do you have teachers' conventions the first week in November? (laughter)

MR. SCHEIB: Not really professional conventions -- we don't have that kind of schedule -- availability.

ASSEMBLYMAN WOLFE: Okay. I mean, I'm asking these questions because I'm sure these are going to come up from our colleagues here. I really appreciate your candor and please, I'm not trying to give you a hard time but, like I said, these are things I know that we're going to be asking.

Thanks very much.

ASSEMBLYWOMAN JASEY: Assemblywoman Voss.

ASSEMBLYWOMAN VOSS: Yes, Assemblyman Wolfe kind of asked the questions that I was going to ask, but do you have a graduated sort of pay scale? Like if you have a bachelor's, a master's, a doctorate and stuff, do you get paid commensurate with the number of degrees you have, or the number of years you have put into the facility, or the system, or whatever word I need to apply to this?

MR. SCHEIB: At Agora, if you come in with-- We look at cyber school experience and not necessarily at this point, brick-and-mortar experience because they're just quite a different beast for experience level, so that's something that's considered a scale where you would be as well as if you have your instructional 2 in Pennsylvania, or you have a Master's -- those are also going to bump you up as well.

ASSEMBLYWOMAN VOSS: So your salary is determined by the school that you're working in? I mean, you don't all work in the same school district, or the same cyber school, right? So when you apply for a job, you negotiate on an individual basis with the powers that be. And do you have a retirement system, a pension system that you can pay into, even though from what Assemblyman Wolfe asked you, there is no union, so--

MR. SCHEIB: Correct. We're still a public school, so we contribute into the Pennsylvania teachers' retirement.

ASSEMBLYWOMAN VOSS: Okay.

MR. SCHEIB: So we will be able to retire with our PSERS program.

ASSEMBLYWOMAN VOSS: Okay, thank you.

ASSEMBLYMAN WOLFE: Yes, I have another question.

The young man who is sitting at the end who was in, I guess, he was in Agora School.

ASSEMBLYWOMAN JASEY: No, he was in Commonwealth.

ASSEMBLYMAN WOLFE: Commonwealth, okay. And he indicated all the equipment he gets -- he gets a computer, and all this -- now, are the parents-- Is the district charged based on the courses the

student is enrolled in, or is there just one flat fee and they can sign up for as many courses as they want?

MR. YERKES: It depends. As was stated before, the students basically have an amount of money that's assigned to them, depending on what district they come from.

ASSEMBLYMAN WOLFE: Okay.

MR. YERKES: And that money that would be associated with that student would come to us; then we use that money to fund the programs that we have.

ASSEMBLYMAN WOLFE: Okay, good.

MR. YERKES: Which allows us to provide them with the Internet service, printer and scanner, as well as a laptop computer.

ASSEMBLYMAN WOLFE: Good; thank you.

ASSEMBLYWOMAN JASEY: One of the questions that Senator Ruiz sent to me I already asked, which was: How well do you know your students? But another question she sent was -- and you've already answered this one, but I'd like an answer from the other two teachers: What has surprised you about teaching online, that you didn't expect? What's different?

MS. SCHEIB: Well, obviously, the relationships. But even the relationship with the faculty -- that's something that was surprising to me, because we are scattered across Pennsylvania. But through e-mail, instant messaging, virtual classrooms, even with us and having professional development face-to-face and online I feel like I know my colleagues more than I knew the teacher across the hall from me for three years. Because we're all kind of going through this together, and even though I've been

doing it for eight years, it's still kind of new. So even though I'm kind of a veteran, even being in it for only eight years, we all really rely on each other to find best practices. It's not like a traditional school where you can say, "Oh, I taught this subject for the last 20 years, and here are the things that work." It's a day-to-day, growing experience, and it's extremely dynamic. I think that's the most surprising thing.

ASSEMBLYWOMAN JASEY: And how diverse are your students, in terms of learning issues, ability, preparation since they're coming to you in middle school?

MS. SCHEIB: It's very diverse. When students start the school year, we do have something called a Scantron performance assessment that the students take. It is a computerized test, and it's for math and science and reading. And through that, along with many other assessments that we use, we do have a math specialist and a reading specialist staff, so some students will spend a lot of time in those areas to help bridge those gaps that maybe they've come to with us.

MR. YERKES: I think the most surprising thing for me was, as the students said when they were up here, is the flexibility, but it's flexibility with accountability. When I was in a bricks-and-mortar classroom, you would go in the morning, you'd have about a half an hour in the morning to say "Hi" and "How you doing" to all the teachers who were in the school, and then you went into your little world which is your classroom, and you were there all day long with your kids. And you didn't really have any outside contact too much with other teachers, except for maybe a planning period here or there, and sometimes those were eaten up by one thing or another.

What's nice in this environment-- Since we have to work in office locations, we have accessibility to each other which allows that flexibility that we didn't have before. So I can bounce off ideas with my fellow teachers immediately and get responses immediately, which helps with planning, which helps with understanding a particular student who might be challenging. It's nice to have that support. It's also nice to allow that flexibility to engage in the whole process at their own pace. But again, there's that accountability. Four years ago, I was looking for a change from the traditional classroom, so I found the cyber school world and looked into it. And I was pleasantly surprised that the misconception that virtual school is a student and a computer is not true. The computer is a medium, but there is a huge human element on the other side. And that was a nice surprise.

ASSEMBLYWOMAN JASEY: And just before Assemblyman Wolfe has a question and perhaps Senator Rice -- I'm still trying to get my mind around how this works. So the students that you're working with, are they all at home? Are they in other places? Are they in schools at all -- bricks-and-mortar schools -- or are they-- Who are they? Where are they coming from, and why are they choosing to come to your schools?

MR. YERKES: Why they come runs the gamut from one reason to another. Some of the students that we had up here-- It might be activities they are involved in, they could be dancers, they could be gymnasts that their practice schedules don't allow them-- If they're in high competition scenarios, a traditional school will not satisfy their schedule. So those kinds of needs are there. There might be social issues, whether it's bullying in the school. It could be learning issues, whether it's special

education. There could be illnesses. We have kids who are suffering from cancer that are often in the hospital, and this environment allows them to still be educated, yet still tend to their medical needs. So we run the gamut of all those reasons.

As far as where the kids are coming from, they're all coming from their homes. We do have certain situations here or there where maybe several kids in a general areas might congregate together, if they're all with their school and will go through the school day together in one location. But often the students are at home, and they will attend classes and things like that through the internet.

ASSEMBLYWOMAN JASEY: Thank you.

Assemblyman.

ASSEMBLYMAN WOLFE: Yes, I will try to be brief.

You said you had Scantron tests that you give?

MS. SCHEIB: Yes.

ASSEMBLYMAN WOLFE: Do you have the capability to deal with children with special needs?

MS. SCHEIB: Yes.

ASSEMBLYMAN WOLFE: You do that?

MS. SCHEIB: As far as a special education department?

ASSEMBLYMAN WOLFE: Yes.

MS. SCHEIB: Yes, we have a fully staffed special education department.

ASSEMBLYMAN WOLFE: Okay.

MS. SCHEIB: Yes, absolutely.

ASSEMBLYMAN WOLFE: I'm interested in-- You have a contract with Agora and with Commonwealth? I assume you sign a contract with them?

MR. YERKES: With--

ASSEMBLYMAN WOLFE: Agora or with Commonwealth?

MR. YERKES: Do we sign a contract with who?

ASSEMBLYWOMAN JASEY: Your employer.

ASSEMBLYMAN WOLFE: Your employer.

MR. YERKES: Yes.

ASSEMBLYMAN WOLFE: What is the length of the contract?

MR. SCHEIB: It's a one-year contract.

ASSEMBLYMAN WOLFE: Okay. And you're required to be available for 12 months, or are you available nine months, or how does--

MR. YERKES: At CCA, we're 10-month employees.

ASSEMBLYMAN WOLFE: Okay.

MR. SCHEIB: We're 11-month employees.

ASSEMBLYMAN WOLFE: Okay, now I think one of the earlier presenters -- maybe it was Ms. Patrick -- was talking about remediation and the ability to catch up. Do you have summer school programs? Do you have--

MR. SCHEIB: We do; we have summer school programs as well, so sometimes we have teachers who will take on that extra month and take that on as an additional responsibility. And we do offer summer classes.

ASSEMBLYMAN WOLFE: Do you get holidays?

MR. SCHEIB: Yes.

ASSEMBLYMAN WOLFE: You do; okay.

MR. YERKES: We don't get snow days, though. (laughter)  
(applause)

ASSEMBLYMAN WOLFE: Very good -- okay. Trying to cover all these bases -- okay, next slide.

ASSEMBLYWOMAN JASEY: Senator Rice.

SENATOR RICE: You're part of a traditional school system, is that correct? You're part of the traditional school-- You're like charter, in the sense your relationship with the traditional school system?

MR. SCHEIB: We're still responsible with Pennsylvania Department of Education. I mean, we're our own entity; we're not affiliated with another school.

SENATOR RICE: Maybe I asked the question wrong.

MR. SCHEIB: Okay.

SENATOR RICE: To me, a charter school is a private school -- quasi-private. They're alleged to be public because they're part of a system that is coming from it. My question to you is that, your entity is in the same position, is that correct -- as what we do here, as charter schools? In New Jersey, charter schools -- we call them public schools because they're part of the system. That's your status, basically?

MR. SCHEIB: Correct. We're charter schools; we're publicly funded.

SENATOR RICE: Okay. All right, let me ask you this: Do your teachers get tenured in your system?

MR. SCHEIB: No.

SENATOR RICE: Then you're different than we are.

Okay, you are different because here our teachers, in charter, if they stay and get the time in and they went to a traditional school, they have the tenure.

MR. SCHEIB: Right.

SENATOR RICE: Okay. You don't have that.

MR. SCHEIB: We don't.

SENATOR RICE: Where's your teachers' training support? I believe, and we believe in New Jersey in investing in our teachers. And that's traditional, in terms of academic techniques and changes of things. But you're in a whole different world. You're actually in the technology world that's a little bit beyond. Where does this continuous education or training-- Does the state or the system pay for that? I mean, where is the support for the teachers?

MR. SCHEIB: We have professional -- our own professional development that's focused on our model of schooling. Agora is also part of a K-12 school, which is a nationwide (indiscernible) curriculum (indiscernible) also provides us additional training. They provide us management services as well as well as teacher training. So we're allowed to use that. They have schools throughout the United States as well as internationally, and so we also get training from them. They provide training for us. We have on-going virtual and in-person professional development. Teachers who are going on for our Master's program -- many, many universities and colleges now have degrees in areas like information technology, and are gearing that way to that type of education. And so there will be more and more programs for online learning, privately as well.

MR. YERKES: We have in-house training as well, but we also provide tuition reimbursement which is not only for colleges, but also for conferences or ongoing classes that you can take that relate to your field in some way.

SENATOR RICE: What's the relationship with the local superintendent? For example, our districts are overseen by the local superintendent. Is that the same situation -- no? What's the difference?

MR. SCHEIB: Again, we don't have-- We have no affiliation with our local district, any local districts across the state. We have a head of school at our school, and I would guess that's kind of the equivalent of a superintendent. They answer to a school board that we have as well.

SENATOR RICE: You have your own school board?

MR. SCHEIB: We have a school board, yes.

SENATOR RICE: So you're not part of the school board that gets elected in the city.

MR. SCHEIB: No, we're completely--

SENATOR RICE: Okay, that's interesting.

ASSEMBLYWOMAN JASEY: They have a charter board.

SENATOR RICE: A charter board.

MR. SCHEIB: Right.

ASSEMBLYWOMAN JASEY: Right.

SENATOR RICE: Whatever that means -- a charter board.

What happens-- Two questions: What's the criteria for getting in your schools? Can you reject students? And what happens if they're not performing the way you think they should perform? Can you kick them out of your "network of schools," if you will?

MR. SCHEIB: We're a public school, so any student can apply and can enter our school. We have an application process that they fill out. As long as they provide the documentation we require, such as proof of residence, birth certificate, medical information -- things that any other public school requires -- they can be enrolled in our school. We don't kick out students because they're not performing. We work to remediate students if they're struggling. That's our goal: They're ours. Once they're here and they're ours, we're going to work with them to help them achieve.

MR. YERKES: I would say the same thing for us at Commonwealth Connections Academy. However, we-- Because we're a public school, we have to answer to all the same requirements that a bricks-and-mortar school would require as far as attendance, participation. We keep a close eye on that; we have an escalation process that watches students, and when students become at risk of not abiding those requirements, we work very hard to provide solutions for them to get back on track. If it becomes an issue where attendance is not there, or participation is not there, we can withdraw students back to their home district at that point. But again, we don't withdraw for low performance; we look to remediate and provide services for those students to get them on track, educationally.

SENATOR RICE: Final question; how do you select them?

MR. YERKES: How do we select students?

SENATOR RICE: Yes.

MR. YERKES: It's a public school, so anybody--

SENATOR RICE: Do you have a lottery system? You say anybody, so if the whole district wanted to go into your system, you take them all? So there's no lotteries, no--

MR. YERKES: If they were to apply--

ASSEMBLYWOMAN VOSS: Hire more teachers.

MR. YERKES: Yes, right. We can take as many as we can. I don't know if our charter has a cap on it and, in that case, I think maybe there would be a lottery system, but we haven't approached that yet -- if there is a cap.

ASSEMBLYWOMAN VOSS: Hire more teachers.

ASSEMBLYWOMAN JASEY: Right, there are no caps.

We do need to move on.

Assemblyman Wolfe has a question before we do.

ASSEMBLYMAN WOLFE: Yes. Both of you -- the three of you -- are chartered by the Commonwealth of Pennsylvania, correct?

MR. SCHEIB: Right.

ASSEMBLYMAN WOLFE: Do you serve students outside of Pennsylvania?

MR. SCHEIB: No.

ASSEMBLYMAN WOLFE: Could you?

MR. SCHEIB: No.

ASSEMBLYMAN WOLFE: Now you're Agora and Commonwealth Academy. Maybe we should have asked this of the first group that presented to us, but are there existing virtual schools that are country-wide -- national?

MR. YERKES: With Connections Academy, we have schools in a lot of different states, but we are different because we abide by the department of education of each of those states. Let's say Florida, Oregon, Ohio -- they all have Connections Academies; they operate slightly different than what we do, but Commonwealth Connections Academy itself only will take students who are residents of Pennsylvania.

ASSEMBLYMAN WOLFE: Okay, thank you.

ASSEMBLYWOMAN JASEY: Thank you.

I have a last question for you, and that would be: Is there anything you'd like to tell us as we move forward and embark on this idea of virtual schools and online learning? Words of wisdom? Recommendations?

MS. SCHEIB: I think the thing that I've learned over the last eight years is it's always good to have choice.

ASSEMBLYWOMAN JASEY: Okay.

MR. SCHEIB: I would agree. This is a great option for a lot of students, and we just want to make sure it's available for a lot of students because as you saw on the panel up here, they came from a variety of backgrounds and they've excelled and you wonder what would happen with those students if they didn't have this opportunity? I think it's just making sure they have that choice.

MR. YERKES: I guess, don't fear what you don't quite understand, and this is relatively new, and it can be scary especially for people that are used to the traditional ways. And I don't think this is going to overtake all of education, but it is an alternative. And I think it's very productive for certain students, certain teachers, certain families.

ASSEMBLYWOMAN JASEY: Thank you. Thank you so much for coming today. I appreciate it. I feel like my education is growing, expanding, and we know where you are so we can certainly ask questions as we go forward. Because I think we are definitely going to be moving in this direction and the goal of today has been to try to increase our base of knowledge so that we do it intelligently.

So thank you very much.

ASSEMBLYWOMAN VOSS: I just wanted to make one comment.

ASSEMBLYWOMAN JASEY: Oh, I'm sorry.

ASSEMBLYWOMAN VOSS: I am an educator for over 41 years, so this is something very, very important to me. One of big fears had been the fact that the relationship that I had with my students in the classroom was very, very important and you have allayed my fears about that because just hearing how you communicate with your students is very important. It's not impersonal, and that was one of my fears about online education. So thank you very much.

MR. YERKES: Thank you.

ASSEMBLYWOMAN JASEY: Thank you. Thank you very much. (applause)

So I would now like to invite up to the table Jeanne Allen, who is President of the Center for Education Reform out of Washington, D.C.

Thank you, Jeanne, for coming. I appreciate it. I didn't know if anybody else was coming up with you.

J E A N N E A L L E N: Thank you. I was just going to suggest, maybe -- since you didn't finish Q and A with the first panel, if they wanted to come up, because I'm going to be very brief.

ASSEMBLYWOMAN JASEY: Okay.

MS. ALLEN: And it's totally related.

ASSEMBLYWOMAN JASEY: All right, that works.

MS. ALLEN: Does that work for you?

ASSEMBLYWOMAN JASEY: Yes, absolutely.

MS. ALLEN: Thank you, Assemblywoman Jasey, Assemblywoman Voss, Assemblyman Wolfe, and Senator Rice. We really appreciate this discussion, and you've illuminated, really, the biggest questions that are out there across the country -- both federally and state-wise. And my job, really, here is just to, maybe, kind of give you just a little bit of brief context for that discussion. Some of the things that, if you do go down this road in New Jersey in a much more broad and sort of deep way -- some of the things to keep in mind.

I mean, there is lots of discussion. The good news is that the State and the D.C-level -- the Washington, the Federal level -- in fact, almost a year ago -- a little over a year ago -- the same group of people and some additional folks came together because we had been deluged with questions from Washington about exactly what Congressman Andrews alluded to: What are the impediments to doing more online learning that perhaps the Feds could get involved in? And we realized in the discussion that there are, indeed, some impediments to allowing these things to thrive -- schooling opportunities being a reality for more students and teachers, and among them basic things like the definition of schooling; the

applicability of various federal funds; and on top of that, a mindset that sometimes does have a hard time embracing of how learning can occur without a physical classroom.

Simultaneously, as this discussion has been evolving at the Federal level -- the nation level thanks to people like Michael Horn and in the book that he did with Clay Christensen; Senator Wise's -- Governor Wise; sorry, I just promoted you (laughter) -- Governor Wise's work with the Alliance--

GOVERNOR WISE: Promotion in the State Legislature. Not so sure at the Federal.

MS. ALLEN: Exactly.

You know, that Digital Learning Task Force you referred you has been delving into these questions. So this is an area that is so now packed with data information research that we have at our fingertips. Which really, for me, is unlike any other reform that I've seen come about in a long time, where we learned while were doing. They're learning-- The research is out there and it's going to really set the stage for doing.

And that doing really does-- When it comes down to asking ourselves, "How do you do this and advance it in New Jersey?" what do you do to make sure that you've addressed those impediments, assuming, let's say, for the sake of argument this is a place you want to go further, there are just a couple of principles that I would suggest you consider.

The most important principle, and what I call the minimalist approach, is that no program you have today, or an act, should discriminate against virtual schooling. And sometimes that seems like a no-brainer but, in fact, unless it is explicit, as you well know -- you write the laws -- in law

that says nothing here shall preclude this from applying to virtual schooling. You know, it leaves here, and it gets interpreted in ways that we never imagined. And we've learned that the hard way in states.

The second principle is that state law should actually -- assuming again it's something you're welcoming -- encourage it by providing guidance to schools and school districts about best practices, and how to actually utilize those existing funds to provide virtual schooling. Again, in the absence of having done this repeatedly in New Jersey, unlike a lot of states, that simply has not happened yet. So having that, basically, in law and guidance is critical.

And a third principle, which unlike the first one is minimalist, I'd say-- Sort of the activist approach is that any reform effort, whether it be charter schools, teacher quality issues, and even standards, should recognize the inclusion of virtual learning and the need to modify how we evaluate what it means to be a teacher, a school, and a standard to accommodate -- not lower -- the new reality of online learning. So when you're looking at how you define a teacher, for example. Several years ago, when this came up in California for the purposes of funding, a teacher was defined as actually someone who was with those children in the actual classroom; someone who had a full certificate as opposed to, perhaps, some alternative certificates. All the different things you start thinking about that define how we pay and hire and treat schools begin to take on a more complicated effect when you're looking at state policies. So those are very important things that are to be considered.

With regard specifically to charters -- and I'm happy to answer if you still need here, or any time in the future, questions about how that

bigger picture, about statewide versus nationwide-- There are no nationwide charters providing virtual schooling. That would be against state law, which are the state boundaries. There are private programs that some of the same people provide in public charter schools -- will provide if someone wanted to have a program -- a private school. But with regard specifically to charters, New Jersey law does not explicitly call for, nor does it preclude, online learning; but we have to clarify in law entirely virtual, as well as blended schools, are permitted, if we're going to encourage the development of the highest quality models in the states. Money, in that case, would follow the children -- and the finances, again as you've heard, do vary entirely state by state, but we have to be explicit about it because what we've run into in those 27 states -- we have full time virtual public schools operating -- is that if you're not explicit they don't get supported. The teachers don't get funded. The programs and the computers, the technology to support the professional development that go with it aren't provided for. And even in a traditional school that might want to take advantage of online learning, they end up doing it as an add-on, as opposed to something that could be integrated into the classroom. And so some of those considerations, particularly if you include this in your charter law, are incredibly important.

The existence of statewide charter schools -- I just have to tell you, as someone who has been observing this for a long time -- often spurs districts to create their own programs. It's rarely the other way around, with the exception of some Midwest states -- Oklahoma, Kansas -- who have been doing this for a long time -- Washington State -- it tends to be the other way around.

ASSEMBLYWOMAN JASEY: Wait -- repeat that to me?

MS. ALLEN: The innovations of public charter online schools tend to spur districts to adopt similar or blended learning models.

ASSEMBLYWOMAN JASEY: No, the state-- You start with the state law, and-- Okay.

MS. ALLEN: Then a district might say, "Oh, that's something that we can actually do, or want to do." Because I heard a little bit about it, which is an important consideration district, so I do (*sic*) and as Senator Rice mentioned that earlier this has been going on for awhile in pieces. What tends to happen is, you allow it to happen at the charter level for online schooling -- is what we've seen in Pennsylvania and several other states and you tend to see districts then jumping into the fray. They see it can happen, there are innovations, and they understand how that money flows.

ASSEMBLYWOMAN JASEY: So what you're saying is that local school districts, regular public schools, may embrace the strategies and the approaches being used by the online. So one of my greatest frustrations with the charter school movement has been the lack of sharing of information and strategies -- best practices -- between the regular public schools and the charter public schools. And this might actually be an example of where that happens a little bit more easily.

MS. ALLEN: Absolutely.

ASSEMBLYWOMAN JASEY: Okay.

MS. ALLEN: In fact, I would say that of the two major providers of public virtual online schooling -- public charter schools through virtual mechanisms -- they're probably both getting almost an equal share of

questions in increase from schools and school districts and beginning to look at of course sales as well as partnerships to provide those, as well as, by the way, some private school models. And it's because the traditional school districts in some states that have seen it actually happen through the charter mechanism are beginning to realize that might be something that they could employ, particularly when you're looking at the challenges we have now with the finances and the human capital challenges. If you consider the teachers you just saw who are educating sometimes upwards of 100 children, but not at the same time, obviously, and what that means for maybe potentially expanding the number of kids you can reach who might not be able to come to your boundaries. If you think about it in terms of why the conversations on Capitol Hill right now -- with regard to the military and families coming back to a state and not being able to necessarily access or not wanting to access, for all sorts of family reasons, the same district they were in. I mean, the crossover between being able to provide an online schooling model through a charter or otherwise through a district and not the crossover the district lines that sometimes help families in need is critical.

And just another note on that: The question earlier about the kinds of kids who go. One of the other groups of students that the online learning community is talking more and more about, which to me is incredibly important -- Senator Rice, you mentioned the incredible numbers, just scary numbers, about student dropouts, particularly among black males -- and a lot of the students are finding themselves having to work, having to support a family, having dropped out or finding new pathways back in. And that's an area that people are taking very seriously.

But anyway, the State -- you all can really do a lot to encourage and foster all those different approaches. But you have to look at and unpack the codes and the laws that sometimes are buried with things that would prevent it should you say, we want to do this in X, Y and Z way. As the individual (indiscernible) showed you again -- as I said at the start, the breadth and the depth of the data and the research are outstanding, and what we're seeing today-- Which is something I have to say that my colleagues in this field. Several years ago -- it took me to actually see it. You said earlier, I'm trying -- I have a hard time picturing it. I literally had to sit in front of a program and then I had to sit in front of a computer and then I had to understand firsthand what it looked like to really get it. And like you this is coming from someone who's actually been in and around education for a long time, so I would actually encourage you to think about a way to have that either brought to you or to go out and see it. Because it will unclick a lot of those conventional thoughts we have about whether it can or can't work. It is truly one of the most exciting things to be involved with today because the breadth and also the depth of the people you see, right? It's nonpartisan, it's actually tri-partisan, if anything. It's traditional education folks with innovative education folks, it's charter, it's not charter, it's people talking about how do we unleash the mathematician in Singapore to teach our children in inner city Newark versus someone else, and it goes on and on with potential. So with that (indiscernible) context, I'll close. Thank you.

ASSEMBLYWOMAN JASEY: That's very exciting. Thank you.

Other members of the panel, if there are-- I don't know if the legislators have questions, but if there are things that you think we need to know that we haven't heard yet, please feel free. I do want to leave 10 or 15 minutes for our DOE folks if they're still here: Lawrence Cocco -- okay. Susan Sullivan and Eric Taylor -- so I do want to leave some time for you.

MR. HORN: Assemblywoman.

ASSEMBLYWOMAN JASEY: Yes.

MR. HORN: If I could make just one observation and actually, it's following up something Assemblywoman Voss said.

I got into this-- What struck me from a policy application is, that this is about assisting and complementing teachers. And that what I've come to learn over time is that virtual schools are critically important, but probably about 75 percent of this application is going to be in a blended environment, where there's a teacher in that classroom looking face-to-face with students, and now you're bringing in the best content, as Jeanne says, from literally all over the world. But it does not replace the importance of that teacher in the classroom and, indeed, I've actually learned some things listening to you this morning, Assemblywoman, because as you point out, this is about a classroom teacher now having some time freed up to be able to focus on the students' individual learning styles, of which every student-- No two schools are the same; no two students are the same. And so as opposed to the teacher having to be solely responsible for the lesson plan and for all the content that day. At a time when the written word is doubling, literally -- the written word -- every couple of years now, no teacher can be expected to do that. But the teacher now can assume-- Now has a lot more assistance because of the blended learning environment.

ASSEMBLYWOMAN JASEY: And what does that blended learning environment look like? Explain that to me a little bit more.

MS. PATRICK: Two slides that I have on definitions that we didn't get into today is that an online course is defined where 100 percent of the online curriculum is used. A blended course -- there is sort of two buckets for blended learning: blended course and then a blended learning program. If you're just looking at a blended course, it would be a course that mostly meets face-to-face -- sometimes always meets face-to-face -- where online content and curriculum is used, and the technology that goes into online learning. So these technology platforms and the use of students to be able to extend learning opportunities outside of a particular class period. You see this a lot in higher ed; we're seeing much more of it in K-12. And this is really the area where it's expanding. You know, people talk about blended learning programs; lots of districts are giving in to blended learning programs now, and those are kind of, "Here's your blended course, your blended program is the other bucket," and I have two different subcategories for that: One is called, for blended learning, a buffet model where, if you think of a Florida virtual school where students in their local, traditional high school for five classes a day -- and then they want to take the AP environmental science class too, and that's only offered online. Think of a blended learning program as a buffet model where they can pick and choose.

And then there is the blended learning program that is more like that course; we call it the emporium model. So an entire high school may have a percentage; let's say the entire math curriculum is through online learning; the teachers all trained in those tools. And so it's all under

one roof, and students can go at any pace and get that customized, personalized experience using the digital curriculum.

So buffet, emporium, blended programs, blended courses.

MS. ALLEN: If I can just give one quick example: Rocket Ship is a new charter school network -- relatively new -- in California that is actually devoted to helping low-income children -- at-risk kids -- in a blended learning environment. They come to school; the people who are in front of them, for the most part, are going to be learning coaches. Some of them are qualified teachers, but the rest of the qualified teachers are in a virtual environment. So it's a combination of both being delivered, depending on the needs: fast-paced, the courses change and shift quickly, so if someone needs to catch up, they can go into this area. If someone needs to accelerate, they can go into another area. And there's a constant shifting of people to expose these students to learning as they need it, and as they can grow which allows these kids to accelerate something like a grade level in just the first year, as compared to their traditional counterparts. It's pretty impressive.

MS. PATRICK: And just to note on Congressman Andrew's comment about the school turnaround model: Connections Academy has a new model that they're doing with Wireless Generation and (indiscernible). It's a blended model, so they have face-to-face teachers, but they also have virtual teachers. So if there's a school that's been underperforming for a number of years, they can bring in and connect teachers together and have that blended learning take place which is really exciting, as opposed to some of the other turnaround models that I have heard of.

MR. HORN: If I may jump in with other quick addition.

ASSEMBLYWOMAN JASEY: Yes.

MR. HORN: We're actually-- The think tank where I work is doing a survey right now of hybrid models out there. We're seeing, roughly, six types emerge, but what's striking is that no two of them look exactly alike. The innovation right now is quite striking. And the different roles that teachers adopt in team teaching environments -- one might be a learning coach, another might be a case worker, a third might be the content master; some will be in person, some will be virtual, some will be lots of different things -- that are really exciting from the student perspective is what's really striking to us as we look at that and the creativity of the model. Some look very traditional; some look radically -- have blown my mind, quite frankly, which I think is exciting. And it's a key reason why when I said toward policy when you think about that, it's why, I think, hold the outcomes on these new types of models and these new providers. Be very-- Hold them to the highest standard possible, but then really try to divorce yourself from the natural thing of saying, "This is exactly how it should flow," because then you restrict that innovation, to think of those new teaching models, those teaching definitions. Ratios are awfully hard to calculate when you actually have three teachers touching the life of a student at any one point, and so a lot of those line-of-sight geography limitations and so forth can get in the way. Which is why I'd say hold it to the highest account possible. But the districts and charters and everyone are really exploding out of this game.

ASSEMBLYWOMAN JASEY: Sounds like it.

SENATOR RICE: Madam Chair, I know because of the time-- I think we missed a real important piece in this whole discussion, which

means at some point in time, as Co-Chair, if the Assemblywoman agrees, you may have to bring a couple speakers back. I believe we need to get more in depth with the Michael Horn presentation. (laughter)

ASSEMBLYWOMAN JASEY: He liked your first chapter. (laughter)

SENATOR RICE: Because it put us-- I don't believe that you can talk about *B* without talking about *A*. Virtual does not work unless we understand, theoretically, that the traditional things we have looked at to determine why students are failing are not really-- Our attention should be there, but not the way it's there. So there needs to be more discussion about the intrinsic and extrinsic motivation factors and other things; there needs to be public discussions so New Jersey parents don't get confused with the attack on the education unions and teachers, whether they are in a union or not. And they can understand because once we get into that kind of discussion, publicly from elected officials, all parents, or most parents, give up. They look for new directions that are failing us. We invest money from legislators who don't understand either part of this into a system that's not going to work. And we want to measure it out because it's new; knowing it's not going to work 10 years which means we wasted 10 years. I really believe that the Michael Horn component and those around that think tank need to get back in here for some real serious discussion with educators and with the Department of Education.

So that's a charge, if I can get some parents, we're going to get to this Committee.

ASSEMBLYWOMAN JASEY: That's a great segue, Senator. I know that Assemblyman Wolfe has another question, and I know that

Governor Wise has to leave because he has a train to catch, so I don't want to hold you up. But I want to thank you for coming because I think that the key point of the day, really, is to broaden our understanding and our knowledge base, and I'm happy to hear Senator Rice say that we need to get even more information. Because what we want to do is, we want to move forward quickly, but also intelligently, so that we can best serve our students, particularly those students who are not being well-served now.

So I'm going to let the Assemblyman ask his question, and then I'm going the Department reps to come up.

Thank you.

ASSEMBLYMAN WOLFE: I don't have a question; I just want to thank you. I just want to say something that most of my colleagues don't know about me: I work for -- all my adult life -- in higher education. I worked at the University of Delaware as Administrator; came to a community college in New Jersey -- I was a psychology professor. And I got invited to attend a conference where they talked about high-risk students. Well, I didn't know what a high-risk student was, but at that time, these are kids who should have gotten As and Bs, but the father was an alcoholic, someone might have died in the home -- they couldn't concentrate on school. So we developed a program where I work and, at one time, one of the best in the country, to deal with those kids who really needed some extra help in the way they learn. To me, that was a big milestone. We all had a colleague here -- Assemblyman Joe Doria, became Senator Joe Doria -- he really pushed charter schools. And I got really turned on to charter schools. But listening to this testimony today really has me encouraged about what you have presented to us. I hope that we can get some more

support, not only from our Committee here -- I'm sure that they will support you -- but I think the other legislators and the whole legislature in New Jersey. And I'm sure that, hopefully, the Department will assist us, because I'll tell you: That's a great future. I really appreciate what you've brought to us today. Thank you.

ALL: Thank you.

ASSEMBLYWOMAN JASEY: Thank you. Thank you again; travel safely.

ASSEMBLYWOMAN VOSS: Come back.

ASSEMBLYWOMAN JASEY: Department of Ed reps, would you come up, please?

Welcome. We have two mikes there -- red is on, so you can divide them between you.

**ERIC TAYLOR:** Good afternoon.

ASSEMBLYWOMAN JASEY: Good afternoon.

MR. TAYLOR: My name is Eric Taylor. I'm the Director of the Office of Statute and Code Review, the Department of Education. And I'm here with Larry Cocco, Sue Sullivan from the Office of Educational Technology, and Chris Emigholz, the Legislative Director from the Department.

I'm going to let Larry and Sue take over in a moment because they can give you information about the state of virtual learning in New Jersey and, hopefully, provide information and act as a resource for any questions you might have.

I just want to note preliminarily that expanding educational options for New Jersey students is a key goal in the Governor's educational

reform agenda. And expanding virtual and online opportunities in New Jersey would constitute a significant step towards attaining that goal.

So again I'd like to thank the Joint Committee for taking the initiative on this important subject. And with that, I'm going to hand it over to Larry and Sue.

**L A U R E N C E C O C C O:** Thank you. And thanks to the Committee for allowing us to testify today, and also to Susan Patrick and the other students and those who testified. I think that they gave an excellent national perspective about the state of online learning in the country.

And from a New Jersey perspective, we are one of the few states that does not have an online learning policy currently. We are working on it; we have some draft recommendations; we've been working with an online task force, and that will be in process as we move forward.

We also do a New Jersey school technology survey every year. We have some data about online learning in the state. I'm going to let Sue talk to that in a minute and, hopefully, we'll be able to move forward from here with your help, and we'd like to serve as a resource in any information that you need or questions that you have.

Sue, could you talk a little bit about the survey?

**S U S A N S U L L I V A N:** Sure.

**ASSEMBLYWOMAN JASEY:** Just move the mike around to you. Is it on? Red is on.

**MR. COCCO:** Yes.

**MS. SULLIVAN:** Got you; thank you.

Thank you for allowing me to talk to you -- talking about technology is dessert for my mind. (laughter)

ASSEMBLYWOMAN JASEY: Oh! Okay.

MS. SULLIVAN: We've been doing a technology school-based survey for more than 10 years at this point, and we ask varying questions to meet Federal and local needs. And when we looked online which, I think, is the piece that's kind of interesting for you, online experiences for our students have doubled in the last two years. Now that does not simply mean online courses. It can mean online events, it can be field trips, it can be working with learning objects or small lessons, it could be online courses. So in 2008 you can estimate about 100,000 of our students were having online experiences of some nature. And, if we look at 2010, you're talking over 217,000 of our students having online experiences, which is merely an expression of wonderful growth for our students.

We also looked at online learning. I have a vested interest: I'm a product of it in terms of one of my degrees. And we've talked internally at the Department about online learning. So in 2004 we tested the waters with a pilot grant called the KOOL grant -- Kids Officially Online. We had nine school districts and their partners who found an area of need for the (indiscernible) between the districts and participated in this grant. And in that grant we had students who were obviously delighted to be in that environment. And we had teachers who said, basically, 60 percent of them said their students had increased their achievement levels. We provided them with rubrics of quality to proceed, and we had lessons learned from this and that was, of course, our intent. We want to pilot in a small way and find out what we could learn from the process in New Jersey.

And some of the things we learned were the need for professional development for our teachers; the need to have a rubric of quality to provide a vision of quality for these students; we learned that students need support; and that there was a need for access and tech support for them; and a need for a good data management system under them -- and I can't underscore that because online learning is a data stream. You can go down to the mouse click. So I heard teachers say nationally that when they follow that data stream per student, they stalk the students who are on a downward trend, and it's a good stalking.

So that basically gives you a concept of what we've done in terms of survey data, and we have other data that supports that as well, and piloting online learning in our state.

Larry.

MR. COCCO: Just one more point; I know time is short.

I'm sure you're aware that the State of New Jersey is one of 48 states that has adopted the common core standards. And as part of that, we're committed to do online assessment of high-stakes testing at the state level by the school year 2014-2015. Now, that isn't that far down the road, and if we don't make sure that our students who are going to be taking these statewide tests that school year-- If we don't make sure that they have online experiences to prepare them for the online environment, we will be at a severe disadvantage in that test year. So this is sort of a juggernaut coming our way, and I'm very, very happy that you're taking up this issue, and anything that we can do to help you work through what's necessary to make this happen and have online policy in the state, we'd just like to be a resource for you.

ASSEMBLYWOMAN JASEY: Well, along those lines, obviously all our kids are not going to be in online charter schools. So having said that, what's the plan for developing opportunities for students to have that online experience on some level, so that when these assessments come in 2014-15, we're ready?

MR. COCCO: Well, we've started a series of meetings to address that concern. The funding for the consortia on the online assessments was only announced a few weeks ago, and we're already having meetings at the Department. So I don't have an answer for you yet, but it is one of our major issues right now, and one of our major initiatives.

Sue, you had something you wanted to add?

ASSEMBLYWOMAN JASEY: And then Senator Rice had a question.

MS. SULLIVAN: Our students are moving forward with online learning. I was glad to meet Josie because I have statistics that said students were taking classes from Stanford; they're taking classes from Fairleigh Dickinson, Johns Hopkins, Bergen Community College, Burlington County Community College, Middlesex; Mulberry College in New Hampshire; New Jersey Institute of Technology. And we have local virtual schools that have been building: We have Monmouth Ocean ESC; we have Hudson e-school; and another prime player with a different model is the virtual high school out of Massachusetts. So there are many providers; these were the major ones that are having impact. So our students are doing this; it's how we have to support it in the future to have them accomplish it an easier way.

ASSEMBLYWOMAN JASEY: Okay, and then a follow-up to that, before Senator Rice's question: What's the level of technology

availability across the state, district-wide? I mean, are all of our schools wired? Are students having access at school?

MR. COCCO: Well, the survey shows that there's some Internet connections in, I believe, just about every school in the state -- it's either 99 or close to 100 percent. However, the level of connectivity varies greatly as does the access to technology. The State student-to-computer ratio right now -- statewide from the school report card data -- is about 2.5-to-1, where there's 2.5 students per computer on a statewide basis. But we're a local, rural state, and the local district has its own authority in how they address the integration of technology into the classroom. So those computers could be used in a very efficacious manner for education, or they could be used as a reward for good behavior.

ASSEMBLYWOMAN JASEY: Or they can be sitting there.

MR. COCCO: Correct. So we have those facts and those statistics, but we don't have eyes in every classroom to make sure it's being used correctly.

ASSEMBLYWOMAN JASEY: Thank you, Michael. I want to read the rest of your book. (laughter) I read the first part of it.

Go ahead Senator Rice.

SENATOR RICE: Yes, you're with the Department of Education?

MR. COCCO: Yes.

SENATOR RICE: If I heard you correctly, you have a task force to look at this online concept.

MR. COCCO: It's an online task force. We actually have a couple of the members here in the room -- Tim LaGuerra from Monmouth

Ocean Educational Service Committee, and Sister Elizabeth; and we have someone from the Hudson E School.

SENATOR RICE: All right, let me ask you a question. I'm asking the questions now -- I'm a yes and no person. You know, it's like an inquiry here, you know what I mean?

MR. COCCO: Okay.

SENATOR RICE: Okay. Yes and no. So you have a task force. Anyone from the education association -- (indiscernible) government like unions, but I'm not looking at unions, I'm looking at educators. Anyone from the teachers' organizations on the task force?

MR. COCCO: Not at this time.

SENATOR RICE: Okay.

MR. COCCO: This was a small task force just to get things--

SENATOR RICE: Well, that's-- See, small is not always necessarily correct. Big is not always correct. It's having the right kinds of people who deal with this stuff. We have these attitudes in the State about who's going to participate, which means we lose valuable human resources. I'm asking you to take a look at that. I'm not satisfied -- in any task force that's going to talk about education, that doesn't involve someone from the arena who deals with every day, whether we like each other or not. So the Committee needs to figure it out -- that's number one.

Number two: If we're going to talk about virtual and online, I would like-- I don't know, because I believe you've been with the Department of Education for a while?

MR. COCCO: Six-and-a-half years.

SENATOR RICE: And the Governor's new. Do you communicate with the Governor? What's your relationship with the Governor? Because you know for more than six-and-a-half years, I've been trying to get legislation moved through Democrats and others dealing with the whole digital divide. If we don't address the digital divide, then we're not going to address properly online and virtual. Do you understand what I'm saying?

MR. COCCO: I understand.

SENATOR RICE: And then the question that the Assemblywoman raised was, your response -- which is the actual one -- is that we've got all this local stuff. The whole notion of the digital divide needs to be addressed, but we have to take a look at how we are going to deal with the local district's control of that part of the system. Because we can't have someone in school district A all into this, because that's a decision that the district made; and then someone in district B not into it, but they didn't make any real decision and then someone-- Instead of just sitting, there was a motivation you can go play with it like a toy just because you got an A rather than making it a learning tool.

So I'm looking for two things: I want someone to report back to this Committee, to the Committee as a whole -- now I'm speaking -- how we're going to expand this task force since it's so new. Reach out, suck up a little bit, tell the Governor I made the request that you go and say, "Look, can you educate us?" And you have three unions around here: You have NJEA, but you have Newark teachers' union also, okay? And they have teeth. So my point is: You all figure how to get that done with technology

people in the classroom who understand the need. And they can be superintendents.

The final question is: You said that this like something to you like some sugar or something. I forgot what it was, but anyway--

ASSEMBLYWOMAN JASEY: Dessert.

SENATOR RICE: Dessert -- okay. I knew there was some sugar in there. (laughter)

But the thing is is that: Can you send us, based on what you know, a breakdown on what the population looks like? Where they are from -- I'm talking about black, whites; you look confused. I mean, I'm into the racial thing now, not from a racist perspective, but the diversity of it, as well as the geographics and demographics of it because hopefully there is some balance there. Because if we see, for example, that non-minorities in urban areas participate more than minorities in urban areas, that may tell us something about the way we look at, maybe family values, maybe peer group. If we see that they're different economics, where they're coming from, the majority are non-minorities, then maybe the geeks, if you will, or the parents -- I'm being honest about it, okay? We need to evaluate what that means. If we see this kind of balancing thing taking place throughout the State, whatever districts they come from, we can say, "You know, something is happening with this whole concept, regardless of where you're from, what the economics happen to be, or whether you're a geek or not." So that, to me, would be important, because I don't think we do analysis right -- at least in government we don't. You Department people do a good job, but you are kind of narrow in your thinking. Not because you want to

be, but because you don't have people like me around to make you (indiscernible). Thank you.

ASSEMBLYWOMAN JASEY: Thank you, Senator.

I think what you're saying is that we need more information, and perhaps we need a follow-up meeting with the Department since you're right here in Trenton and we gave, obviously, most of the afternoon to our out-of-state guests. And I will let you respond.

SENATOR RICE: But the right information; I don't want just a lot more information.

ASSEMBLYWOMAN JASEY: No.

ASSEMBLYWOMAN JASEY: Specifically, we need to ask the questions.

SENATOR RICE: We need to, maybe, present them with questions.

ASSEMBLYWOMAN JASEY: And I also want to give Sister Elizabeth just a couple of minutes -- I didn't know that you were going to be here -- to address us about her virtual school.

Yes, Susan.

MS. SULLIVAN: We can do something with the demographics, but our survey data was never broken down to the racial levels.

SENATOR RICE: Okay.

MS. SULLIVAN: It was basically looking at school districts and asking school districts to reply. So demographically, we can. On the other level, we can't.

SENATOR RICE: That's good enough. You give me school district, I can give you the racial breakdown. (laughter) I don't have to look at it.

MR. COCCO: We can do the-- The district's directive (indiscernible) is (indiscernible).

SENATOR RICE: This is New Jersey, remember? (laughter)

C H R I S T O P H E R E M I G H O L Z: Senator, just a little background on your question.

Senator, the task force that was referenced by Larry and Sue has actually been in operation long before Governor Christie took over. It was actually a Corzine -- I believe -- a Corzine-Davy creation, right?

MR. COCCO: Correct.

MR. EMIGHOLZ: Yes.

SENATOR RICE: Well, he messed up a lot of things; would you reach out for some educators, please? (laughter)

MR. COCCO: No, no, but it's something that-- A lot of their work was done before that, but that is a good point we will take into account. And then your digital divide issue is important, and I actually think there is evidence out there that since you started advocating on the issue, that things have gotten better. And I don't know if it's necessarily the resources that are out there, it's how they're being used. And that's something that's different than the divide.

SENATOR RICE: We need to pass the bill, and the way we're going to get the bill passed is that if people in your position advocate for it and talk to the Governor. If you have a Governor who wants you to say no because of budgets -- and that was Corzine's thing, sometimes, and the

people around him -- it's not going to happen. So my position is very simple: I don't need task forces and people working in government who are afraid to challenge the authority that hired them, in terms of their thinking and sell what you know we need. To go in and say, "Well, this is what we need," and I say, "Well, do it" to some reasonable degree -- to me it's a waste of human resources, and that's why we don't get the financial resources necessary to move forward. But we can save dollars and cents long-term.

ASSEMBLYWOMAN JASEY: Thank you.

Any other comments that you'd like to make before you depart? (no response)

Thank you for coming, and I look forward to continuing this conversation, because I didn't realize that we had so many people focused on this issue at the Department. And now that I know, I know where to find you.

I'm sorry -- did you have a question, Assemblyman?

ASSEMBLYMAN WOLFE: No, just -- the Sister --

ASSEMBLYWOMAN JASEY: Okay.

Thank you very much.

Sister.

**S I S T E R   E L I Z A B E T H   D A L E S S I O:** Thank you for allowing me to speak for a moment.

ASSEMBLYWOMAN JASEY: Yes.

SISTER DALESSIO: Is it okay if I call up our Superintendent, who is here with me?

ASSEMBLYWOMAN JASEY: Certainly -- and use the mike.

SISTER DALESSIO: Okay.

To briefly explain: My name is Sister Elizabeth Dalessio. For obvious reasons, members of my family call me the black sheep of the family. (laughter)

I've been in both Catholic and public education. Right now I am serving children in public education. I'm the Assistant Superintendent of Monmouth Ocean Educational Services Commission, which is a public school district. There are 10 throughout the State of New Jersey.

Tim Nogueira is our Superintendent, and I must say he's given me plenty of opportunity to expand and to do wonderful things.

What you might not know: In 2002, we began the New Jersey Virtual School. We began it with -- deliberately -- four students in a partnership with Florida Virtual School, because we wanted to see if it would work. Then we went to 70 students the first year, to see if it would work. And finally, we went to 1,500, and then we average about 3,000 students a year from over 100 school districts in the State of New Jersey. All of our teachers are New Jersey-certified teachers; they belong to the NJEA. In fact, the NJEA has vetted us twice -- they have come to our building, asked us loads of questions. We gave them all access to all of our programs which, before I leave today, we would like to do the same for you. So if you would give us your e-mail addresses, we're going to make you teachers and students in the course of your choice so that you can actually examine what the students in the State of New Jersey are already participating in.

I will tell you: I took that Stanford University chemistry course. I want you to know that I blew up the lab twice. (laughter) The

way that it works: They are virtual labs and, as you know when you titrate chemicals you have to have them go in at a certain rate. And so I was trying to learn the course well before we had our students start. And I had one of the professors at Stanford University working with me, and he said, "Okay, do it at whatever milliliters per second," and twice -- twice -- I blew up the lab. (laughter) So Villa Victoria does not want me back; I used to be a chemistry teacher for them. (laughter) They said thank you, but no thank you.

In terms of Latin: Do you know that Point Pleasant and Lacey Township now are taking Latin I, II, and III with us in the virtual arena? Yes, and it's being done by a public school teacher at Red Bank Regional who is studying for his doctorate in classical language. We do offer a full curriculum. We have a complete partnership with Florida Virtual and with Pearson. I mention Pearson because of the fact that you may not know this, but last year we remediated 2,000 students who had not passed their entire HSPA test. So the Department of Education asked us to remediate them online, which we did. The highest success was with the writing components. This year, two weeks ago, we got called down again, and we're discussing now also remediating students for the new biology test that is becoming State-mandated. And instead of having these students, as someone mentioned, I don't know -- maybe Susan, or maybe someone from here -- before said, "Why do we have the students take the whole course over again? Why aren't we just remediating what they need?" And that's always been a big proponent of Tim's: Let's get the students now in their public schools; they haven't done well first semester. How are we going to guarantee they're going to do well second semester?

So we go in now and we begin the remediation. We're doing a lot of exciting things. I was bursting at the seams. I was with Susan last week at the iNACOL meeting; we exchanged a lot of great ideas. I don't want to keep you all afternoon. Call us back; you can come to Tinton Falls where we also have a blended learning-- Tim calls it BLT -- blended learning technology, but it's school--

ASSEMBLYWOMAN JASEY: Road trip.

SISTER DALESSIO: Yes, road trip. (laughter)

You know why? Because he's the other wonderful thing that we do. We all spoke about our-- We'll serve your lunch, and a good lunch at that.

TIMOTHY NOGUEIRA: No chemistry.

SISTER DALESSIO: No chemistry -- I promise you.

We only deal with at-risk students at Monmouth-Ocean Ed Services Commission. The one who broke my heart was about five years ago: A kid came bounding off the bus, and I said, "Whoa, who are you?" because he came right into my office. And he said, "Who are you?" And I said, "No, no, no -- I asked the question first; who are you?" And without batting an eyelash, that child said to me, "I'm one of the students that nobody else wants." Now if that didn't hit home. And we made the commitment that very child would be educated. So come see our at-risk programs -- they're all online now. We're also at Bound Brook High School running a program for them; we're at Passaic running a program for them. So we have a special dedication to those students.

And one final note before I hand it over to Tim. You talked about Mandarin Chinese? We had a woman walk in our door eight years

ago -- didn't speak a word of English; she only spoke Mandarin Chinese. She went through our ESL program, she went through our basic skills program, she graduated from our adult high school program, she went to Brookdale Community College, graduated; went to Rutgers on a full scholarship, graduated; went through their master's and doctorate programs. She's now our Mandarin Chinese teacher.

So success stories abound in the virtual world.

Tim?

MR. NOGUEIRA: Yes, thanks so much.

So many things you touched on today -- we're dying because we want to stand up and yell and say, "We know how to do that. We're doing this stuff." We've been doing it for about seven years. We were on the first task force -- and I can't remember the Governor, Sister -- we came here for about four days in a row and wrote a white paper for one of the governors.

SENATOR RICE: Seven years ago -- McGreevey.

ASSEMBLYWOMAN VOSS: That was McGreevey.

MR. NOGUEIRA: Oh, I'm not sure -- it might have been.

SENATOR RICE: Another problem.

MR. NOGUEIRA: It was about seven years ago. But we wrote the white paper, and it got up to the Governor's level, but there were never any funding ideas behind it. So the virtual school didn't go anyplace and the State was considering a State virtual school; they didn't do anything -- so we did. We created a virtual school. We do 3,500 students during the summer on recovery. I also work in the Monmouth County Jail where we teach GED online with a live teacher, but also online to the inmates.

ASSEMBLYWOMAN JASEY: I've written myself a question about that.

MR. NOGUEIRA: We have graduated-- In a year and a half, I think we're up to 56 men and women in the jail who have gotten their GED through us. In the previous five years, only one person had gotten their degree.

We are in the Youth Detention center before it was closed in Monmouth County, and we taught the kids there online.

And you talked before about some groups. Let me just talk about the most at-risk group. And I'm just going to a little plug. The most at-risk group are the kids who are out of school: the drop outs. Dr. Librera, the former Commissioner of Education and I -- who is now at Rutgers -- have created a New Jersey virtual charter school, which we have an application in for, to deal with drop outs. Camden, Paterson, Perth Amboy, Monmouth, Ocean, and Middlesex are the first places we want to try it; 150 students. We know it's going to work -- we've been doing this for seven years. We've done thousands and thousands of students. We've hooked up with seven community colleges. The kids are going to meet at the community college; get to use the community college lab in addition to the laptop we give them. That's the place they're going to meet. A resource officer and a high school guidance counselor is going to meet with them twice per week and try to keep them in their studies. And those are the kids we're going after first. They're already out. I know we have to stop the dropouts, but some of the problems in trying to stop it is getting some of those kids that have dropped out, and saving those kids.

I know the State department, one day, is going to come out with a new formula for drop outs, and I have to tell you: Our numbers are going to look worse. This will work. It does not work for every child; you do have to train the teaching staff; I have about 70 to 100 teachers throughout the State of New Jersey. Every teacher, as Sister said, is highly qualified and certified. We call the parent once per week. We take somebody from the district and put them on our site -- there's a website -- and they get to watch our teacher teach. And one thing that wasn't said today: A great thing about virtual -- every keystroke is recorded. Everything that the student does, everything the teacher does is recorded. We have never had, in seven years, a problem when some teacher said something inappropriate or some student did something inappropriate.

So there's a great many topics to talk about. I'm so happy that you're interested in this. We'd be happy to help you at any time or give you any information you need. I'm just going to tell you: we've been doing it for seven years. Thousands of students, middle school, high school, and adults, and we have some of the best material out there.

But the important fact that you mentioned before, Assemblywoman, is the teacher -- the most important thing. When I go into a district and somebody wants our services -- and I've been in Jersey City, and almost every district you can name in the state -- I go in and say to them, "Who are your best teachers? Who's the best teacher in your district who can work for me to teach your kids?" And that's who is online -- the best teachers. That's a wonderful example Sister gave about Latin, because I have had that same teacher teach Latin in Asbury Park and other districts where that teacher-- I don't know if you've heard of anyone

getting their Ph.D. in Latin -- I never had. That's a rare commodity, but here's a teacher that can get to many more kids than the kids who just live in their town -- and that's a wonderful attribute, too.

So I'll stop. But thank you so much for giving us a couple of minutes. We're really excited about what you're working on. Anything we can help with, we'd be happy to do with you.

ASSEMBLYWOMAN JASEY: Well, I want to thank you for coming, because I think we definitely have to have a follow-up meeting, Senator.

SENATOR RICE: Absolutely.

ASSEMBLYWOMAN JASEY: Melanie has your cards; we definitely need to look at your experience here. Our last trip to Ocean County was a great trip; we went to the vocational school. Yes, MATES. We were at MATES, and we had a great lunch there. (laughter)

We will definitely come and see what you're doing, because I think it will help all of us get a real picture and a hands-on experience with what we're talking about in terms of virtual learning.

So I thank you for coming, and because the hour is late, I'm going to adjourn this meeting. I want to thank all the legislators who made the time to come, because this is a subcommittee of the Committee.

And I want to thank those guests who are still in the audience: Jeanne Allen, and parent -- I don't know your name -- your daughter -- Susan Patrick. I want to thank you so much for coming. I think it was a very worthwhile afternoon and it certainly begins to answer a lot of the questions that we have going forward in terms of virtual and online learning here in New Jersey.

So thank you very much. And also to the Department representatives.

Meeting adjourned.

**(MEETING CONCLUDED)**