

Transcript of Speaker

I. History of Education

B. The Education Evolution

The First 100 Years

Tom Jandris:

I want to talk to you about history for a couple of minutes, because if you don't know why you're at where you're at, you don't know where you're at. Bad English, good point. If you don't understand why you're here, you don't have a full understanding of what you can do about it.

So, the first thing we're going to focus on for a while this morning is an historical perspective on the evolution of America's education. Now, why? You say, I learned that in undergraduate school. Maybe you did. How many of you took a course on the history of public education? Anybody? Raise your hands high.

This is a different history we're going to do today. What a surprise; right? This is sort of the real history as opposed to the revisionist history that we learn in most of our colleges of education these days. By the way, almost everything we learn in our colleges of education today is revisionist in some way. Why? Because they're intended to support the existing system. There's such a heavy investment in the existing paradigm that, in fact, there is too great a risk for them to be able to step outside the box.

And, so, this is an outside-of-the-box history of American public education. If you're taking notes, that's what I'd like you to call it. It's an outside-of-the-box history of American public education.

What was and when was the Boston School? You don't have to get it exactly; it doesn't matter. I'm an English teacher. But what was it and when was it? Who knows? How many of you took history of education? The Boston School was the first publicly supported school in America; the first publicly supported school in America. When? At the beginning of the 19th Century. About when? Some people argue about the exact

date, year, time, about 1802, 1803, right around there. We still had single digits, early part of the 19th Century.

It doesn't matter whether you remember the Boston School or the date, quite frankly. What is important is you remember this. What was the mission of public education in America for its first 100 years? What was the mission of public—not exactly 100; don't hold me to that; you know, it's around there; multiple decades. What was the mission of American public education? It will be—do we have any former history teachers here?

Participant:

To provide a free and appropriate education.

Tom Jandris:

To provide a free and appropriate education. Certainly, to provide a free education. I don't think they had the word appropriate yet. But I think that came later on. In fact, we still don't have it; do we? That word just drives me nuts. Have you ever looked at the states' definitions of appropriate? They are horrific. They will scare you to death.

It wasn't until later in my career I had a chance to work for almost a decade at the policy level of the U.S. and at state level policy. And I've got to tell you, education policy is horrific. It will scare you to death. If you start looking at appropriate, if you start looking at equal, if you start looking at adequate—those are the words in the policy—it will scare you to death.

Free, yes. One of the conditions was that it was going to be free. What does that mean? Publicly supported. Absolutely. What else about the mission besides being publicly supported? What was it attempting to achieve?

Participant:

Everyone will be educated.

Tom Jandris:

Everyone be educated to what?

Participant:

To be able to participate in a democracy.

Tom Jandris:

To be able to participate in a democracy. That was the mission of public education. The founders of the Boston School said we have to have a literate voter in order to effectively participate in a democracy. It wasn't about equal, by the way. Equal wasn't in there. And it wasn't about standards, and it wasn't—it was. We want to create an educated voter. They knew it was essential for there to be an engaged and informed dialog if the process, the very young process they had invented at that time. Remember, who was in office at this time? Jefferson and his colleagues; right? They were very concerned about how this process was going to get supported, and they recognized it as a priority.

What was the fastest way of travel in 1805 in this country? Think about it. It's mind boggling. Why is it important to know what the fastest way of travel was? Because that's how you communicated; right? You can't communicate—in those days you couldn't communicate faster than you could travel. Think about that. Now we can. Huge change.

In those days, you couldn't communicate faster than you could travel, and, so, what was the fastest mode of travel in those days? At distance; at distance? Riverboat travel was the fastest mode of travel in those days. And they recognized that unless you could communicate with a widely dispersed population—at that time, of course, it was just mostly the East Coast. The furthest west that there was any population was like Tennessee. But they recognized that it was a diffuse and diverse population that they were going to try to have to reach.

And how were they going to be able to reach them? Through the written word. They needed an educated, literate, reading public in order to be able to do it. That was the motivation. It had to be free. Why? Because we couldn't guarantee everybody would be involved if it weren't free. Do you see the corrected use of the conditional voice there? And then, secondly, it was important that everybody be able to read.

The Industrial Revolution

Tom Jandris:

And, actually, for the first almost hundred years of our institution, that remained the primary mission of public education. When did it start to change?

Participant:

The Industrial Revolution.

Tom Jandris:

Who's the genius at this table that said that? The Industrial Revolution. It started in Europe in the earlier half of the 19th Century; some people would say even back into the 17th or 18th Century. But the real wave of the Industrial Revolution started in this country on the East Coast in the textile industry and then continued to expand beyond that until we started railroading and mining and some other kinds of things later on. But the Industrial Revolution started it.

Now, what was it about the Industrial Revolution that began the evolution of change in the mission of our business? This is important stuff, people, because it's why we're sitting here today. How many of you went to a land grant college for your teacher training? I did. Eastern Illinois University, a tiny little school down in—and it was a land grant college. And almost every land grant college had a library—if it hasn't been torn down yet—had a library that had as one of the symbols in the concrete outside the library a torch, and it was supposed to be the torch of knowledge or the beacon of knowledge or some such stuff.

How many of you think that education leads society? Does anybody in this room think that education leads society? What we need on the portals of our libraries are mirrors, because the truth is that education is a mirror of where society has led it. We don't do much leading of society; we reflect our society.

And we, in the middle of the 19th Century, were reflecting this new thing called the Industrial Revolution. And what did the Industrial Revolution need? Workers. And where did they get workers? Where did the workers in the latter half of the 19th Century

come from? For those of you who are purists, from where did the workers of the 19th Century come?

Participant:

Off the farms.

Tom Jandris:

Some off the farm. But where did most of them come from? They were immigrants. They came from Ireland; they came from China; they came from Germany; they came from all over the place. And why did that require a shift in the mission of American public education? What did we have to do to those immigrants to get them to be productive workers in a society driven by the Industrial Revolution?

Participant:

Speak English.

Tom Jandris:

They had to learn how to speak English, because none of the barons, the industrial barons, were willing to learn—we didn't have ESL requirements in those days. We had to make them all into—I mean—We have somebody here from Canada today; don't we? Who's from Canada? Anybody else from Canada?

I used to have an office in Toronto, and I loved working in Canada, because my Canadian colleagues would always say to me, You guys down below the border always are fond of calling yourselves a melting pot. To us in Canada, that's a sickening notion. What we are is a mosaic. That's really interesting; isn't it? And I really like it, by the way.

The melting pot notion of the United States did not happen—it's not anywhere in the Constitution, folks. It may come as a surprise to you. It's not in the Declaration. There's nothing that says, you know, we're founding this institution in order to be a melting pot. The notion of the melting pot came into our vernacular during the latter half of the 18th Century, which was that we had to create all of these little worker bees who were identical; who could read the same, work the same, do the same stuff. Let's melt

them all—what is the notion of melting? Think of it. What is the notion of melting? I mean, I’m not a chemist, but come on.

It’s taking a bunch of diverse ingredients and making something that homogenized. Any of you been to Europe lately? It just makes me sick. I was in Provence last year taking a cooking class. And it just makes me sick that even in Central Europe these days everything is homogenized, Anglicized and Americanized. It’s like, oh, I was in Florence, and there was—not only was there a Starbucks and McDonalds there, but there was a Gap—in Florence. Give me a break. It’s horrible.

The notion of homogenization—I mean, one of the reasons why I like to buy almost all of my cheese from England is because it doesn’t have to be homogenized. The notion of homogenization is just a disgusting notion, when you think about it, in terms of the social milieu of our country. We don’t need people to be the same anymore. They did then. And the mission of American education became, as it reflected society’s needs, the homogenization of its citizens. This is the second important bell weather shift in our business.

By the way, we still have a bunch of schools and, unfortunately, a bunch of principals who believe that homogenization is their highest and best use. You know who I’m talking about; don’t you?

The last school of which I was a principal had 62 hundred kids in it. And my board wanted absolute standardization, centralization and control in that school district; in that school. They believed that there was no other way to “keep the lid on that pot” than to homogenize those kids. Pretty good extended metaphor; huh? And that was, you know, that was 15 years ago.

“Model T” Students

Tom Jandris:

What other kinds of institutions occurred to support this notion of homogenizing society at that point? Now we’re almost at the point where we’re changing into the new century, into the 20th Century.

Let me ask you a question. What happened in 1903? Do any of you know? A couple of very important things. One of them is really interesting to me.

Participant:

Flight.

Tom Jandris:

Flight somebody said. Was that the year? We just, yeah, we just celebrated the centennial; didn't we? Yeah. I didn't think about that, but yeah, flight. That's a biggie. What else happened?

Henry Ford designed and installed his first assembly line. 1903. As you know, Henry Ford didn't invent the automobile, contrary to popular belief; but he did invent the assembly line as we know it today. 1903. Let me ask you historians or those of you who are interested in this topic, What did an assembly line look like in those days? How did it work? How did it function? Do you know? Any thoughts? Yeah.

Participant:

It was labor intensive.

Tom Jandris:

It was hot. The gentleman over here said it was very labor intensive; it was. A lot of manpower. What kinds of jobs were those people doing?

Participant:

Rigorous, hands-on.

Tom Jandris:

Rigorous, physical, hands-on, highly similar kinds of work. The only way your work differed from the worker next to you is that you had a different size bolt.

How was a product put together on the assembly line? Do you know?

Participant:

Step-by-step.

Tom Jandris:

Step-by-step in a piecemeal fashion. And how did the pieces move from one step to another? Actually, it wasn't really a conveyor belt in those days because they didn't

have the machinery to move the conveyor along. It was a system of rollers, sort of the precursor to a conveyor belt. And the automobile, you know, frame, chassis, et cetera, moved along this system of rollers. And it got to your point, and you were given so much time to put your bolt on. You put your bolt on, and what happened? When the amount of time that you were allocated to put your bolt on had passed, a bell rang to warn you to step back so that the product could move to the next slot.

Do you know the second thing that happened in 1903? For the first time in history, as near as we can tell in American public education, in New York City at a very large high school training these workers for the Industrial Revolution, a bell rang for kids to change classes. Do you think that was by accident? I guarantee you it was not by accident. It was a way to move those kids along the assembly line in that school in New York City, the purpose of which was to produce a Model T.

What was the condition of the Model T all the way until the mid-30s, by the way? Were there a lot of options available on the Model T? Were there any options available on the Model T? What color was the Model T?

Participant:s

Black.

Tom Jandris:

Black. What did it look like? It looked a box. What else did it look like? Could you get whitewalls? Could you get automatic or shift? Could you get air conditioning? Could you get a AM/FM radio? Could you get satellite receivers? Every single one of them was identical. That was not by accident.

It was the cheapest way to mass produce a homogenized product, and that was what we in education reflected for nearly the next half century. It was why we could have classrooms with 60 kids in them during the '30s and '40s, and if you were in a Catholic school, all the way through the '60s, because it didn't matter how many you put in as long as you could have a reasonable crack at making them the same, homogenizing them for utility in an industrial society.

What were the hallmark principles of the Industrial Revolution? Are you familiar with the word epistemology? Do you know that word? It's a great word. The word epistemology means highest value. What is the epistemology of society? The Industrial Revolution had its own epistemology; and the epistemology of the Industrial Revolution were three hallmarks. Do you know what they were? I've already said all of the words—standardization, centralization and control. Why? Because that's what you needed in the assembly line—you needed standardization, centralization and control. And, in fact, all of our great corporations during that period, some of which still exist, were built on the principles of standardization, centralization and control.

Standardization, Centralization and Control

Tom Jandris:

Have any of you ever been to AT&T's headquarters in New York. If you ever get a chance to go to New York, I want you to go to AT&T headquarters in New York. At one time until just the last 20 years or so, 25 years maybe, AT&T was the largest corporation in the world until it was divested. This is arguably one of the success stories of the Industrial Revolution; right?

If you go to AT&T headquarters in New York, engraved in granite, no less—What do you call those things over a doorway? A lintel? Is that right? Engraved in the lintel over the doorway in granite at the AT&T building is the mission of AT&T. From when, by the way? 1903. That's when it was engraved. It was that bell weather year. It's very interesting. Do you know what it was? Do you know what the mission is? You can go read it—To put a black box in every kitchen in America. That was the mission of AT&T engraved in granite from the first part of the century. To homogenize the product, to mass produce it in an environment of standardization, centralization and control.

And that was what education did in its mirroring of society, because we had such an enormous economic demand for a homogenized labor force that could all speak English and all put bolts and nuts in the right place, at the right time, and get away from the assembly line before they got injured as the product moved to the next step in the assembly line.

By the way, when did quality control occur in the manufacturing of that stuff during the—these are important questions for educators, by the way. Do you know what quality control is? It's where you check to see whether or not the product works right. When did quality control occur, do you know, during the first half of this century? At the end of production.

My dad was a quality control engineer for Inland Steel. He spent 47 years with Inland Steel. By the way, it explains my behavior. I was the son of a German quality control engineer. Think of that. You talk about a difficult childhood.

At the end of production is when the quality control engineers came and tested the products. And that was the science for almost 50 years in this nation.

Is this stuff sounding familiar?

When did the third wave—with apologies to Elvin Tofler—occur in the change, the modification of our mission in this country as educators? Actually, there were two things that occurred. Sputnik is one of them. What did Sputnik do?

Participant:

Global competition.

Tom Jandris:

Global competition for what? Scientific leadership. And, in fact, the nation awoke one day—not quite that suddenly, but almost one day—and said, Oh, my, God, we don't have any engineers. We've got a whole bunch of manual workers working in manufacturing plants, all nicely homogenized; but we don't have a whole bunch of R & D going on here – at least not R & D that's going to allow us to keep pace. Keep pace with whom? Our biggest perceived threat in the late '40s and early '50s and throughout the '50s and '60s was? The Soviet Union.

Speaking of the Soviet Union, this sort of reminds me. Do you know, my story today might seem like—well, I'll give you sort of a metaphor. Why are fire engines red? Somebody said because they can easily be seen. That's sort of common folk wisdom; because they can easily be seen. Would you like to know really why fire engines are red?

Fire engines are red because, in fact, there are 12 inches in a ruler, and 6 times 2 is 12. Right? Most rulers are 12 inches. And Queen Elizabeth was a ruler; right? But Queen Elizabeth is also an ocean liner. And, of course, ocean liners are in the ocean, and there are lobsters in the ocean. And lobsters are always red. And in those days, Russians used to be red; and since fire engines were always rushing, they too had to be red. It's not bad, is it? For those of you who are believers in the chaos theory, that makes sense.

The Truth of Why we are Here

Tom Jandris:

My comments to you today are a little bit like that. If you can't begin seeing the connectivity among these superficially disparate entities, you're in trouble these days; because we are influenced today in the jobs we do by all of these disparate entities about which we have very little knowledge and less familiarity; and unless we get that knowledge and familiarity, we will lose control of the important job we have to do.

Every day when you walk into your office and sit down at your desk, if you don't understand the truth of why you're there, you're in trouble. And I'm talking to you about the truth of why we are here. And I'm talking to you about the truth of why we got this goofy thing called NCLB. And I'm talking to you about the truth about why we need to change what we do as opposed to just reacting like we're "Stepford Wives" as we walk into our offices every day.

And, so, we're now in the 1950s, and we've got Sputnik, and we've got the Red scare, which is how I got distracted and told you my fun joke. But, in fact, there was another thing that occurred besides the fact that we needed to change the mission of the institutions to mirror society. Yes.

Participant:

Special ed.

Tom Jandris:

Special ed; not quite yet. But we're going to get there in a few minutes. Thanks. Keep that in your mind. Yes.

Participant:

Unionization.

Tom Jandris:

Actually, unionization came very early. As a matter of fact, the first unions were developed on the back of the Industrial Revolution in the 19th Century, and certainly played an important role. We should talk about that when we get a chance. It's a good suggestion. But unionism did not change by—by the way, unionism is about homogenization. Unionism is about—it's just another version of standardization, centralization and control. It is about collective self-interest; collective self-interest, not individualization. And that's why unionism paralleled the Industrial Revolution so nicely and why my belief is—and you may not quote me—that, in fact, unions have long since outlived their usefulness. But the reality is—and the cameras just all picked that up.

But let me tell you the other thing that happened in the '50s besides the Sputnik thing. The reality is that something very important in 1953 occurred, and I already mentioned the company in which it happened. What did I tell you was the company that was the largest corporation in America in 1953?

Participant:s

AT&T.

Tom Jandris:

AT&T. Two things happened. There's something interesting if you're a symbologist—is that a word? It is now. If you're a symbologist, there's something weird these three – 1903, 1953, 1973—we're going to get to that in a minute. But in 1953, two very important things.

First, of all, President Eisenhower signed the first ever Federal Transportation Bill allocating federal resources of the development of American highways—a hugely important thing. It changed life in America forever. On the back of the Industrial Revolution that provided the automobile, and for us to be able to use the highways. If you don't think that's important, think about my grandfather. My dad was a German immigrant who came over in a boat in 1917 when he was 16 years old. That was my dad. He met my mom. He was a German speaker. He met my mom, Irish Scotch, on the boat.

They were both 16 years old; they couldn't speak to each other, but they got married 4 weeks later when they got to the United States. They stayed married for 56 years. It's a great story.

My dad then brought his parents, cousins, aunts, uncles, nieces, nephews over to this country. It's a typical sort of immigration story in the United States. My grandfather died when he was 93 years old, and after the time he came to the United States in the early 1940s from—it's a circuitous route, but from Germany, Austria essentially. From the time he arrived here—let's call it 1940—he never set foot out of Cook County until the day he died—Cook County, Illinois. Never set foot out of Cook County. Think of that. He didn't go to Des Plaines, didn't go to Witt, which was just 30 miles away. He never set foot out of Cook County.

My father never set foot out of the continental United States. By the time my oldest son, who is now 33 years old, was 4 years old, he had lived on 3 continents in 11 countries.

You don't think this thing that Eisenhower did in 1953, and that all of the emergent expansions through the space industry and space race didn't have an incredible influence on our experience in this society and in education. 1953 was a hugely important year because it launched, it launched mass ability to travel.

That's less important than the other thing that happened in 1953. What was the biggest corporation in 1953?

Participant:s

AT&T.

Tom Jandris:

And what was the mission of AT&T.

Participant:s

A black box in every kitchen in America.

Tom Jandris:

This is the XQ3R method; right? We're reviewing now. Okay. Ron and I talked about that at breakfast. Okay.

A Change in Mission: Civil Rights

Tom Jandris:

The other thing that happened was that AT&T, some engineers sitting in a back room in White Plains, New York, drew on a drafting board the design for—nope, not computers.

The Princess telephone. 1953. Sitting in the backroom in White Plains, New York, engineers drew the Princess telephone. You say, Jandris, are you nuts? Well, the answer is yes; but tough, I've got the microphone. They drew the Princess telephone. And why is that important in this litany that we're talking about today? It's important because, in fact, it wasn't a black box; number one. What else was important about it? It didn't go in the kitchen. It was designed for a bedroom. The most important thing about it was, was it was designed to be purchased by—

Participant:s

Women.

Tom Jandris:

Women. Big deal. Huge deal. The largest corporation in the world, contrary to their mission—in granite—contrary to their mission designed a phone that was a different color, a different shape, to go in a different room and; most importantly, it was designed to appeal to women.

What does that mean? We're going to get to that in a little while. It set the stage for the fourth phase of American public education, fifth maybe. But now we're still in the third phase. The third phase is the Sputnik thing, and we're furiously in the '50s and '60s trying to do what? Educate scientists, mathematicians. The entire focus is on science.

By the way, about whom do we forget when we're producing all these scientists? Women, the underserved, the disadvantaged and handicapped, the illiterate. Urban America mostly, and rural America secondarily. And a great deal of the emphasis is put on the gifted and talented, Anglo-Saxon, protestant male in America—what a surprise—in public education.

This is the shortest, one of the shortest periods in education history because it didn't last very long because what happened? Within a decade now, not 50 years. It's interesting – a hundred years, 50 years, now we're going to 10 years. What happened? This is some of our era right now – me, Kathy.

Participant:

The assassination of President Kennedy.

Tom Jandris:

What else besides Kennedy, besides Kennedy being shot?

Participant:

John Glenn's space shot.

Tom Jandris:

John Glenn's space shot. What else happened?

Participant:

Civil Rights movement.

Tom Jandris:

Who said it over here? Speak loudly.

Participant:

Civil Rights.

Tom Jandris:

Why did Civil Rights occur in 10 years? Because the insidious nature of this emphasis on White Anglo-Saxon, gifted and talented males became obvious that a whole bunch of folks were being left behind, even to the idiot policymakers.

And the whole mission of public education began to change again now yet for another time, and the mission of public education became, what? Focused on Civil Rights. Now, do we do it well? When did that start, by the way? 1954. What happened? Brown v. Board of Education, Topeka, Kansas. Right. That's when it sort of started, but it crept very slowly for almost a decade until all of a sudden we have Vietnam, we have Martin Luther King, we have Lyndon Johnson, we have a whole bunch of stuff occurring simultaneously—Civil Rights legislation—until finally in our business.

Education is almost always 20 or 30 years behind business and industry in terms of our evolutions, by the way. That's a good estimate; almost always 20, 30 years behind the evolution of the mission of the private sector.

Until this notion on Civil Rights really peaks when? In the early 1970s. What happened in the early 1970s? In particular, 1970, '71, '72 and '73. What things happened then?

Participant:

Equal Rights Amendment.

Tom Jandris:

ERA. Title 9. What else? 94142. Are you with me? What's all that stuff about? Civil Rights. It's about Civil Rights. It's about equal opportunity for women, equal opportunity for disadvantaged and handicapped. ESL programs got launched in the early part of the '70s for the first time in this country. The mission of the institution shifted yet again, and the mission of the institution actually then started mirroring something else, which was not only Civil Rights.

By the way, from a Civil Rights point of view, were any of those things successful? Marginally, maybe. Marginally, maybe. But what really do they reflect? AT&T 1953. What they reflect. . . Why did Congress respond to the special ed lobby, which was the first? Why did Congress respond to WHO? Why did Congress—that wasn't bad English, that was an organization, W-H-O. Why did Congress respond? Political pressure.

Political pressure for what? For Civil Rights? Sort of. That was the veil anyway. You open that veil, and what's underneath it? The pressure imposed by self-interest groups, collectives of self-interests, sort of specialized kinds of unions, unions in support of—1953—the New Age, thank you Elvin Tofler—which is society focused on niche marketing. Think of this for a second. Just sit back and listen. I know that that's industrial business language applied to education, but remember now, I've built, I think, a pretty compelling case for how education mirrors society.

A New Focus: Individual Rights

Tom Jandris:

The mission of education slowly and subtly changed from an emphasis on Civil Rights to an evolved emphasis on individual rights. That's the ultimate Civil Right; isn't it? Right? And why are we interested in this notion of individual rights? Because we're good guys, and because we're a God-fearing, blessed country? Well, we are all of that stuff.

But the reality is it's because that's where the political power and money is. Political power and money is in niche marketing, friends. And, oh, by the way, we need to supply a workforce for those companies who need people who can build corporations around the notion of niche marketing. They have the ability to individualize a product.

Look at the way people are dressed in this room. If we had done a workshop like this 20 years ago, this room would have been homogenized to the nth degree. And I'm thrilled that now we got people dressed like me, we got people in jeans, we got people in T-shirts. You know, as long as it's appropriate, that's wonderful because it's all about the expression of individualism; isn't it?

The driving force in American public education for the last 20 years has been niche marketing, friends. It has been sort of our need to appeal to individuals. Do you get, as a building principal now, most of your pressure from organizations or from parents, individual parents?

When I got my first principalship in 1979, I was the youngest high school principal in Illinois. And I was too young to have a high school principalship, but I got it anyway. I got most of my pressure from groups, even in 1979. Who was the group? The chamber of commerce, the PTO, the booster club, the blah, blah, blah, blah, blah. Right? I got a lot of pressure from those folks. I didn't get many parents squeaking at me at all as individuals in those days; not very much at all. It was amazing. You know, that was in an era when there was sort of this relationship between a building principal and even a teacher and a parent that really supported in loco parentis. My problem as a building

principal was with groups. Now, most of your challenges come from individual parents. It is the evolution of this notion of niche marketing.

What is the purpose of niche marketing? Let me say one other thing, and then we're going to take a break for a few minutes, and we're going to make the bridge of this history lesson to NCLB. Think about the challenge I have in doing that.

Here's the issue. Unless we find the ability as educators to engage in niche marketing, we will not be able to meet Steve Ballmer's requirements of us. And if you don't think that it's important for us to meet Steve Ballmer's requirements, you're deluded because, in fact, our job is to effectively mirror the epistemology of the society in which we labor. We can work to change it; we should work to change it, but if we're not mirroring it, we're not going to be in business for very long.

Mass Customization

I want to tell you one other quick story. And some of you know if you read anything my bio that I was very privileged to be appointed as one of the first members of the Points of Light Foundation when President Bush took office in 1989. And that was a thrill. But part of the responsibility of being in the Points of Light Foundation was that we were supposed to go around on behalf, sort of as ambassadors to the administration and help.

One of the ways I was asked to help in those days was that because I had not only been an educator but an entrepreneur, I was asked to go to work for the State Department on a volunteer basis and go to Third World Countries—now we call them Emerging Countries, because Third World is considered politically incorrect; in those days, we called them Third World Countries—and help local people establish small businesses for economic development. It was kind of a cool assignment.

One of the places that I got sent was to Peking, China—now called Beijing, another evolution. And I was sent with a group of people to do microenterprise development in this Third World Country as Beijing was emerging out of the dark ages. The guy who headed up the committee I was working on for the State Department was Peter Drucker. And I'm thrilled to say Doctor Drucker is still alive, and for some bizarre

reason, he took a liking to me and sort of adopted me as his kid. And every year for a week I'd get to walk the hills of Estes Park, Colorado, where he's got his summer home and spend it literally walking the woods with Doctor Drucker. I mean, what a thrill. I'd just shut up—if you can believe that—and tape record for an entire week. It was an amazing opportunity.

This was my first experience with Doctor Drucker, and it was very exciting, because we were observing the construction of a Panasonic bicycle plant in Peking that had just opened up. And the general manager of the bicycle plant was excited about this new project because it was the largest factory at that time built in Peking. And he gave us this entire sort of description of what was going on at the plant. And I was the only one in the group besides our interpreter who spoke any Chinese, so I had the opportunity to sort of interpret what the interpreter said.

And one of the things that the general manager was so excited about was that this bicycle plant had three assembly lines, each of which, if you strung them end to end, was over a mile long. So, producing bicycles, three lines, a mile long each. And each of those assembly lines was able to crank out between five and eight bicycles per minute. And this guy was very excited about the robotics that it took to do that; you know, the labor ratios were very low; he was very excited about it.

But in those days I was—if you can believe this—even more cocky than I am now. And I took Doctor Drucker aside for just a minute and wanted to sort of impress this guy. For those of you who don't know who he is, he's the most published author in the *Harvard Business Review* in history. He's considered to be sort of the nation's management guru, if you will, especially in private sector issues.

And I took him aside, and I said, Doctor Drucker, one of the things that disturbs me about this plant is that it just seems to be the Industrial Revolution raised to the nth power. It just seems to be about standardization, centralization and control done very well. Kind of the economy of scale issue. By the way, do those sound like our large high schools.

And at that moment Doctor Drucker looked up at me and said to me—think about this a second, 1989, Peter Drucker, the most famous expert in management and leadership in the country at that time; still is in my view; he’s 94-years-old now. He looked up at me—he’s only about 5’ 4”—and in his Austrian-laden accent said to me, “Jandris, you’re an idiot.” That’s an exact quote. Now, what do you say to a guy like Pete Drucker when he looks up at you and says you’re an idiot. I said, Yes, sir. Didn’t know why, but I knew I agreed because he’s much smarter than I am.

As it turned out, the piece that I had missed was that each of those five to eight bicycles a minute off of each of the three assembly lines was custom made to the specifications of the purchaser. Now, what does that mean? Not custom made like you get a car out of Detroit. Not do you want whitewalls or stick shift or automatic but, in fact, custom made truly so that the pedals were designed so that they reflected the measured pronation or supination of the rider’s feet; so that the drops were—the handle bars—were made in such a way so that they reflected the measurement of the sort of inseam of the individual rider. You get my point. Each of those five to eight bicycles a minute off of three assembly lines, custom made to those specifications.

And then he said something to me that changed my life forever—and then we’ll take a break. It was this. He said, Jandris, what this plant represents is the principle of mass customization. Think about those two words juxtaposed against each other. Mass customization, which is something he had been writing about for over 15 years and researching. And then he said to me, Those industries, those business and, moreover, those societies that most effectively over the next 50 years can engage in mass customization will be those that become preeminent. Why? Because of the rapidly growing population; because of the incredible speed with which societies are diversifying, even in the midst of homogenization. Those kind of issues. And he said, This plant, this bicycle plant, is all about mass customization.

And then he looked up at me, and he said, Jandris, what I want you to do—this was in our first meeting—he said, What I want you to do is find a way to create the opportunity in American education to engage in mass customization. And I took him

seriously. I haven't been very effective at it, have I, over the last 20 years, 15 years. But, in fact, that's why we're sitting here today; that's the most powerful driving epistemology in our culture today, which is that we must be able to engage in the mass customization of the work we do if we are going to succeed; because that is what is most essential to the survival of our civilization. And if we can't do it, we will fail.

And that's what I want you to think about for the next 10 or 15 minutes while we take a break. And we're going to come back and talk about why NCLB is not a piece of onerous education legislation but is in some ways a misguided attempt to force us politically into mass customization.