UNEDITED

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SERVING STUDENTS' INTERESTS: THE REAL CHOICES

Thank you very much. It's good to be here. I've been invited to come to this conference I don't know how many times, but it never seemed to work out. It did today, so here we are.

I'm not going to spend any time talking about all of the good things that you have already done and are doing. You have managed to institutionalize teachers' centers in this state after the Federal Government pulled out -- something that's not been done anywhere else in this country. You have some funds to move ahead on a mentoring program. The salary monies -- I know they're not called that -- but the real money that could be used for that, which was the excellence monies, was certainly something that no other state has been able to do. You have really done quite a few things; plus the tremendous amount of effort on professional and educational issues in terms of trying to improve what it is that teachers do. I can't think of any other place in the United States that has done more or has done better. So that is the good news.

Now, the not-so-good, which is not so bad either because if you have a place which is doing better than anybody else -- I'm sure you're the people who want to not just do what you did yesterday or what you're doing today, but you're the very people who can grab the ball and move to do something that's even more

and different and, hopefully, better. So what I'd like to spend my time with you talking about is kind of giving a picture as to why I don't just come here and say since you're doing all these things that nobody else is doing, that that's great, and leave it at that, which would not be a bad thing to do. But I think, given the evidence as to what needs to be done, it would not be right.

So let me begin with a question of where we are -- and when I say where "we" are, I mean all of us in this state and in this country -- in terms of how well or not so well are we doing in education. Next week I'll be flying from the West Coast back to Washington to speak to a group sponsored by the Education Commission of the States, in Washington, and they have taken as their main issue at-risk students. You've all heard those words, "at-risk." And please don't misunderstand me; I'm not about to say that there aren't some students who, because of poverty, past and present discrimination, family situation and a whole bunch of things, do not need special attention and special help. I'm not saying that. They do. And we in the AFT have always worked very hard to see that they do.

But the notion of "at-risk" creates a picture which, in a sense, is false and self-satisfying. It creates a picture that says, you know, the system is working pretty well, and most kids are doing pretty well, but out there there are those kids who are at risk, and it's like saying most of us are healthy most of the time but occasionally somebody is sick so we have to do something for the sick patient. But the rest of the thing is quite healthy. The extent to which that is the impression that

is created by the concept of "at-risk" or the extent to which we all think that basically the system is okay but all we have to do is do a little bit better, I think is the extent to which we think we have not really looked at how well or how poorly the schools are doing.

Now, I don't want to get into the usual kind of game about SAT scores or standardized test scores. I did a piece yesterday in The Times on standardized test scores that will surprise you. We have really done remarkably well as a nation. Every state, every city, in the country is above average -- in reading, math, basic skills. It's true. It's Lake Wobegon. We're all above average. How we got there, I'll tell you later -- we got there by cheating, of course. But we're all above average.

But as I give you these figures, please remember that I'm not saying that we've gotten worse than we were in some golden age. We don't know how good we were in the so-called "Golden Age," if there ever was one, because there weren't any of these instruments around at that time. I suspect that we weren't so good in the Golden Age because I believe that if people stay in school longer, they do learn something, even if some of them are shut out or tuned out a good part of the time. I don't think we're doing worse with the kids who are learning kids -- and a lot of learning kids used to drop out very early because of economic necessities. So I think we're probably doing better than we did before.

But there weren't any headlines in 1940 when only 20% of the kids graduated high school and 80% dropped out, because it was

a different world than the world is today. So I'm not saying we're doing worse. But here's how we are doing -- and I will use a few results from the National Assessment of Educational Progress, which, if you haven't looked at their materials, you ought to send for because it gives you a pretty good notion of the kind of test we ought to be teaching, too.

You know, it's a test that checks to see whether somebody can write a letter, whether they can read a syndicated columnist or an editorial in a newspaper, whether they can open up the newspaper and read a supermarket ad as to what the specials are that week and figure out what the shopping list will cost, whether they can look at a bus schedule, a railroad timetable and figure out which train they have to get if they want to get to thus and such place at such and such a time, a whole bunch of things like that. These are what you might call the modern basics. We're not talking here about philosophy or about quantum mechanics or about poetry or about Shakespeare, but we're talking about a level that's not primitive, a level that's important for an average, ordinary person in order to either be employed or to understand the world around them in terms of making intelligent decisions in elections, for example.

So what does NAEP tell us? Well, as far as reading is concerned, just about everybody can read very simple things so there isn't mass illiteracy in the old sense of the word. There's practically no illiteracy in the old sense of the word. The old sense was that an illiterate was a person who couldn't write his name or couldn't read anything. There's just nobody like that any more. But when you get to tasks that are pretty

important and that you'd expect a substantial number of people to have, here are the figures.

Now, remember that by this time we're just measuring 17-1/2-year-old kids in high school, the successful ones. They're the ones who are going to graduate. Twenty-five percent have already dropped out. We're not testing them. So this is a sample that is selected -- creamed, if you will -- and the news in this sample should be pretty good.

But the percentage of kids who are about to graduate who could read an editorial in The New York Times or who could read one of these nationally syndicated columnists, like George Will or like the people you read in the editorial pages across the country -- the percentage who can do that is 36% of those still in school, after 25% have dropped out -- 36%. When you get to the bus schedule and you ask somebody what bus they have to catch here in order to get to New York City before 5:00 P.M., only 4.9% of the kids about to graduate can look at a timetable and can pick the right train. Now please don't say it doesn't make any difference because you just have to call Trailways or Greyhound and they'll tell you.

The point of this is, how many people can open a world almanac and look at a chart that has some numbers and a few words and can figure it out? How many can look at a spread sheet? How many can look at a simple chart in Time magazine or in Newsweek -- and they have them every week -- and look at it -- I mean, it's a form of literacy, a very important form of literacy. If you have to write in words everything that is in one of those charts, it would just be too long and too complex.

By the way, just in case you think, gee, you know, a lot of these black kids don't do so well, a lot of these Hispanic kids don't do so well, if you take all the blacks and Hispanics out of the sample then we jump from 4.9% to 5.8%. So, yes, black and Hispanic and other kids who are economically poor, et cetera, need special help. But if we got all the blacks, Hispanics and kids at risk up to where all the white kids are in this country, it would still be a disaster. That's a very important thing to keep in mind.

You might say, all right, that's just one thing; what else is he going to tell us? Well, the toughest test they gave in writing was to ask a kid to write a letter of application to a supermarket asking for a job. And you could make some spelling errors and you could make some grammatical errors, but the important thing was that you had to use a little bit of reasoning, critical thinking, a little bit of persuasion, something like: "Dear Sir, I'm applying for this job in your supermarket. I know you want somebody who's reliable and who's going to be there every day, and I understand that because I worked in my uncle's laundrette last summer and even when I was sick I came in because I knew that he couldn't replace me." Something like that.

Or, "I know you want somebody who can handle a cash register, and I was in charge of collecting money for a church outing," or something like that. "Everything was handled well. You can call the minister and he'll tell you." Of course, if you had three or four of those, magnificent. But it really just required one indication that you could reach out to somebody,

think of what might be on his mind or her mind, and write that simple note.

What percentage of all the kids who are about to graduate -- successful kids, after the 25% have dropped out -- could do that? Twenty percent.

So, what else? Mathematics. Let's do something very difficult. You give kids the following common fractions: 5/8, 3/10, 3/5, 1/4, 2/3, and 1/2. You just say arrange those in order of size from the smallest to the largest. What percentage of 17-1/2-year-olds about to graduate can do that? Twelve percent -- twelve percent, yes.

Well, you know what percentage know which half-century the Civil War was faught in? You know that the overwhelming majority of students graduating our schools do not know who the enemy was in World War II, or what half-century it was faught in?

By the way, I don't believe any of these tests are mere "Trivial Pursuits." There's nobody who's going to read anything about current events and every sentence go look up when the Civil War was faught and when World War II was faught and who were this and who were that. If you have to go to the dictionary once every sentence, it's like -- have you ever tried to read a foreign language with a dictionary next to you? How much of it do you read? How many words do you look up before you throw everything down and say, "The hell with it, I'm not going to do it"? You can't do it that way. It's too slow. And you can't say, "You can always look it up." "You can always look it up" is great if you're reading through the book and once

every 5, 10, or 15 pages, or once every chapter you say, "Gee, I'll look that up." Then you're moving along. But if you have to look something up once every paragraph, that's it, and you're not literate in that subject, just as you aren't in a foreign language, and it slows you down so much that you can't do it.

So it's not "Trivial Pursuit." It doesn't mean that I think all the questions are great, but most of the questions on those examinations I wouldn't have any quarrel with.

So, what does all this tell us? It seems to me -- and I hope it will seem to you -- you're in the business of trying to help your fellow teachers do a better job, and by "do a better job," I hope that we know what we mean. You're not trying to help them teach better. You're trying to help more kids learn more. I mean, you're not trying to help them teach better if teaching means doing what I'm doing right now. You're really in the process of trying to get all of our colleagues to do those things that have to be done so that these results will be very, very different.

I don't know about you, but my own view of what kind of strategy one adopts when one is in a situation like yours -- my view or strategy is something like this: If the whole machine is working pretty well, then just polish it up and oil it up and grease it up and tweak it a little bit and make it run a little better because, gee, you're already at the 70% mark. If you do it a little better and work a little harder and get every teacher to lecture a little better or talk a little better, a little better material, a little better preparation, you'll bring it from 70% to 75% and 75% to 80%, and then, eventually,

we'll get closer and closer to -- we'll never be absolutely perfect but we'll get up there.

On the other hand, when you get results like the ones I've just talked about, which is 12% on common fractions -- remember, it's not 12% of all 17-1/2-year-olds; it's 12% of the three-quarters who were successful -- if you take these figures and put them across that entire group, the entire cohort, including the people who left, then the figures are much smaller, substantially smaller. And I think it's a reasonable hypothesis that as a group, not individually, those who left would not do as well as those who stayed.

Well, if that is so, it means we're educating 5%, 10%, or 15% of the youngsters in our country -- 5%, 10%, 15%, depending on the skills and on the areas. Let's just for the sake of being the big optimist say it's 20%, we're educating about 20%, and we've got to get up to some level like 70%, 75%, or 80% or 85%. After all, I was not talking about super-difficult things -- a simple letter, editorial in the newspaper, bus timetable, very common fractions. And these are not the hallmarks of genious. And if all we are educating is 20%, then it seems to me the conclusion is you'll never educate 70% or 80% of the kids to be able to do these merely by getting the teacher to give a better lesson. You'll never do it by getting a slightly better textbook than the one we have today. You'll never do it by adding an hour onto the school day. You'll never do it by giving some people merit pay. You'll never do it in any of the ways being talked about now about reforming education, because you've got too far to go.

To move from 20% to 75% or 80% is such a huge move that none of the proposals usually made, or even all of them put together -- I don't think that all of them put together, I don't think any reasonable person would believe. In a sense, by doing these things what we're really saying is we should be doing more of the same thing that we're doing and then we'll get there. That's what all those reforms really say. I mean, in a sense, we do give merit pay; we have a system of advancement to administration on the basis of a reward system. We have various jobs that one gets some extra money for. I mean, all of these things are there in some form.

So what is our system like? It's very difficult for people to -- this is a very difficult time, a very difficult time for the guys who made automobiles from the turn of the century until now and who licked the entire world. Everybody wanted an American car, and if you bought a car from somewhere else you didn't have the money or you were just a queer duck who wanted to go around -- or a snob who wanted something that was imported. But our cars were better. Here we are, and we might not have an auto industry five years from now because somebody else figured out how to mass produce cars without making lemons. And we haven't figured it out yet, and that's what we need to do.

We need to figure out how to mass-educate kids without producing lemons. We're in the same business that the auto industry was in; that is, we're doing better than we ever did before, we're turning them out pretty fast, turning out a lot of them, but the reject rate now, given the figures I gave you, is

just immense, and it's unacceptable.

Well, it's difficult to change. I go to a lot of meetings, and a lot of them are administrators, principals, superintendents. I could have a convention of principals and superintendents, and sometimes it would be 1,000, 2,000, 3,000 of them out there in the audience. I like to ask them, "How many of you were once teachers?" And they all raise their hands. "How many of you, when you were teachers, had an experience like this: Your principal or assistant principal walked into your room, sat in the back of the room, and observed your lesson and wrote down what the aim of the lesson was and what your materials were and what your leading questions were and three good points and three weak points, and asked you to come in for a conference?" They all raised their hands.

Then I look out at the audience and I ask them the question: "How many of you ever found throughout your entire teaching experience that that experience, having someone observe your lesson and write it up and talk to you about it, improved your instruction?" And they all laughed, and about three hands go up out of a thousand.

Then I ask them, "How many of you now do the same thing to your teachers as was once done to you?" And they laugh, and all their hands go up. Of course, that's what they're expected to do, and that's what they have always seen other principals and assistant principals do. And if they didn't do it, somebody would fire them. They'd say, "What are you doing? How are you supervising teachers and how are you getting them to do better?" So you can't blame them.

But here you have a phenomenon where 99% of the people doing something have experienced it themselves and know it does not work, and yet they continue doing it. And the last generation did it, and the one before that, and the next one will and the next one. And here is a case where people, if they just honestly look at themselves in the mirror and say, "Do I believe that walking in and doing this is really going to change things, really going to help?" -- as a matter of fact, it's not even in front of the mirror. They told me in front of all those other people that that was the case, and yet they go on doing it. So it's very, very difficult to change.

It will be just as hard for teachers to change, because what teachers do basically is what they saw their own teachers do and what they saw their college teachers do and their elementary and secondary teachers. And this is the system that all of us came up in, so all we can think of is that system, and all we can think of is making it a little better -- a little better training, a little better presentation, a little better questions, a little better materials, and so forth.

But the evidence is pretty strong -- by the way, the evidence I have just given you is very similar in Great Britain and it's very similar in Germany and in France and Holland and Belgium. In other parts of the industrial world, the situation is very similar. It's different in Japan, for other reasons, and maybe we'll have a chance to talk about that.

So this is not just the United States. The percentages may be slightly better in Germany; that is, maybe they're educating 30% instead of 20%, or maybe 35%, but I guarantee that it's not

70% or 75% or 80%. The same is true in the other countries that I mentioned.

So, I think that the first thing we have to do is get away from talking about teaching because every time we talk about teaching we'll be talking about what I'm doing now, and what I'm saying is that since that's what teachers do about 85% of the time, is to talk to youngsters -- that's what Goodlad and about five other people who have done pretty extensive research say -- that is, the process of teaching as defined by most teachers, and what the results here show is that it doesn't work; doing it this way doesn't work. Doing it a little better is only going to work a little better. Doing it a lot better is still only going to work a little better. Because, essentially, what the results show is that only a certain number of kids can learn by listening to someone talk.

By the way, only a certain number of adults can sit still and listen to someone talk. They're usually called "college graduates" or they're called "college students." You see, basically that's how our system selects people. Those who can do this successfully get selected to do this. Now we know that those who didn't do it are not necessarily dumb, because you've met a lot of those people, your colleagues, who went on to make a lot more money than you did. They even read, they go to the theatre, they listen to music, they discuss international issues intelligently. They're not dumb, but they were not able to sit and learn by listening to somebody and put things down on a piece of paper and hand it back. You know somebody like that, at least one. You may know more -- some relatives, friends. I

know people like this. So, they're not dumb; it's just they were not able to sit still long enough, they weren't able to learn by listening, and they weren't able to hand back the right words when we asked them.

So what we have to think about is not teaching, because a lot of good teaching is going on all across the country, and a lot of better teaching is going on because of everything you've been doing and are doing. But teaching, in the sense that we talk about teaching, may not have much to do with learning except with those kids who are able to learn by listening to words or reading words. With those kids, it makes a difference, and that's only about 20% of the kids. That's what all these figures show us in all these countries. They show us that only about -- it doesn't show that God only made 20% of us smart. It shows that God only made 20% of us have the smarts to be able to initially learn either through reading or listening to words -- "In the beginning" were the words only for 20 percent of us. [Laughter]

Now I think of one of my favorite stories that has to do with a dog food company. It's a very important story. It's a story of a dog food company where the chief executive officer brought together all those chiefs of chiefs of staff of the company. They had an all-day meeting. The first person to stand up was the nutritionist. She had a chart which showed the various nutrients in this dog food as compared to the others. There was no comparison. If you looked at the charts that were up there, you could see that this dog food was just filled with nutrients, and the others you'd have to eat two or three or four

times as much dog food to get the same amount of food value.

Then they went on to the next person, and this person dealt with the packaging. They had all the boxes and cans lined up there, and you looked at this dog food and this one just popped out at you. The others were all pretty much alike, but this one, they packaged it in such a way that it was spectacular. If you were walking along the counter in the supermarket or anywhere else, there's no question you'd automatically think the others all looked like the same and this one is the one you'd move toward. You'd see it, whereas you wouldn't see the others individually unless you were going for one of them.

The third person got up and put on all the TV commercials for all the different dog foods. There was just no question that the others were standard dog food commercials; they were sort of boring. This one had just great appeal.

The next one was the print media, and so forth. They just went through everything, and they spent the better part of a day doing it.

Then the president of the company stood before this group and said, "You've all just shown me and you've convinced me, you've convinced each other, that every aspect of our dog food is better than any of the competitors'. Now I just want to know one thing: Why is it that we're losing money and that we're not selling very much of this?" And a little, lonely, quiet voice in the back of the room called out and said, "Because the dogs won't eat it." [Laughter]

Now I'm not saying that kids are dogs, so please -- I always get into trouble when I make speeches and some other

organization goes out and says, "Al Shanker said...." -- but I am saying that we can have all the right teaching and we can have the right textbooks and we can have everything else done right, but in the end, if the kids aren't getting it, they're not learning, then none of these other things make a difference because the whole purpose of these things is that that's the end and that's the goal.

Somehow we have to start with a radical realization that so far all the improvements that we're making, which essentially are based on doing more of the same thing and doing the same things better, will do a lot for the 20% who are learning now. That 20% that can listen and understand whatever we do to improve teaching, they'll learn better because they're sitting and listening. And if we make them go an extra half-hour or an extra week or an extra month, they'll probably learn more -- probably -- because the system works for them. And if you give them more and better of the same thing, it will work more and better for them. But it will not work more and better for those who aren't getting it now.

So we've got to ask ourselves, what are some of the things that prevent those kids from getting it? I've just mentioned one of them, in a sense, by implication. I said that a lot of kids, probably 80% of them, cannot initially learn through the word and therefore we need to think of providing students with a variety of different ways to learn the same thing. The latter half of that sentence is very important. This is not the Sixties. I'm not saying that if kids can't learn words they don't ever have to learn words or they don't even have to learn

the things that we want to teach them, let them learn any damn thing they like. That's not what I'm saying. Eventually, they do have to learn the word. Words are very important. And there are parts of our culture and of thought and of everything else which you never get any other way.

I'm not saying that we should find some other way of reaching the kids, like the television set. I'm not saying that. I'm talking about keeping kids on board, not getting them to feel that they're stupid and can't learn anything and can't make it, or giving them more of something that they can't digest in the first place -- words. So we need to devise a system in which kids, who can't get the words, get some pictures, through VCRs, and are able to learn -- certain things do come better through words, like poetry -- computerized models, group learning, cooperative learning, which is rather different than just single talking, a whole different variety of ways.

Now, that has to be part of the stock and trade for any teacher. A teacher who proceeds only through words is like a doctor who has only one medicine. When he's lucky, the right patient will come along and the medicine will work. But, if he keeps giving that same medicine to those for whom it doesn't work, he's not a very good doctor. So, that notion of a variety of different avenues is extremely important.

Secondly, it has to do with the timing of students. Different people learn at different rates. We all know that and we all took that in our courses, but there is no way in which we embody or incorporate that in what we do in school, because if we have learned it -- we've gotten it in every one of our

courses: kids learn at different rates, kids learn at different rates, repeat after me. Right? I mean, that's one of the things we learn. But you're going to a school where all the kids come in on the same day; they're first graders. Well, if they all learn at different rates, how come they all come in on the same day? How do we decide they come in?

Well, if your birthday is on a certain day or before, you'll all come in; otherwise, you wait one more year. How come a whole bunch of kids who are very different all come in the same day? Well, simple: that's when the teacher starts talking. [Laughter] That determines it. So, you see, if education were not primarily focused on teachers talking, kids wouldn't all have to come in the same day. They would not. They could all come in on their birthdays.

By the way, that's a rather interesting thing to contemplate. I remember that one of the toughest days of my whole life each year was the first day of school. I taught elementary when I started, but most of the time I taught in junior high school. The kids knew that I didn't know their names. So, the first day I'd try to get them seated and quiet, and then I'd take out my roll book and say, "All right, I'm going to assign seats," you know, and I said, "All right, John Abbott, take the first seat." And nobody would answer to that name. I'd look all around and say, "Is John Abbott here?" And everybody would look around. Then I'd say, "Okay, John Adams, take the second seat." And somebody would say, "He's John Abbott," and they'd all start laughing. And the kid would say, "No, I'm not," and there would be a big thing. It would take

quite a long time before the kids [Laughter] -- and here I was almost with a Ph.D., and they made a monkey out of me in the first five minutes. I didn't even know their names; that's how smart I was. [Laughter] They had this tremendous power over me.

I know nothing like this ever happened to you. [Laughter] I'm sure they teach you some technique to get over this now, but I didn't have it. I didn't have the advantage of it. But, nevertheless, just think that if, instead of the teacher being the only one who doesn't know them, walking into the room and trying to figure out who they are and trying to learn all their names, as each kid came in on his birthday he's the only one who didn't know anyone else there. Everybody else knew what the rules were and the teacher knew their names, but the one new kid who comes in on his birthday, he's the one. Very different, right? Very different in terms of the atmosphere of the institution if that were to happen.

Well, by putting the kids in the same class and by having the kids learn mostly by the teacher talking essentially means that all the kids do have to learn at the same rate, because they better learn when your saying it. If a kid isn't ready for you, then it's too bad, because you can't, three months later or four months or five months later, individually repeat the same talk to each kid as that kid gets ready for it. So, in spite of everything that we are saying about all kids learning at their own rate, we have organized a school in a way that absolutely negates that, and a system of education which is based on teaching as we know it, which is talking, or all reading the

stuff at the same time in the classroom, or for homework tonight. All of that says that, yes, all kids learn at the same rate, but they admit if they don't learn at the same time it's too bad for them.

So we knock those kids out; we call them stupid if they can't sit still and listen to somebody talk and understand what they're talking about. And then we call them dummies just because they happen to be a little younger or not quite ready yet. They might be ready next month, but today is the day this is what we're going to learn, and the reason that we're going to learn it today is that I've got to organize my time during the year and I picked today to do it, because I have to do something today. [Laughter] And I'm going to pick something that is not going to leave everybody behind -- that's bad teaching. And I'm not going to pick something that everybody is going to know, because that's not good teaching, either. I'm going to pick something that's going to leave only half of them behind. Right?

So what we do is we compel kids to compete with each other unfairly. That's what that amounts to, because to get kids who are not ready to perform at a time when they're not ready to perform, it knocks something out of them. What does it knock out of them? It knocks their self-esteem out because the kid has not taken all the courses that you're giving. Maybe you should be giving these courses for kids; in other words, you ought to tell them that they're not dumb if they can't understand the words. Or maybe we ought to be telling kids that they're not dumb if they aren't able to learn this today because

they might be able to understand it next month. You see, maybe kids need courses about the process of education so that they don't drop out in their own heads if they don't happen to get something at one time. I don't know if that would work very well, but it's an interesting notion.

Now let's think of something else that we do that's very common; that is, we ask kids questions. We want pupil participation, so we ask them to do various things and to answer questions during the course of the day. And something happens in that process which is, when you think about it -- and most teachers don't think about it; I never thought about it when I was a teacher -- when you think about it, it's very destructive, because there are some kids whose hands are always up and who love school and who would come on holidays because they get so much ego gratification from always getting it right, and there are other kids who get it right some of the time, and there are some kids who are sitting there engaged in an unconstitutional act of prayer [Laughter]: "Please, God, let him not call on me." But their prayers are not always answered, and as teacher I have to call on everybody and give them all a chance.

So, once in a while, I do have to call on them. As a matter of fact, I try to call on everybody at least once a day and sometimes twice a day. What happens when you call on somebody who doesn't know it in the morning, then you call on him again in the afternoon, and he stands up and turns red or he doesn't say anything, or says, "I don't know," or "I don't understand" or he comes up with some wild answer? What do you call that?

What would we call it in any other context? Well, we'd call it an act of public humiliation. That's what it is. That's how I feel when somebody calls on me to perform and I fall flat on my face. That's how you feel. We all feel that way, especially if it's in front of all our friends. That's why you're always told to take driving lessons from a professional driving instructor where nobody can see you.

Aside from the fear and danger aspect, there's that -- well, what happens when a kid is called upon constantly and he constantly is humiliated that way in front of his peers? Well, you know what happens. After a while he says, "This is not my game. I'm not going to play. I don't give a damn. It's not important." So what we have in school -- because of the way school is not organized in accordance with the way children are made, school is not organized in accordance with the needs and interests of children -- school is organized in accordance with the needs and interests of adults. You bring kids in at a certain time and provide a custodial and educational function simultaneously, and it's easier to have one person compel a bunch of people to sit still and be quiet for five or six hours at a time, something which is humanly impossible for most people, including adults, and to pay attention and listen to someone talk for that period of time -- very, very difficult.

So, what does this mean? It means that school ought to be a place where students can proceed at their own pace, where their learning at a relatively early age is fairly private; that is, where their failures are not viewed as failures. If I'm in a

car with a driving instructor and I make some mistake, I don't view that in the same way as if I make that same mistake with my wife who is teaching me, or my best friend. I'm humiliated, I'm ashamed, besides which those people are more emotional about it, also. [Laughter] But something which says you can learn it in your own way, you can learn it in your own time, and you need not be humiliated because basically most other people aren't watching -- those are the very important features that have to be built into the education of youngsters.

Now the question is, how do we do that? How do we do that? I was at a school in Germany exactly two months ago. It was not a perfect school, but I want to just share with you what happened in this school because it will give you an inkling of the kind of thought that has to go into what we do in schools to make them different from what they are today. Although, maybe this one isn't different enough.

But let me tell you that this school does extraordinarily well. It's been in existence for 17 years. And the percentage of students, given the class composition and ethnic composition of this school, who go on to universities and technical schools is something like eight times the expected numbers. So, it's a very, very impressive school. There is research done by a hostile government that doesn't like this sort of a program.

It's a comprehensive school in Germany, which is unusual. There are about 85 of them. That means that they have kids who would normally be in various schools tracked according to university level or vocational level. Here they have got them all in one, except that most of the parents whose kids are going

to go on to university don't send them here so they have a smaller than average number of kids who are college-bound. And they also have a large number of Turkish kids and Greek kids and Moroccan kids, so they have bilingual problems. They have cultural problems, because basically Turks don't want girls to learn very much so you've got that problem to overcome. You have a number of problems to overcome. So don't think of it as, you know, this is a German school and in Germany these are all little blonde kids who go home and their parents force them to do this and they all do their homework. This is an urban school. That would be a wrong stereotype of a normal German school, also. But it's a school with a lot of problems similar to the ones that we have.

Now, what is different about the school? Well, I'll just mention a few of the key things that are different to show you how the people over there have thought about children and teachers and what makes both of them tick to create an institution that's almost totally different from what we know of as a school here in the United States.

Here's a school that goes from 5th grade through 12th, so it's basically a combination of middle school and high school. Let us take the 5th grade, and let's say that 5th grade has in it 125 students. The school will assign a team of, let's say, 7 teachers to the 125 students. Now, no per diem substitute is ever hired in this school. They take all the money they would use for per diem substitutes and they hire regular teachers who are there every day. So if someone is absent, you'll have some more kids to handle, but no one will ever come in for a day who

doesn't know the kids' names and where the kids can run rings around them, because they feel that it's a waste of money to bring in somebody who does not know the kids and doesn't know what the teacher is doing. They put all the money up front in the regular teaching staff.

The second thing is that this is a school with 2,400 youngsters and there are only 3 administrators in this school -- a principal and two assistant principals. Under German law, the principal and the assistant principals must teach 6 periods per week minimum. So they're teaching-supervisors. Aside from that, there are just a few secretaries, nobody else. Everybody else at the school is a teacher.

Now, these 7 teachers have 125 kids. Here's what happens: These 7 teachers are a team. They must decide, how do we break these kids up into German class, history class, math class, science class; how do we break up these kids? That's their decision, not that of the downstairs office. If you want to talk about empowering teachers, if you want to talk about professionalism, this is the level at which you have to start. Here are your kids; there are 125 of them.

Now, the other things they think about are: Should we have periods every 47 minutes or are we better off having German and history for a month and then math and science for a month; or, are we better off having German and history in the morning and math and science in the afternoon? Why do I say that? I say it because a very smart Englishman, who's not an editor but who's basically a business manager, raised the following question: He said, suppose you're the head of a company and your company is a

bank or an insurance company. It's a place where a lot of people do office work, and when these people are doing office work they read some things, they write some things, they make some reports and they hand them in. As a matter of fact, office work is something like school, isn't it? The kid is doing types of office work, to a large extent.

Suppose you were running an office like that and you're now the overall manager of this company, and you hire a new employee. You say, "All right, Mary, come here. You're newly hired, and here's your room. You see that you've got 30 other people at their desks in this room and they're doing their work. See that fellow there? He's your boss. And this is your desk, right here. Sit down. Your boss will show you the work that you're going to be doing. Do you understand that now? Oh, by the way, we don't want you to talk to any of the other people in the room while you're doing your work. Let them do their work and you do yours. That's a rule that we have here. Is that okay, Mary?" And Mary says, "Yes."

He says, "Well, in just a minute your boss will come over and will tell you the job that you're going to be doing here. Now, Mary, I want to tell you something about this place, because in 47 minutes a bell is going to ring and I want you to stop what you're doing in this office and I want you to go up three flights of stairs and go to Room 532, and that's another office. You'll be given a different desk there, and there'll be a different bunch of co-workers sitting at all the other desks, and there will be a different boss with a different personality, and he's going to give you a totally different job to do. And

we also don't want you to talk to any of the people up there, either." [Laughter]

"Now, 47 minutes after that you're going to go to another room. As a matter of fact, you're going to have seven different desks, seven different bosses, seven different jobs to do, and probably about 150 different co-workers, whom you're not to talk to."

Now, who would organize an office that way? Nobody. Absolutely crazy. Very confusing. It's hard enough to adjust to one boss, just think. That's why we have collective bargaining, right? [Laughter]

The kid walks up to his English teacher and says, "Can you help me with this problem in algebra?" The teacher says, "No, I'm an English teacher." See, the kid is the only one who has to know everything. [Laughter] Now, really, does it make sense from the kid's point of view?

By the way, if you don't view the kid as the worker -- you see, if you view the kid as raw materials to be turned into a product moving on an assembly line where in each room somebody puts something on him or tightens the bolt or fixes a wire -- you see, if you view the kid as an inanimate object moving through a factory, the school is perfect. But if you view the kid as a human being who's a worker, who'll be transformed by his own work and who can only learn through his own work -- not what you do, what he or she does -- it creates the learning. You create opportunities. You make the possible impossible -- we make it mostly impossible. And we don't ask ourselves how can we turn this thing into a place where -- see, if we were

office managers we'd say, how can we turn this place into a place where that worker can be the most productive worker, and we'd not move him around, we'd not give seven different offices, not give him a whole bunch of different -- we might give him one job to do this month and then give him another job to do next month, but we wouldn't do it every 47 minutes, never do that.

Now, what do they do in this school? In other words, one of the things they can decide to have is that they'll not have seven periods in a day. They might not have any, or maybe one or two. That's a decision the teachers make because that's one of the most important educational decisions you can make, and we never even think about that.

Now let me tell you something else that happens in this school. These teachers will stay with those kids in the 5th grade, 6th grade, 7th grade, 8th grade, 9th grade, 10th, 11th and 12th. They stay with them all the way through. Now, isn't that interesting, because no teacher can ever say, "Well, of course Johnny can't learn. You know who he had last year." [Laughter] You also can't say, "Well, I can't wait to get rid of him in June." You see, it takes what is a mere bunch of materials being processed and turns it into a moral community. It turns it into a family. You know that kid, and anything you don't do for that kid now you're going to live with next week and next year and the year after that and the year after that. You're going to live with it for a long time.

Why not? Well, there are other aspects of intelligence that are as important, and if you don't have the other aspects the first one doesn't take you very far.

Another aspect of intelligence is what's called "imagination," being able to see new things in old patterns. It's the scientist who is raising a culture of bacteria and one day opens the petri jar and says, "My God, all these bacteria have been destroyed by this mold," and he gets ready to throw out all the bacteria. He says, "My God, a mold that destroys bacteria. I'll call it penicillin."

Why is he raising the bacteria? To find out how he can destroy some of them, to which the average researcher would have said, "These are ruined because I can't now take them into my laboratory and infuse them with something that I was going to infuse them with," instead of something that accidentally happened. But there's a person who saw something.

Can kids be educated to use their imaginations? Well, they can. One thing: All you have to do basically is leave kids alone and they'll exercise them. But you know what happens in schools.

I'll share with you an experience I had in the 7th grade. It was the first time I ever had wood shop or, in those days, any shop. But we sat on our benches and the teacher, a Mr. Schlinghide, was a very good teacher and he taught us about wood. He had pictures of trees and he had a whole section of a tree he had cut, with bark on the outside, and we could see the rings. Then he showed pictures of how it was sliced. Then he showed what role the leaves played and how the roots would spread out and the roots would get the nutrients.

Then he said something that, to me, was just mind-boggling. He said that, in times of drought, often these roots would reach

out to a pipe and would wrap themselves around the pipe and break the pipe to get the water. Then, when he was all finished with his lecture, I raised my hand and said, "How does the tree know which direction the pipe is in or that there's water in the pipe?" He had this piece of wood in his hand that he was demonstrating grains and everything with -- you're right, he flipped it right across the room, hit me in the head, which is what he intended to do -- he was a very good shot -- and said, "That's what you get for being a wise guy."

Now, read the autobiography of Winston Churchill, read the autobiography of almost anybody who later wrote one and made it in life, and you'll find some incident like that of a school that considered some sort of imaginative question to be wise alacky and they were punished for it. Other aspects of intelligence I won't touch on now.

So, essentially the teachers are almost never lecturing here. The kids do work together in different groups. Because the kids are doing it with three or four other kids at a table, they're not embarrassed if they go a little more slowly because it's not 30 kids and it's not in response to a single question. It's the kids who are helping each other do it. And what they're helping each other do is not just memorize facts, but they're going through a process. Each table is developing a theory of how a time zone started and they're going to present it to the class, and who's for it and against it. Then, later on, they'll learn how it actually happened.

Well, what is it that we need to do? We're trying to help teachers teach better, aren't we? And we're doing that. We're

helping them teach better those kids who can't learn the way the 20% who can learn the way we teach them. We're helping those teachers, and that's all right. But we're not helping them up to now to teach those kids who can't learn this way. So we're giving up on 80% of the kids.

So what we need now is to move towards schools that are very different. They won't all look like the Cologne school, but we'll need a team of adults who have the time to ask the same questions. The adults have to have the right to organize the kids. The school has to be organized in such a way that we don't just give lip service to saying that each kid learns at his own rate or in his own way. The school has to embody in its structure the materials and the ways so the kids can learn when they're ready and can learn in different ways, not just that they should but they really can, because the ways are there in front of them.

The teacher's job is a lot like the doctor's: to say, "Jimmy, I think you ought to do it this way because I don't think you'll like this book yet. It's a little too difficult for you now. You'll probably be able to do that in a couple of months. For now, do it this way." And you're the person who prescribes the different ways of doing things. You're the person who develops new games, new materials, new groupings of youngsters.

Essentially, teaching is not talking. Teaching is figuring out whether you should have seven periods a day. And once you've figured out that that's confusing, that no one can learn that way, the job of the teacher is the job of saying we'll not

organize the school so the kid has to relate to seven different bosses a day and seven different tasks, because you can't learn that way. See, that's different from teaching each of those seven teachers how to give a better lesson to a kid who's confused by running from one period to another, because there are limits to what you can do with a better lesson when a kid is that confused and running around.

Well, I hope that in your work you'll find schools that will volunteer. You can't do this all at once. It's a big job. It's the most exciting job we'll ever have, and that is transforming the school from a place that works for those kids who are naturals, to a large number of kids who so far have been really pushed away because they're not naturals in terms of the way that we're doing it. And I'm talking about how to organize a school in accordance with the way kids are built, and kids are built in such a way that 80% of them at the beginning -- later on, you can give more lectures. By the time they get to college, they'll have to learn how to sit through lectures and then they'll have the worst teaching of their lives, probably. Then we'll work on the colleges after we finish with the elementary and secondary schools.

Now, what are the sequences? Please look closely at what's happening in Great Britain right now -- and, by the way, what's happening there is about to be discussed here as a real policy option. I got up one morning at about 4:30 or 5:00 and turned on C-SPAN, a week ago or ten days ago, and there I saw the Republican National Governors' Conference in Santa Fe, and there were Republican Governors saying that ought to be the Republican

Party platform this year as to what we intend to do for the public schools of America. What they were saying is that we ought to do for our public schools what Margaret Thatcher is doing for the public schools in Great Britain. And what's being done is this: Essentially, they're saying, hey, the teachers are no good, the schools are no good, the school boards are no good, the administrators are no good. Why are they no good? Because the kids aren't learning. So we don't care if individually they seem to be nice people or even if they seem to be trying; they're no good. Therefore, we're going to create a kind of collective bargaining for parents.

Here's how it works: If 20% of the parents of children in any school sign a petition -- that is called a "show of interest" -- then the system must conduct a referendum. A secret ballot must be sent to every parent of every child attending the school. And on the ballot it says, "I want this school to be taken out of the jurisdiction of the board of education and to be run by the parents of the children in the school." If a majority of parents voting in that election vote "yes," the school is opted out. The board of education's only job then is to send a committee elected by the parents, which is now the new board of education, the money that it would have spent on that school had the school remained in a public school system.

By the way, since in England they also provide some monies for non-public schools, private school parents versus Catholic school parents or Church of England parents will have the same right to take their schools out of the diocesan or church

control and run them. So that's why the Church over there is against this.

By the way, once the parents take that school over, no contracts remain in effect and no tenure remains in effect. The parents will have the right to hire and fire the entire staff of the school and to run it as they wish, with public funds.

See, it's better than vouchers. If you have a voucher, you still have to find a private school that has room for your kid and will take your kid. Here they've got to give you the whole school, with the monies, so it's very simple. We'll watch this emerge as a major issue in the campaign.

Now, as people take a look at what the success rate is and how poor it is -- and I don't do this in a self-flagellating way. We've got a lot of hard-working people. Think of what you're doing and think of all the people who come to you and who are really trying to do the best that they possibly can. I mean, that's a sign of how committed people are. But commitment in itself is not enough. You also have to have the right ideas.

I hope that I've stirred you a bit today to think of a new world that can be created in our schools, and the job is yours.

Thank you.

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