

The Complexity of Teaching and the Power of the Human Spirit
A Talk by Michelle Shearer, 2011 National Teacher of the Year



This talk was delivered at the National Blue Ribbon Schools Ceremony, November 2012, Washington, DC.
[56 minutes]

I was not encouraged to be a teacher.

I was the valedictorian of my high school class. I always *wanted* to be a teacher. My mother is a retired elementary school music teacher. There are other teachers in my family and I always thought that being a teacher would be a really awesome thing to be. I mean, I always admired my teachers in the public schools of Delaware and in general my desire to be a teacher was met with lukewarm enthusiasm.

Until I decided to enroll in Princeton University, and then the conversation completely changed because as we all know, those who can do and those who can, teach. My roommate said “Wait, so you came to Princeton and *all* you’re going to be is a teacher?” And people asked me how my parents felt about that, you know, spending all that money just to be a teacher in the end. And for a brief period of time I was drawn into that mentality and I thought “Oh well, I don’t know, everybody is telling me I shouldn’t be a teacher, and here I am at Princeton and well, I love science and I love people, so maybe I should be pre-med.”

And that career aspiration was very well received at Princeton, so I decided to be pre-med. And I embarked on that path. and I was enjoying it but I wasn’t *loving* it, and just a year or two into the program I decided that I really needed to do something for myself, so I sought out a volunteer experience. I went to a volunteer counselor and I saw lots of different projects. I saw Habitat for Humanity, I saw Prison Outreach, and then I saw a sign that said Marie Katzenbach School for the Deaf. And I saw that word “school” and it connected with my mom, with my teachers, with what I always wanted to be.

And I had never met a deaf person in my entire life. I didn’t know any sign language at the time, but I figured I could learn. And I found myself at this school every Tuesday, every Tuesday morning, and no sooner would I drive away from that school than all I could think about was when was it going to be Tuesday again. And I would plod along doing my pre-med studies and my research and every time it was Tuesday, I jumped up out of that bed and then they started to ask me if I could come on Thursday, I said “Sure, I can be there on Thursday too.” Well, how about Friday?

And then I was there on Tuesday and Thursday and Friday, and all of a sudden I realized that if that’s what was getting me out of bed in the morning, then I really had no business being a pre-med major, if there was where I needed to be. And I didn’t care what anybody thought about it.

Teaching is all I’ve ever wanted to do and ever since I made that decision, I never went back. I did journey from that particular classroom and you’re looking at ...you know we are all teachers and educators. We know that most of the time we are often working with less than what we would want to have and you can see in that particular lab we are

doing physics experiments and you can see the Hot Wheels cars set up on the counters, bringing the toys into the science, whatever we can do, whatever we can do to meet the students where we are. We know that that is what we all do every day.

So I found my way from that school to public schools and then I did have the chance to teach at the Maryland School for the Deaf, which is a truly unique environment because it draws students from all over our state. Maryland is a small state but it's also a very diverse state. We've got the mountains, we got the beaches, we've got the cities and everything in between. And, very interesting, even though I had taught for five years in the public school, and things were going well I wound up at this school and I had to rethink everything I had ever done because I was out, without the auditory mode.

And I remember getting up from my very first day of teaching at the Maryland School for the Deaf, after successfully teaching for five years in the public schools, I remember getting dressed and thinking, "I don't know if I can do this. I said I could do it. I believe in my heart I can do it but I don't have the auditory sense anymore, and I'm going to be teaching AP-Chemistry and advanced math." And I had to rethink everything in terms of the other four senses. And really in that environment and I often credit my students at the school for the deaf for teaching me so much of what I know about great teaching.

But let me show you the classroom that I left yesterday afternoon to journey here. This is where you will find me now at Urbana High School in Fredericktown, Maryland. This photograph was actually taken right before I journeyed off as National Teacher of the Year. And I carried this photo with me everywhere I went, everywhere I went, so that I would never forget, no matter what crowd I was in front of, whether I was speaking with policy people or people from the business community, so I would always remember and remind them what it's all about in education.

And I look at this picture and I see progress because I see roughly an equal mix of male and female students and this is AP Chemistry so that shows progress, because that is not the way it has always been. I know when I went through school I only ever had one female science teacher and that was in the 6th grade. So we *have* made progress on the gender gap. When I look at this picture and I see challenges because I see some diversity but not enough. Because the diversity of my own classroom does not reflect the diversity of my school's population. And that is a problem, and that is a problem and our work is not finished until it does. I see students in this picture who have 504 plans and IEPs, and there are still people who tell me that those students have no place in my class, that they shouldn't be there and the fact that they are there means that well maybe perhaps my expectations just aren't high enough. And then I look at the picture and I see at least one face that is missing and his face is missing because the photograph was taken at 2:00 in the afternoon when he was over at the career and technology center. People would say what would a student who is in the career tech program be doing in your AP Chemistry class? When really the question is why is there only one?

So many things that we can see just from one picture. But then on May 3, 2011 I found myself in a very unlikely place—standing with the other 55 state and territorial teachers of the year with the President on one side and the Secretary of Education on the other. And people look at this picture and they are like "wow, Michelle, that's just great, they finally got you out of that classroom, finally got you out of that classroom for a year!" And they would say "how does it feel to be a celebrity?" I'd say, "I'm not a celebrity, I'm a representative." And that is different. And they'd say "yes, yes, but you are an exception." I'm not an exception. There are *exceptional* teachers and leaders everywhere, in every school, in every district, in every county, in every state. And they're invisible. They are *invisible*, you don't even know they are there because great teachers and great leaders are content to go to those buildings every day and to pour our hearts and souls into the students, never seeking or expecting recognition for simply doing what we love to do and what we know is right to do. Not a celebrity. I'm a representative of all those invisible teachers.

But yes, it did take me out of my classroom and that was hard, because after 15 years of wearing those goggles and my black jeans with my sleeves rolled up, you know, here I was traveling for a year, away from my colleagues, away from my family and yes that was an amazing experience. But here is the thing, let me boil it down. Because there are a lot of issues and one of the things that I learned for sure in traveling which is what we all know is that we disagree about a lot of things. We disagree about a lot of things in this country, that is for sure. But, here is the truth: In all my travels, I never, ever heard anyone say that they didn't want anything but the *absolute best* teachers for their kids and the absolute best leaders in those buildings. I never heard anybody say, "Oh, you know, that's alright, we don't need great teachers, 'cause we've got this" or "no, it's ok, we'll take a bad principal, that's alright, 'cause we got this." Nobody ever says that. I don't care what walk of life, what political affiliation, I don't care where you are in the country, *everybody* wants the absolute best teachers for our children.

But then of course there is some discussion about what that means and I was asked on a trip to Spokane, Washington, I was asked once by a business community member. He said "you know what Michele, if you were going to start your own school, if you were going to build your own school, what would you want?" And as we all start thinking and dreaming, right, big smiles go on your face, wow, if I could get everything that I wanted. But you know when I was asked that question, I didn't think about the building itself, I didn't think about the technology, I didn't think about the curriculum. The very first thing I thought about was the people because if you don't have that, you don't much. You really don't have anything.

And if I could really hire my own people for my own school; let's talk about the teachers, the leaders, whatever. I would have three questions before I got to anything else. The first question would be this: *Do you love children?* I mean, plain and simple, do you love children? And of course by children, I mean children of all ages. And of course by *love*, I mean that unconditional type of love that unconditional type of love, knowing that our students will *not* meet our expectations just about every day. [laughter] They will talk while we are talking, they will text behind our backs. They have baggage. They come hungry. They are going through a lot of personal things in their own lives. They do *not* come as these 100% eager learners that everybody assumes they are. But we love them anyway, we love them anyway.

And my second question would be this, because if you don't love children there really is no point in being a teacher or leader in any school, in my mind. I don't care how much you know and I don't care what your qualifications are. My second question would be this: *What's your energy level?* [laughter] I mean, what is your energy level? And that's a *serious* question. I'm not sure I've ever been asked that question in any interview. What is your energy level and more importantly if you say, "oh yeah, I've got it. I can bring it. I'm a high energy person. I can light it up." Well that is great, because I've got a part b of this question and that's this: *Can you sustain it?* Because we all know it's easy to be fired up that first year of teaching. What about your fifth year? Your fifteenth year, your fortieth year?

You know, we all know that we come back in August energized, ready to take on the world. And what about January? [laughter] And what about May, testing season? Right, we all know we can go home for the weekend and pull ourselves together and then Monday morning rolls around. The question is, do we have the energy and can you sustain it. And that is what I tell myself every morning before I step into my classroom. No matter what is going on in my life. If I do not bring the energy, my kids will see it and they will know it and it will reflect back. I've always liked to tell myself that the classroom is my mirror, and my students will reflect back what they see from me. And if I come in in a bad mood, if I come back without the energy, that's what I'm going to get back. And that's on me.

Then I have a third question, those are some pretty big questions to get through. My third question before we get into anything else would be, *Will you embrace the complexity of education?* This is not an easy job. This is not easy work, to deliver content, and develop people and deal with social, behavioral, and psychological issues all day, every day, is not easy work. And I've heard so many people tell me, they are like "Well, yeah you know, teaching is

my backup plan.” Wow. Or they say “well, you know I’m going to teach for two years before I get my real job.” Well, see I think our students deserve better than that. Because we all know you can’t master the craft of teaching in two years. I know I’m on my sixteenth year and I don’t have it figured out. My husband has been teaching for over 30, he doesn’t have it figured out. We are always sharing ideas and improving always. This is a terribly complex business, but we embrace it.

And, you know, these three questions are really important to me and yes, of course we get into you know, what are your qualifications and this and that and strategies, but this comes first. And you know what, now that I am a parent all this is that much important to me. Who are those people in the building? This is my little girl, Carly, who yes, I left behind last year as I traveled for a year when she was six years old. Left her at home with my *husband* of the year. [laughter] Because I tell you, that was a lot to ask, that was a lot to ask. But this is my little girl Carly, actually at her preschool graduation, with the boy she says she is going to marry. [laughter] And you know some people look at that picture and they say, “That is so silly, are you serious? Like, preschool graduation, come on.” But is it really that silly? Knowing what we know about early childhood education, to put every single kid in that cap and gown and to hold that piece of paper. Not because the piece of paper has any inherent value, but so they do will believe that they could be, will be what we are calling how college and career ready. And of course I’m going to put that in quotes because that means different things to different people.

And again that is just kind of a let’s all sum it up in a sound bite, but you know when I think about my own child, when I think about my own little Carly. I know exactly what that means to be college and career ready, world ready, life ready, relationship ready. I know what I want for my own child and *we* know and *we know* it is our responsibility and our love and our passion to want the same thing for other people’s children that we want for our own. And I think so many of the discussions we have on education could be solved or refocused if we would just remember that simple fact. You know everything for your own child or your nephew or your neighbor or somebody close to you. And to want the same thing for somebody else’s child. Because it’s not just about my little girl Carly and people will ask me they’ll say “Are you sure that Carly is getting a science education, are you happy with what she is getting in the school?” You know what, Carly has got an AP Chemistry teacher for a mother. She’s got AP Physics teacher for a father. Both of her grandparents, retired elementary music school teachers, right, my sister is an English teacher; my cousin is an 8th grade language arts teacher. I’ve another cousin who is a 1st grade teacher. Carly is covered, right? [laughter] My little girl, whether she wants it or not is going to *marinate* in that environment.

When people ask me “well, you’re a high school AP Chemistry teacher, what do you even care about the education of young children?” You know I think about all these little faces. I think about *these* future scientists. It’s not just about *my* little girl having a chance to be a scientist. It’s about *every child* who is *programmed* to be a scientist. To have that opportunity if they want it. It’s not all about science. I’m not up here to just push STEM. Music was a huge part of my life, music and the arts, drama. What about that? What about our vocational students? And that is a very, very large segment of our school population. What about them?

And we know we look into these faces and every day we look at these kids and we see opportunity. We see opportunity, the opportunity not only to change individual lives but to advance society. Now that I’ve wound down my year as national teacher, people ask me all the time. They’re like “What are you going to do now?” Right? I mean that’s it, right? You got it out of your system, what are you going to do now? Certainly you have opportunities. If I had a dollar for every time I’ve heard that word since I’ve finished being National Teacher of the Year. Well, you have all these opportunities. You got opportunities now. As if I didn’t have them before. You’ve got opportunities now. And I know in their mind an opportunity might be something that puts me in a position that is oh, shall I say “cushier,” more prestigious perhaps, higher pay, whatever.

But see, I've always connected with the quote from Edison that "opportunity is missed by most people because it is dressed in overalls and it looks like work." [laughter, applause] And we know, we know every day that we walk through these buildings that we have work to do because the eyes are staring right back at us. It *is* work and it's hard work, it's wonderful work, it's invigorating work, it's draining work. It is work, no doubt about it. And that starts very early on and I know this. After many years of teaching high school chemistry, I've had the opportunity to watch education now from the ground up through my little girl and I have to admit that you know my little girl Carly when I sent her off to kindergarten she was into a lot of things, she really was but boy she was not that into reading. That is not good, right? That is not good. So I'm thinking man, what am I going to do about this. I had *read* books to Carly ever since she was born you know I'm sure we all know the book, *Chicka, Chicka, Boom, Boom*. You know that book, yeah, you read *Chicka, Chicka, Boom, Boom* over and over again.

So she goes to kindergarten and you know low and behold her first unit in kindergarten is about *Chicka, Chicka, Boom, Boom*. And Carly comes home from school, all of a sudden she is all fired up. She is fired up to read and write now. I can't tell you how many times hundreds of times I read this book to my child and she says "Yeah, but mom we're reading it and I go over to the listening center and I'm listening to it, and then we're about it and she said and then my teacher, Mrs. Macierowski, she took us outside and we actually held a coconut, and we broke it open on the sidewalk, and we smelled it and we tasted it, and then we did a survey about who liked it and who didn't and we collected the data. And I'm thinking *that* is the power of a teacher right there. That is the power of a teacher right there. I just need to benefit from it, society needs to benefit from it.

You know, I'm a scientist, I like to see the data. Well, last summer I came home from a trip to China when my little girl was not quite six years old and she had written this note on the counter it said "I mist you so much. I love you" and of course the little heart with the tail on the bottom. Now her teachers had always told me that detail in writing and detail in artwork would go hand in hand. And truthfully I never believed it, I just didn't. But I'm a scientist and I start to look at the data. This was my note in June, 2011. This was my note last October, couple months later. "I miss you when you are gone. I welcome you back home in Wolfsville." And I look at this particular note and I see the progress. Notice, she hasn't taken any kind of test. I see progress. I see capital letters, I see erasures. I see attention to spelling and there is still a heart but now it is wearing a dress [laughter] and that heart has high heels. And the detail in the writing and the artwork is increasing hand in hand and then I came back two months later to this particular note on the counter.

Right, we know what is happening in our schools. We *know* that you can't measure, that you can't bubble, you can't standardize every measure of growth in learning. It's right there, it's right there. [applause] And we know every day that we've got to bring that energy and be electric to make this happen. That's why we are dressing up, right? That's why in upper elementary school and middle schools, as long as we can we are dressing up. This is not me actually. I can't take credit for this. This is Cherly Conley from Florida who was Teacher of the Year from Florida the year that I was Teacher of the Year from Maryland. Great friend; and there she is with her upper elementary schools knowing that she has got to bring science to life so she is dressing up like Einstein, and then she is trading that wig for a hat and shades, and doing whatever she can to connect with her students, to bring them in, and get them to learn to write and to read and to express whatever they can.

You know so often with whatever we do, we confront the classroom with I wish I had this, I wish I had that. You know, I wish I had....but then we just do. We do without it. My cousin gave me this great example, she said you know if you want to get a great discussion going in your class, she said, "I just like to give my kids two cents." She's like, "Yeah, you know, I give everybody two pennies and have them come up to the room and everyone puts in their two cents." You know I tried it, it's such a simple thing, I mean it costs, it's cost neutral—you get the pennies back in the end. [laughter] I tried that in a class where I was trying to get a discussion going and I had AP students, I had Special Ed students and I had everything in between and I put that jar up front and all of a sudden the Special Ed students started to get up out of their chair because they had the same two cents as everybody else, that their ideas

were worth the same. And yeah, maybe they just said one sentence, or maybe they just paraphrased, but they were *involved*. It's those little things that we are trying to do all day, every day.

But see, I have it easy. Actually I have to admit because I teach everybody's favorite subject. [laughter] Yeah, I just walk in there and I put it on the board and they're all over it. No! No! I put this stuff on the board, my kids are running out of the room, because it's *hard*. And that's what people forget, those people who are not in the classroom, it's *hard* for that little first grader to understand why they have to put that capital at the beginning and the period at the end. It's *hard* for that middle school student to understand why they are taking that test if it doesn't apply to something real. It's *hard* for high school students to want to dog it out when it gets to this. And I got to remember that my people are just like your people. Kids are kids. It doesn't matter the age. My little girl wants to go outside and break open a coconut. My high school students want to get up out of their seats. They want to mess around, with household substances, they want to do labs. They want to be involved, right?

I mean, let's face it, a lot of my students come out of middle school and they've read Harry Potter and they've seen the movies, and then they get to my class and they make that connection. They're like "Hey, you know that fire that is in the movie, like that green flame, can we do that?" Yes, we can do that. We can set up those little green fluid networks and then they say I wonder why they made it green, I wonder why they didn't make it red. Can we make it red? Red is a little tricky but we can make it hot pink. We can make it hot pink and then they start to want to know *why*. And then maybe you can actually keep them in the room one more day to teach them something.

And you know they've read about history, and many of my students love history. They are history buffs but they want to experience it. So many of my students come into my room and they say you know we've read about the Hindenburg explosion. We've talked about it, we've researched it *but can we do that?* [laughter] Can we do this in your class? And again, I would be crazy to try not to connect with that, right? So yes, under a carefully controlled...with all attention paid to safety, experiment. We can, we can fill balloons up with hydrogen gas, and we can explode them, and they can get a sense for how powerful that moment in history really was. And then when they go back to their computer and they watch it play on the Internet it has that much more meaning. I've never met a student anywhere from any walk of life or background who does not want to shoot off an alcohol cannon. [laughter] I mean there are some things that are universally appealing, there are, I don't care who it is. Students come into my class every day. They want to know two things. The first thing they want to know is, "Are we going to burn something today?" And if I say "No, we are not going to burn something today," they say, "Well, are we going to blow something up?"

And then, you've got to find a way to rope them in, but we all know because there is the danger with those outside our profession...you guys are just entertainers, you're just trying to please the kids. You're just trying to do what they want. No, no. We know we've got to keep them in the room. We know we've got to rope them in. We know we have to give them a reason to want to learn any of this stuff but yes, ultimately the goal is that look on a student's face, that serious look: I am a scientist. I am chemist or better yet, and I love this picture of Rochelle. It's one of my favorite pictures ever because her written lab work is reflected in her goggles. That's what we are going for.

You know, I've spent a career watching the faces of my students, because I started in deaf education, and because I was so tuned in from an early age by how much *information* you can get just from a student's face. I watch my student's faces very carefully. This is one of my favorite places of all because this face can mean one or two things. This face can mean, "Wow, that was so cool. I love this class!" Or that face can mean. "Man, that was not supposed to happen. [laughter] And I hate this class." And this is most real for me and hardest to communicate to people—We know, we teachers, principals, educators, we know that every moment of every day, we are in danger of losing our kids. Whether it's the 4th grader who has just decided like, "I don't want to read any more." Or whether it's the 9th or 10th grader who is saying, "Maybe I'm done with school all together." But you know, when a student gets to that point in my class where they're on that boundary between fascination and frustration, or between excitement and

exasperation, in my AP Chemistry world when a student tips over the edge, that frustration shows up in physical form.

It's a white piece of paper with lines on it. It's called a drop slip. It's a drop slip. Because my class is not required. A drop slip, and once they've crossed that line they come walking down the hall and I can see it coming every year. The piece of paper is in one hand, and the book is in the other and they're coming to tell me all the reasons why they are going to drop my class. And you know as well as I know that in that moment, it doesn't matter that I have a degree in chemistry from Princeton University. It doesn't matter that I've been the National Teacher of the Year. It doesn't matter what technology I have, or don't have, or that I have a bag of tricks a mile deep. All that matters in that moment is if I have a *relationship* with that student and that relationship better run pretty deep, because they are going to give me about 60 seconds to talk them out of it and then they're gone. And in that moment where I am ready to have that conversation with that student, I hope that I have an *army* of people with me: parents, coaches, guidance counselors, administrators, neighbors, anyone, anyone who can help our kids stay on this path.

And let me tell you last year I spent a lot of time looking into a lot of other faces. I spent a lot of time looking into the faces of people who will ultimately employ our children, these children that we love so much, the people who will accept them into college and ultimately employ them. I spent a lot of time and these are just some photos from last year of roundtable discussions of you know, situations where I would be the only teacher in the room, whether there was a small group or large group at a convention, whatever and it would be my job to communicate on behalf of all of us what we are trying to do. And you know often in those moments, people will look at me as an AP Chemistry teacher and I actually had one gentleman say to me, he said "You know Michelle, I don't care if every single one of your students can get a 5 on the AP exam. I don't even care. I don't care if they can't also, A,B,C and X,Y,Z and then the conversation starts.

Because we all know that we are not just teaching our content, I mean for me its chemistry for you its history, for somebody else its art, whatever it is, we're not just responsible for teaching that content. We're not. Conversation started here. They say "Yes, yes, you need to teach your content and we understand that and that's important, and that's going to be tested and all that is important but at the same time you need to also be teaching what are called the 4 C's: Critical thinking, collaboration, creative problem solving, communication. This isn't really news to any of us. We know that. But once you start to open that can of worms, and people look at this diagram and they say well it's not that simple, and if we are going to stick with the letter C, what about competence? What about confidence? What about character? Because make sure you are teaching all that too.

And then we realize that when you step out of bounds with the letter C, that there's all these other things that can come into the conversation. This was on the cover of my *Science Teacher* magazine last fall. Yes, critical thinking, communication, problem solving still there, but information literacy, just being able to *process* vast amounts of information. Can students step up and give an oral presentation? What about all these behaviors we want them to have? Self-management, and a whole bunch of other things. Everybody is looking for the visual, the one picture that summarizes everything we're trying to teach our kids.

But you know when you really just get people talking around a round table, and you ask the question "What do you want us to teach our kids in our schools?" You really open it up, and people are just going to start spouting right, "well while you're at it in AP chemistry make sure you are teaching leadership, citizenship, integrity, competence, time management, self-direction, independence, creativity, ingenuity. And confidence, perseverance, adaptability, resilience, determination, discipline, positive thinking, collaborative spirit, and optimistic outlook, if you wouldn't mind. Because really so much of what I hear that people want our students to have, that we need to develop from a very young age, is that they want them to have that work ethic, that drive, that desire. And what was probably one of the most painful moments of my year within my own county I was told "Well you know what the problem is? The problem is that even with our top students – you know the ones who do take the tests very well, the ones who do

check off, you know often the problem is that they have the skill, but not the will.” That’s an exact quote. The aptitude but not the attitude. And that’s what they were saying, they were like “sure get your 5’s on your AP exam, but make sure you cover all that too.”

And by the way I was in Spokane, Washington where someone said “You know what, speaking as a scientist, you know what you really need to teach your students, they need the ability to see beyond themselves.” Well that’s a lot to teach. [laughter] Right I mean all that is a lot to teach. But I argue that we do it. That we do it. We do this every day. I don’t need to know you to know that you’re not going to drive back or fly back to your classroom and just start doling out content. I know this, you know this. I’m going to be back in my classroom early tomorrow morning trying to tackle all that stuff.

And so what I would ask in return when I think about these words “students need to see beyond,” well then, in education, we in our schools need to see beyond what can be seen. Because let me take you to my classroom again. If you come into see me teaching in my classroom, you are going to see everything that you want to see. Right? Bring in your checklist, you’re going to see everything you want to see. You’re going to see objectives on the board, you’re going to see kids engaged in active learning, you’re going to see that I am using appropriate wait time, you know—bring a stop watch you can clock it. [laughter] You’re going to see everything you want to see.

The checklist is just the surface. What you are *not* going to see is all that hard, interpersonal work. You’re not going to see me, probably, unless you stay long enough. or if you are there for every minute every day, you’re not going to see me sitting down with that student who’s struggling: “Mrs. Shearer I have a job I have a little brother to take...” you’re not going to hear me convince that student to keep going in AP Chem. You’re not going to be there when the student storms out of my room with tears in her eyes, because she can’t handle one more formula, and yet we’re going to bring it all together the next day, and it’s going to look great just the way you want it. You are not going to see all that under the surface, interpersonal human relationship work.

And I would say that all that all that invisible work, the intangibles, we have to find a way to capture it. We *have* to find a way to capture it. And as I have been drawn into this conversation about teacher evaluation, when I wrote my own National Teacher of the Year application, I was asked that question, “What would you consider to be the evidence of effective teaching?” Well, by the way it has to fit in two pages and all that. So at the time, I really struggled with that question. How am I going to answer this? So I decided, and I don’t have the time to get into the whole thing today, but I decided to write it as a multiple choice question, because we’re all in tune with that right?

And I started off on my National application, I asked this question: “Okay, which of the following *is* the best evidence of effective teaching?” And I started with examples from my own teaching. And the first one is the obvious, this is what people will first point out about my teaching. For example, from 2008 to 2010, Mrs. Shearer’s AP Chemistry students achieved AP exam passage rates of 91%, 91%, and 88%. And I put that up at a meeting of state legislatures in June, and there was an audible, “Well, that’s just great.” Is it? Because if we’re going based upon numbers, and I *am* a numbers person, I would want know a little bit more.

The first thing I would want to know is, how many students took the test? Right? Okay? Yes that’s with 100% of the students taking the test. “Oh that’s just great.” Well is it? Because what does 91% mean? Is that 10 out of 11 students? Or is that 91 out of 100 students? Does it matter? And if you look at the numbers 91, 91, 88, I mean, it’s good, but it’s not growth. So what does that mean? And you know, if we go back to this picture, it should be glaringly obvious, there is not a single African American male student in my class. So as we ooh and ah over the numbers, shouldn’t that matter? You can’t say the numbers are good, that’s just great. Not until we dig deeper, because when the numbers are good they still don’t tell the whole story.

So that was my first option. Then I went on in my multiple choice question to say this, well choice b) a female student of minority background who was hesitant to take AP Chemistry struggled to pass the course and earned a score of 2 on the exam—and for those of us who teach AP we know that 2 isn't considered to be a passing score. Okay, so based on that information, then she is a failure and so am I. [laughter] I guess we're done. But if you took the time to delve deeper into that young lady's story, you would find out that she learned from that experience. We developed a *relationship*. She overcame her math phobia. She went on to pass AP biology and AP Physics. She went on to pursue a STEM major in college, the first in her family to do so. And yeah, my class was a stepping stone. It was a stepping stone. But if you just look at what happened in my class, she fails – so do I. How do you evaluate that? You be very, very careful.

I don't have the time to go through the sequence of events, but how do you measure the fact that I have inspired students to go on to be a scientist? How do you measure that you inspired somebody to be an artist? How do you measure that *long* term effect of a teacher? How do you ever capture that in an evaluation? Does it matter that one of my classes at the Maryland School for the Deaf, who is considered below grade, these are HS students who are reading at a 4-6th grade level. Does it matter that they ran to class every day, would come out to get me in the hallway, where I was on hall duty, would come get me in the hallway and say, "we're ready. We are ready to start." Before the bell even rang. Does that matter? Does it matter that seniors who wanted to drop my class because it was too hard, stuck it out, because we all know there's this thing this affliction called senioritis. [laughter] It's very real to those of us who actually work in the schools. Does it matter, you say "Well, did they pass the test?" No, they didn't. They didn't, but they were marinating in an academic environment for the second half of the year instead of running around on the streets. We have got to dig deeper.

So as I am asked to help my students see beyond. I am asking others to see beyond just what they can *see* that we are doing in our classrooms. Because as we all know, there is so much more. Even as I have traveled, and people have asked and said, "Oh well, share a really great activity that you have done with your classroom." Often, you know, if you are asked to do you will share something often that perhaps didn't go the way you thought, and it wound up with some magical result. Right?

Yeah, I think I'm a pretty good teacher, some days, and I decided that at the end of the year I was going to close my year in AP chemistry with a Rube Goldberg project. It was going to be magical! Because it was going to cover all these things that everybody talks about, you know collaboration, communication, and all this, and it was going to be great. And for those of you who aren't familiar with Rube Goldberg, it's basically an engineering activity that brings in a lot of your artistic creative students. You know, you can go online and find little cartoons, you know, how to wash your dog, how to build a very simple alarm clock. Of course the idea of Rube Goldberg is to accomplish something simple though a very complicated engineering design. So of course in science we can extend that out the wazoo.

So I got my students together for this project, and I was like this is going to be great! Well, it fell flat! And this was not my first year of teaching, this was two years ago. It fell flat, because I did not account for human nature. And when I put my students in teams, and I said, "Okay, you need to build this machine, it's going to accomplish this task," they became *so* competitive. They became so competitive and so grade conscious that they started building underneath the lab desk. Right? They didn't want other students to see what they were doing—"Hey, that's my idea, you can't use that idea." You know how it is. So I was like, great. So here was supposed to be this great creative collaborative activity, and basically it just tanked. So I came back again and I said I've got to redo this.

And yes, our students are grade conscious, because unfortunately, we have programmed them to be so. So I said "Okay, new rules this year, everyone still in teams, your machine has to work, but nobody is going to get an A on the project unless *everybody's* machine works on the last day of school." Right. so I'm thinking I've got it now, right! [laughter] But they actually bought in, they bought in, because they worked on their own machine, and then

they would look across the room and say “Hey man, you shouldn’t be using the dental floss there, you should try this or try that,” oh “Here, why don’t you use this ramp?” And they really did, they really helped each other out.

But, then I came in the last day of school, and all my kids were in the middle of the room and they had their arms folded, and they were looking at me like this. On the day we were going to present the project, and I said what is going on? ‘Cause here I thought this was a glorious activity and I was actually really looking forward to it on the last day of school and one of the students stepped up and hit me with this question: “How many chances does each team get?” Right, because I had said that nobody was going to get an A unless everybody’s machine worked the last day of school. So they said, “How many chances do we get?” I had really not considered that question, because I was so wrapped up in the glorious nature of the collaboration and all that. [laughter] I said. “Well, I don’t know, I said it’s the last day of school, we’ve got 90 minutes, we got to set it up, we got to do it, we got to break it down,” I said “I don’t know, each team can have two chances. I thought that was fair.”

So they all get back in their group, and they’re collaborating and collaborating, and he steps forward again and he says this, he says, “But if our group’s machine works on the first try, we should be able to pass our second chance to another group, [Laughter] and then they would have three chances.” And they’re like “Yeah, yeah, yeah! And if that groups’ machine works then give it...” So like I’m just standing here like, what? And they just started to arrange themselves in order from strongest to weakest [Laughter] in an all-out effort to save the struggling group, to *see beyond themselves*.

I didn’t plan on it, it wasn’t in the lesson plan that you would have seen if you would have come into my room to check me off. It just happened. And so many of those great moments, they stem from the students, and then we as teachers and principals, we try to learn from it and we try to do something with it. This is the craft of teaching and education. Very difficult to summarize in a one page checklist.

You know, people ask me, what was the highlight of my year as a National Teacher of the Year, very difficult to describe, but there was another moment that was similar to this ,where everything that is good about teaching an education just kind of comes together. You start from what you are trying to do as a teacher but then it grows.

I actually found myself in Onagawa City, Japan, and from a distance it looks like an absolutely beautiful fishing community and of course it is but unfortunately this is one of the regions that was devastated by the tsunami. So when I got to Japan, this was my last stop, I was going there the very last thing. When I got to Japan the first day of my ten day trip they said you know. “You’re really great you’re going to the tsunami region, we would love to have you teach a class. Would you teach a class?” So right away I kick into, “What do we have, what do we need, what’s the curriculum objectives, blah, blah, blah,” and they’re like, “No. We just want to you to come and connect with our kids. What we’ve read about, your inspiration, your passion, we want you to bring that to our kids for just one hour.” I said “Well, what *do* you have? I’m still thinking like a science teacher, right, I want to do activities. They’re like, “We have nothing. We have nothing.” And there it was bare down to the bone, right, of what teaching is all about. And it was in that moment that I flashbaked to the New Jersey School for the Deaf, looking around that physics classroom, wishing that I had more stuff, and hauling out the Hot Wheels cars.

And I said to myself, “Am I a teacher or not?” And so we went to work. And for the whole week we said “Well, what can we get? Can we get some aluminum foil, can we get some scissors, can we get some rulers, can we get some trays?” I said, “Can you get me some *bubble gum*? If you can get me some bubble gum, we can do this cool activity where they can determine the percentage of sugar in a piece of bubble gum.” And they looked at me and said, “Well, I don’t know if we can get it.” They said. “Even if we could get it, I don’t think our kids would even know what to do with it.” And I said, “Well, let’s just do it anyway,” you know.

So here we are, eight or nine adults scraping together materials in the course of the week, for one lesson. And we went there and with our heart and soul delivered that lesson to these kids, and as you can see they [Laughter] yeah, they figured out what to do with the bubble gum. Because here is what's true, because people like to put me on the spot, in the sound bite: "What did you learn as National Teacher of the Year?" That kids are kids everywhere and that teachers are teachers everywhere. Our hearts are all the same. That is the truth. There was *never* a situation that I was in as National Teacher, whether I was in the states, in Texas, in New York, whether I was in Singapore, whether I was with the Bureau of Indian Education, this past summer, speaking with the teachers who educate our students on Native American reservations, the heart of a teacher is the same, and kids are the same. We're all connected by that work, that work that's dressed in overalls.

I have to tell you that I really enjoyed my conversations with international teachers because it does illuminate how similar we really are. I was having dinner with this young lady and this gentleman. The young lady had just finished her first year of teaching, which we all know can be just a little grueling. And I asked her I said, "Well, how would you describe it, what's it like to teach in China?" was kind of my question to her, "How would you describe teaching?" And she just looked at me, and she was searching for the right words, and finally she just settled on, "Tiring." [Laughter] And you laugh without an explanation because you know exactly why. It doesn't matter who I ever spoke to as a teacher crowd, in any state you put that word up, *tiring*, everybody laughs, everybody nods like, "Oh yeah, it's tiring, yeah." We all know it. It's the, the frustration is that other people don't. You know, teaching is a very misunderstood profession. Others don't understand, they say, "Why are you so tired? What, you work from 8 to 3, right? [laughter]

So I kind of took it upon myself last year as a teacher to try to *educate* others as to what it really means to be a teacher. Because again because everybody *had* a teacher, we assume we know what it is to be a teacher, right. And often I'll get. "Yeah, well, you know you're all just tired because you're all just buried in paperwork all the time." Well sure, yeah there is paperwork; there's paperwork in any job. That's not it. So I really tried to start to explain what we all do and I put up this particular cycle and I said "Well this is a teacher's daily, daily cycle. Yeah planning lessons, collecting materials, assessing work, analyzing data, making copies," of course, assuming the copier is actually working. [laughter] And that is enough to keep us busy 24 hours a day, 7 days a week and we know it. No sooner is it over it starts again. But see, for anybody who has ever just had a teacher, they know that's all that they see, but that's not it because now the graphic is going to stay the same, but the words will change.

We're also involving parents, attending meetings, and collaborating, and tutoring and I don't know about you, but for me that's a full time job after school, just tutoring afterschool help, we're coaching and advising, and doing things after school with elementary school students and middle school students who don't have sports programs, and all of this and that's enough to take 24 hours a day 7 days a week. Often uncompensated.

But that's not it. Because the words have changed again we're always having to keep up. It's never done. Latest technology, best practices, current research, policies and legislation, we got the Common Core standards now, we got the new generation of science standards, all the AP sciences are going through a redesign. Just keeping up is a 24-7 battle, again, often with no extra additional compensation. And then of course, you're in a leadership position, which so many teachers and leaders are. You're traveling you're speaking, you're setting up professional development, you're recruiting, you're mentoring new teachers, in general you're just trying to motivate others to stay with it. And that's enough to completely drain the life out of you, but you know that at the same time we are judged, we are accountable. And we are measured in every possible way, everything from test scores, to international ranking, to graduation rates, and college entrance exams. Not to mention the fact that we are responsible for building the pipeline in *every possible* profession.

And if that isn't enough, I was at an event with a gentleman who served with the initial NASA program, and he stood up and he said, "I don't see any vision for this country. If there's going to be any vision for this country it's

going to come from the schools, it's got to come from the teachers." I mean, put that on your to do list when you get back to school. [Laughter] I mean, tomorrow morning, I'm going to step out, do I have my copies and my tests stapled? Okay, do I have my lab hat? Now, a vision for the country. Let's work on this, right now! [laughter] And the thing is, that I appreciate the vote of confidence. I appreciate the vote of confidence. I really do. But I would also argue that the message to us, in all that complexity is, you know, "just make it happen. Make it happen." And we all know that we're all being asked to do more for less with less. "Just do it" is the message that we get from society. And again I would argue that we are doing it. We are doing it.

And you know, as I stood with the 55 state and territorial Teachers of the Year in a group, representing *every single* educator in this country, I thought to myself, "We *are* doing it." And people ask me to reflect on that day, and I think back to that speech, and there was one line in that speech that was kind of the anchor of the speech, even though it was kind of in the middle. Where I said this where I had my three minutes at the podium, I said this, I said, "There are millions of teachers in America and we could *all* be pursuing different careers. We choose to use our gifts and talents to benefit students in the classroom. It is a choice. We choose to take all this on. And then I went on to say, "Yeah we each have our little niche, but we're connected, early childhood, elementary, middle school, high school, across all subject areas, we're all connected.

And I went on to say that, collectively, if we could even try to sum it up in a nutshell, which we can't do, I said "We are. We are teaching critical thinking, creative problem solving, collaboration, communication, independent self-direction, adaptability, resilience, all these skills and habits of mind that enable our students to succeed not just in school, but in life." But you know and I know as complex as that business is, it still doesn't compare to who we have to be all day every day. When you go back to your school and I go back to my school tomorrow, this is what we are in the schools. This is what is so difficult to capture but yet it's what everybody wants. People don't just want a great teacher who delivers the content, we want our teachers to be passionate, and compassionate, and engaging and inspiring, and innovative, and thought-provoking, and energetic and humble and dynamic and loving, all day every day, in addition to everything else. That's what makes us who we are. And that's why no matter where I have traveled or what teacher group I have spoken to this is what connects all of us.

But I still have these difficult conversations where people say "Oh yeah, you know, you teachers, it all comes back to like warm and the fuzzy and the love, and oh my God." Look. People will tell me they say "You know Michelle, it's changing, all that love, all that human business, all that human factor it's out the window, 'cause we got technology now." Well' we've always had technology but we've got technology now. Our kids are different today, digital natives, not who you think they are. Well, I watch my little girl, she operates a computer better than I do, I understand that. I understand that students today grew up with tools that we don't have. And that's amazing, and I've seen technology do amazing things for students especially in special ed., but I tell you a computer cannot talk a student out of dropping a class. No piece of technology can inspire that little kindergartener to want to read, to want to read. I don't know of any gadget that can help convince a student to become the first in their family to go to college. And when you look at that *long* list of things everyone wants us to teach, I don't have the app for that. If you have an app for that, send it my way, I want it. There is no app for that. There *is* technology and there are teachers and there is a difference. There's a difference.

And I think one of my pet peeves as I've traveled is when I hear a teacher say, "I'm just a teacher." Really? I'm *just* a teacher? With everything that we have just gone through, with what a teacher is—and has to do, and has to be, I'm *just* a teacher? I would ask, I've asked every teacher I've spoken to, never ever say that phrase. Because it's just a simple change, a simple change: I *am* a teacher. I am a teacher. I *chose* to be a teacher. I choose *still* to be a teacher because I want that opportunity that's dressed in overalls and looks like work because I know what it's going to feel like at the end of my day to know that I have accomplished something. I *am* a teacher.

And again people still ask me, “Why do you do it, why don’t you move on?” You know, I learned a long time ago, in closing—my final slide—I learned a long time ago that I would need a reason every day to want to step back in that classroom, because it is hard work. It is hard work. And I think it gets harder with each passing year, especially with the conversations that go on around us in education. And I decided a long time ago I was going to need something to *remember* what made me jump out of bed those Tuesday mornings and go to the New Jersey School for the Deaf. And it was the students. It’s always about the students. And so I decided a long time ago never to use my bulletin boards for calendars or postings or messages, I just cover my bulletin boards with the faces of students.

And yeah, for the days that it is hard to get up at 5:00 am or it’s raining or cold or you’re tired or whatever is going on in your life, I go in my classroom and I see their faces. I *see* students from the Maryland School for the Deaf who won their National Academic Gold Championship. I see students who have gone on to be teachers. I see students who have gone on to be scientists. I see students who have given their lives for our country. And I remember why I am there. And I *know* at the end of the day, at the end of my career, I *know* that what I do makes a difference. I also know that people get tired of hearing that phrase. It sounds like such a bumper sticker, “Teachers make a difference.” [Laughter] Well, how about this: Teachers change lives. *Teachers change lives*. And it’s a great honor to change a life, even one. And as teachers and principals in your schools across the country, I *know* you are changing many. Thank you so much. [applause]