

Oct. 7, 1986
(NEISNET)

A. SHANKER - EDUCATION REFORM

Thank you. If I run a little too long, stop me because I want to make sure we have time for discussion.

We are now three and a half years into what is called the educational school reform movement which began with a series of about two dozen reports. Most of you have probably heard of "A Nation At Risk", a report commissioned by U.S. Secretary of Education, Terrill Bell. "A Nation At Risk" was followed by a report from a commission chaired by Governor Hunt for business and leading governors and sponsored by the educational commission of states.

Basically round one of the reform movement says that things were too loose, that kids could get through school without learning very much, that teachers weren't tested before they came in, that students weren't required to take hard

subjects, that you could look at the transcripts of students graduating in California and other states and see that instead of courses in literature there is a year of watching television, another semester of comic books, another semester of something else. It looked a lot as though the schools had a wide variety of electives in which the students were able to take soft and recreational types of subjects as a substitute for courses that had some cultural and economic merit to them.

And so, basically what happened is state after state enacted school reform. While these reports have obviously received national attention, and one of them was from a national commission, the reform movement is largely a state by state movement. The U.S. government has had nothing to do with any of these initiatives.

So what you have are some very interesting events. The first initiative of educational reform was the business roundtable of California, made up of just under eighty leaders of the largest corporations in California who hired a group affiliated with the Rand Corporation. They educated themselves with the problems of education in California and came up with a reform plan which they convinced the legislature and the governor to pass. The bill which was 160 pages long dealt with; how long the school day should be, how long the year should be, what subjects the students should take, what the textbook

approval process should be, how the teachers should be tested, who should be promoted, graduated and so forth, beginning to end. There was a 2.6 billion dollar pricetag for it over the two years and they got it through. Brand new governor at the time, Governor Deukmejian, I'm sure that the last thing he dreamt of when he ran was that one of the first things he would be signing was an almost 3 billion dollar piece addition to the education system brought to him by the business community. The parents were out of it; the teacher's organizations were divided because there were some things in the legislation they liked and other things they didn't like. This was essentially a business initiative. So the common thread that you will find running through is the notion that you cannot have economic development in a state without improving education.

This was kind of wave three. Wave one was reindustrialization. If we don't catch up with our competitors in terms of rebuilding our industries, we're gonna go down. The next one was the infrastructure and the third was the human infrastructure. If you look at these reports, they say very little about citizenship, they say very little about building common values, they say very little about developing people who appreciate the arts. Everything is geared to competition with Japan or with other countries and they all say that; that's not what education is about, but that's the footnote; the driving

force behind all these points is economic development.

It is not without interest that most of the reforms were taking place in the south which was lagging behind. Southern governors had reached the plateau in terms of bringing in a lot of business. Some of them are now facing big problems with unemployment. Some of them like Lamar Alexander went down almost a full day with Ross Perot because he was the Chairman of Governor White's commission in Texas and Perot said, "I suppose you're wondering why I got into this thing," and he said, "look, this state (this is before oil prices went down) is in good shape because of oil but, 1) we don't have much of it, 2) God has not ordained that the price will always be what it is," and so I've been going around to business communities saying that if anything ever happens with our oil thing that this state is going to go right back to cotton picking and this is going to be a very very poor state and there's only one smart way to invest all this oil money and that is to build the future economy of this state on something else and the way you build a future economy, is look at Massachusetts. They can have bad times and good times but the fact that they have invested both for a long period of time in a talented and educated workforce means that there will always be business and industry there. That was Perot's line and he sold an almost \$3 billion package the next day.

Alright, let me move away from that for a second. We have

practically the whole country now that's moved back to tightening up, testing teachers, testing the kids, more traditional curriculums. However, at the same time that this was happening very few of these reformers noticed that something was happening in terms of the demography.

One half of all the school teachers in the United States are going to retire or leave teaching for one reason or another. In the next six years, that is 1.2 million out of 2.2 million are leaving in six years. Assuming current staffing ratios without any improvement, we will need 23% of all college graduates for the next 10-12 years, and probably beyond, in order to replace these teachers. Now, in 1983 only 4% of all kids going to college said that they were heading towards teaching. This year, because of the improvement made and all of the attention focused on this, 6% of the kids in college said they wanted to go into teaching. Remember we need 23%. The overwhelming majority of those who are heading for teaching are in the lowest quartile of all college students.

And so we see the results from when California instituted a teachers' examination for their teachers. Florida also instituted a teachers' examination. Almost every state now has an examination and the public says, "ha ha, that's wonderful, we're now testing our teachers." Nobody bothers to find out what kind of questions we are asking them and what the passing mark is. Most states, for instance, (to

be an elementary school teacher) give a 6th grade arithmetic test. The same tests would be given to a student in the sixth grade; it's a multiple choice examination -- the kind of questions that I used to give kids and that I used to get when I was a kid, a warm-up that you do in your head, no pencil or paper; it used to be done in the beginning of the period, and the passing mark for a prospective teacher on a sixth grade arithmetic test is 65%.

Thirty-five of the prospective teachers failed and a lot of those who passed got between 65 & 70. Now imagine having a class where the kids are getting all the answers right but the teacher's getting one out of every three wrong and telling the kid's you're wrong. Well, that's what we're getting. This is the extent to which we've improved. Let's not knock it. We are keeping out the 35% which got below 65%, but we also know we all have a pretty good picture of where we are.

Well things are going to get worse because basically we have always staffed the schools, not on the basis of the attractiveness of the job of teaching, but on the basis of finding refugees who are fleeing some other problem. For instance, there was the great depression of the 1930s, which was the best thing that ever happened to public education in America. Teaching was a job, it was a steady job, it was a good job so people waited 6, 7, 8 years to be

appointed to be teachers and you could pick the top of the bunch. They are all just about retired right now. You may have two or three left here and two or three there, but they're gone. That was the best generation of teachers that this country ever had. Then came military conscription between World War II and the Vietnam War. We got a lot of very brilliant men who came in and they preferred to fight in Brooklyn rather than Korea or Vietnam, and there was a draft exemption and a lot of people decided that that was the way to do it.

Well, that gave the schools a lot of talented people and we don't have a draft anymore.

Yes, it's becoming increasingly more difficult to find top rate citizens who want to teach. I don't know if you saw it about six or seven months ago, the Wall Street Journal had a whole tabloid section on women in business and inside there was a chart which had 1973/1983 and then it listed a bunch of things like banking and finance, business management, dentistry, law, etc. It listed 15 different occupations and professions. They listed 1973 the percentage of baccalaureates and masters degrees awarded to women in '73 and in '83 and the title of the chart was the new majorities. Now the number of women basically shifted from 5-15% in each of these fields to 40-68%, huge changes. Now that's great for women and for human rights and for the country, but who will become our teachers? So basically,

for the first time teaching is forced to do what other businesses do and that is to rely on market incentives. See, we didn't have market incentives in the past so in a sense you had other things happening, you had the depression and military conscription and discrimination and that brought people to view education as a sort of haven. So now, basically we don't have anything like that. So, that's the teacher side of it.

Now this should lead us to some conclusions. Unfortunately, it doesn't lead a lot of the people in the school business to certain conclusions, but it's pretty obvious. Twenty-three percent of all college graduates is what we need. Now we don't want the bottom quartile, obviously, because they're the ones who can't read, write or count very well. Suppose that we had a reasonable standard, for instance, suppose that we said we want these people to be in the top half of all college graduates. That's not unreasonable given the standards in colleges today. Not unreasonable at all, but that would mean that we would be buying into one-half of the upper-half of all the talent in the country. What chance is there that one institution could get that, practically zero. And not only that, if we could get it, should we get it. I mean, can you really deprive all others. I mean our society doesn't just flourish on one institution. So the answer is that we now have a structure of education which requires that we get such a large share of talent that it's not rational.

We either get a large share of the talent or we get a large group of people who border on illiteracy or innumeracy. In which case we also have a problem.

Now that's kind of a clue and the clue is that you had better organize things differently than the way you organized in the past. Because if you require a section of the workforce at a given level of talent which you can't possibly get, then you are obviously doomed to fail.

That's what some of the second wave of reports like the Carnegie Report are about. They're about changing the staffing structure so that teaching can get its fair share of the outstanding talents and structure the schools in such a way that they are more like other institutions.

The other institutions don't have all the best and the brightest. They get a share of those people and they try to structure the institution so that there's a relationship between the best and the brightest and other people who are good too, so as to uplift through some sort of cooperative team effort, so as to raise the level of functioning/productivity in the entire organization. You can't do that as long as you have teachers watching themselves in the classroom because then you have an outstanding person locked in with one bunch of kids and you have someone who's not so good locked in with another groups of kids -- so you have to do something about classroom as well. Now, you have to touch on three things.

The three things that are usually offered as the answers and that I had offered for many many years as the answers for what will attract and retain teachers are 1) higher salaries -- okay but there are 2.2 million teachers in the country, that means every thousand dollar salary increase increases the budget by 2.2 billion dollars. One thousand dollars won't do very much. In order to really do anything, you would probably have to move from the current average national salary, about \$24-\$25,000 up to about \$35-\$36,000 and the cost of that with pension costs and social security costs and other things would be a little over 30 billion dollars. Now remember that the largest federal program in education, Chapter One , is about \$3 billion dollars. So we're talking, as I say, "real money." Not likely to happen. And by the way, if the medical profession had decided in 1900 that everybody that decided to work with a patient who was sick had to be an M.D., that there were no nurses, no nurses aides, no orderlys, no x-ray technicians, no pharmacists, today we would have 6 million physicians in this country all earning teachers salaries. Because you're not going to pay 6 million people. By the way, you wouldn't get the same talent that you would have in six million people. There aren't 6 million people in the country like the 500,000 who are doctors so you make a decision when you decide that a certain occupation is going to be a mass occupation as against being a more elite occupation.

The second thing that everybody says you have to do is reduce class size. Now, I don't want to argue with the researchers as to whether the research proves or doesn't prove it. But let's just take it from a common sense point of view. We really don't want to graduate kids who just know how to take multiple choice exams. We want to graduate kids who know how to think, who know how to evaluate, who know how to express themselves, who can defend a point of view, who can pick an argument with someone else's point of view. You want to have people who can function on an intelligent basis. Now how do you do that, you do it by getting kids to write because writing isn't just writing, it's organizing your thoughts and if you're a secondary school teacher and you have thirty kids each period and you teach five periods a day (which is a typical schedule) that means you see 150 kids. So if you assign a set of papers that means 150 papers and if you take 5 minutes to mark each one. And then if you spend five minutes with each kid saying, Johnny is this the best way to start? Isn't it boring? Would you be interested in that, give me a second way, give me a third way, now how about this thought you have in this next thing, and you get Johnny to rewrite it and that gives Johnny a chance to organize his thoughts, to write outlines, to stand up and say a few things, etc. Well you have 150 papers and if it takes you 5 minutes each, the coaching and marking that's 25 hours. You're not likely to do that very often. So reduce class size, well for you to reduce class size what

do you have to do? You have to hire more teachers and I just said there was a shortage of teachers. And if you hire more you're not going to get more brilliant people, you are going to get dumber people, you're going to go deeper and deeper into the talent pool. So you're not only spending a lot of money but you also reduce the standards of those people entering the profession and even a 20% reduction in class size, that is from 30 down to 24, still wouldn't relieve the teacher that much in the marking job. You would go down from 25 hours to 20 hours so it's not doable. Under the current structure it's not doable.

The third thing is that you cannot keep very many talented people spending their lives locked up in a room with a bunch of kids. Most intelligent people don't want to do that. They don't mind being with kids, it's stimulating, just as doctors must see patients once in a while, lawyers see clients. I mean we all deal with clients but we deal in an adult world with our own colleagues, that is unless there is some time for adults to relate to each other and to share ideas, there becomes a very isolated experience and it becomes a lot more like being in jail or it becomes much more like a custodial institution than one which has some sort of intellectual sustance and professionalism.

Well there again, in order to do that you have to hire more people and to hire people means to lower standards under the current structures. So, what I'm saying is that if you continue to have classrooms in which the teacher stands up

in front of the classroom and lectures to a bunch of kids from 9:00 in the morning until 3:00 in the afternoon, and if you require 2.2 million people of a certain caliber, that caliber is going to go down and down and there is no way it'll work. (I mean we can require kids to take math but the math isn't going to be taught by anybody who knows any math. We can require that the kids have four years of english but it will less and less frequently be taught by someone who knows english.

Now let's spend a minute or two looking at it from the student's point of view. First let me say that we are on a pendulum swing right now. We've got about 75% retention rate and 24% drop out. However, if we follow all the reforms in the last 3 1/2 years, our schools will become a lot like the schools I went to in 1939. That is that you would have take Shakesphere and not television or comic books and you would have to take three years of math, two years of science and a foreign language and so forth. So what would happen if the schools were to become like the ones that I attended? Will they get better? Sure, they were wonderful schools for me. But in the years that I went to school, 76% of the kids were dropping out. So there is absolutely no question that if you take a system that's been very loose and a lot of the reason why kids had been staying is they knew if they would hang around long enough and breath that they would get the diploma and all of a sudden you tell a kid who can't read, write or count

that from now on you will absolutely not get a diploma unless you can do the following chores; pass the following courses, pass the following examinations, of course that will motivate a hand full of lazy kids who could have done it all along but weren't doing it because they watched the breathers and they said well if that's all they're doing that's all I have to do so we'll get the smarter kids, the ones with all sorts of advantages will do a little better. They might do a lot better, but we'll go right back to a 75% drop out rate. It may be more than 75% because we don't have the same family support system today that we had in 1940-1941. So we're about to move into something that instead of being an improvement might be a disaster.

Now, there are certain things that happen in school structurally which make for a lousy performance and basically what we do with kids is we batch process them. Just think of someone inventing an institution where you you take 6, 7, 8 & 9 year olds and say that the best way to have them learn is to have them sit still from 9:00 in the morning until 3:00 in the afternoon and listen to an adult talk to them. Who would think that there would be a good way to have kids learn? And they'll all have to do it at the same speed and at the same rate and at the same time and if they're absent sometime, too bad they have to find a way of catching up. Well, take a lot of research that we have, you know they just take a whole batch of kids in and they say "you're all six year olds, you're now in the 1st

grade." Well you know they're not all six years old because the oldest kid in that class is one year older than the youngest kid. You're taking in one year's worth of kids.

Now guess what the research tells us, which of those kids are going to succeed, the oldest ones. By the way, then you put them all in the same class you're telling them "you're all six year olds, you're all the same." If you're not performing the same then you're the dumb one, you're the slow one, you're the strong one, you're the smart one. You're forcing them to compare themselves with each other by saying you're all in the first grade and you're all six year olds. Well, research shows statistically that the same kids, the ones who are year younger, are gonna get constant messages telling them that they are dumb and they'll have a much higher drop-out rate. Not because they're dumber. A higher I.Q., kid who is put into a class where he's told he's the same as this lower I.Q. kid who is older and doing much better is constantly getting signals that he's dumb. Everytime a teacher calls on him and he stands up and doesn't know the answer to a question, guess what, there goes his ego. So that's the other thing that we do in school. Learning in public so that when the teacher asks you a question, you stand up in front of 29 other kids and you get exposed. You either get the recognition that you are one of the smart ones, one of the leaders or you get exposed. How long would you keep

trying in anything if you kept failing.

Well, we've got a lot of things like that in school, I'll give on other. Some kids just entered high school a few weeks ago when school opened and student says to the teacher, "When do we get our final mark." The teacher says next June. Well, if you're like most people, this is September and the final mark doesn't come until next June, how serious would you be about your work that first night. You have a long time. I wouldn't be that serious about it. By the way, if you were the teacher, how serious would you be about your work that first night. You have a long time. I wouldn't be that serious about it. By the way, if you were the teacher, how serious would you be if you felt you had nine months to get all the work across. So what happens is that kids don't do the work the first night or second or third or fourth or fifth and then right about now (October) he comes to class and realizes that he doesn't understand a thing the teacher is saying anymore. He fell behind. What's the rational thing for that kid to do (drop out)? Everyday I stay here is going to be more of an embarrassment. I'm going to be called on, I'm going to stand up, everybody is going to giggle when they know I don't know the answer. I'm going to leave. What are the chances I'll drop back in again next year?

Now my youngest son didn't do very well in high school. He graduated but he didn't do very well. Besides he didn't

have to go to college. He wanted to work as a dishwasher, then he started working in restaurants. He started making salads, soups and one day he came to me and said he wanted to enter the CIA (that's the Culinary Institute of America). And I said, alright I'll try it. He got in, and he's now about to graduate (and by the way it's a very tough program). Now what's the secret to the program? They take a lot of kids who didn't do very well in high school and they turn them into scholars. They really do. They have to learn a tremendous number of things. I'll tell you one of the secrets. The semester is three weeks long. The minute you walk into class you know that the final judgement is 21 days to come. Not only that, but if you talked in class, how much have you lost? If you run off with your girlfriend for three weeks, you can come back in three weeks. You don't have to wait a whole year.

So what are we talking about? Basically there is now a new round of reform that essentially says that schools today are very much the way were in 1776. A bunch of kids, teachers, lecturing and everybody doing things all at once. It's no good for the kids and no good for the teachers. The way to have a profession where people make more money and which is more attractive as a career, and the way in which to provide more time for teachers to work with the kids on an individual basis, the way to provide more time for teachers to engage in professional exchanges with their colleagues, and the way to develop the school in which

education is not a lock step sort of thing, where you have a lot of these structural aspects that essentially defeat students, is to restructure schools to be something totally different from what they are now.

How do you restructure? Well let me give you an example and then apply it to schools now. Think of another educational institution that's been in our society for quite a while. The boy scouts. I'm serious now. The boy scouts have a curriculum. When you join the boy scouts you are nothing, and then they give you a little card and put it in your pocket. It has a bunch of different tests you have to take, like you have to know the scout oath and the scout law and you have to know X number of knots. You become a 1st class scout and there are a bunch of requirements for 2nd class, 3rd class, etc., all the way up through being an eagle scout. Now the scout master never stands in front of the 40-50 kids and says now kids, today I am going to lecture on how to tie ten knots. Half the kids have done it already, the other half don't want to do it today. It's individualized. Somebody goes up to teach one of those kids and says what are you going to work on today? Johnny wants to work on knots. Scout master says "Okay Johnny, this is going to be very hard but we'll try it." Take the handbook. Here are the three easiest knots, they are all going to be very hard, here's a piece of rope. Sit over there and see if you can copy those three and I'll take a look at you in a couple of minutes. And Johnny

tries. He goes over there and sees that Johnny isn't doing it and says, I told you it was going to be hard Johnny. Let's try something else now Johnny. I'm going to take out of this closet a board which actually has the knots with the ropes on it. You can pull them off. You can look at the front. You can look at the back. You can see if you can copy that. Try that and then if that doesn't work, you go over and say "that's tough too Johnny, go over there to Fred and sit down with him. Fred will show you how to tie these." Fred has a lot of wonderful stories like this end of the knot is a tree and this is a rabbit and the rabbit goes around the tree and down the hole and comes back and then he's got all these stories that will get you to remember.

Now think of what all of this means. It shows us how teaching is not a form of lecturing. It says that a teacher essentially is the person who connects the kids with an experience. It could be a book, it could be a knot board, it could be another student, it could be a game, it could be a videotape, it could be an audiotape, it could be a computer, it could be all sorts of things, but don't view the whole thing as lecturing.

Furthermore, the kids don't have to do everything at the same time. Every kid is doing something different and is doing it at his own rate. So think of a school that's reorganized on the basis that you have a specific

curriculum. I mean, the boy scouts is not a progressive institution in that sense. The kids don't become eagle scouts by learning what they enjoy. I mean, they can come to enjoy it. They learn what they are told that they must learn, it's a specified curriculum.

You have a curriculum, now think of a school which is no longer organized with 2.2 million teachers. Now, you don't have a bunch of kids sitting and listening to one teacher but you have a differentiated staffing scheme. So that you can have the equivalent of doctors or board certified teachers. You have a national system of board certification run by the profession itself that says that these people, maybe 1 out of 5 or 1 out of 4 or 1 out of 7 are characters. They understand the computer, they understand how to train interns, they understand a whole bunch of things and together with them you will have people who are instructors, and perhaps have people who are retired from the military and business who would want to play a role in the school but who are not professional educators. You will have interns and residents just as hospitals use interns and residents to do some of these things. You will even use some of your better high school kids. Because one very good way of learning is to teach somebody else to work on it. It would be a nice thing to identify some of those successful students and to have them teach something. And, there will be a very heavy use of technology. Why should 2.2 million teachers be trying to

figure out what drawing to put on a blackboard to explain to the kids how the Grand Canyon was formed when there exists at least 10 excellent videotapes that could be used at home, in the library, individually in the school that explains to a kid how this happened. After all, when I went to school there was no choice. Either the teacher brought in her own slides, (movie projectors were not yet the kind of things that a school would buy in those days), there was no television, and we didn't have a radio set until World War II.

But today, think of all the things you have to work with. I mean, how great a lecturer do you have to be to try to compete with what is already available. Very heavy use of technology.

So, what we're talking about now is essentially differentiated staff, board certified teachers could earn \$100,000. When a person becomes a teacher, they don't know whether eventually they are going to become board certified or not, just as if you become a lawyer and are going into a law firm, you don't know whether you are going to become a senior partner, eventually, that may be your ambition. But bright people go into fields if there are opportunities in those fields. And once a field attracts people like that because there are opportunities to move (and by the way, since you're not lecturing now, you've got time to talk to other adults). You've got time to meet individually with

John and Mary and Martha while the rest of the kids are working with technology or interns or residents or other things. You have time to do some of the professional things that you have not had an opportunity to do up to now. What this would do also is to turn around the image of teaching. I mean, part of the problem now is if you are a kid in college, if you go up to our professor, he says "What are you going to be Albert?" And Albert says, "I'm thinking of going into teaching." The professor says, "You Albert, but you're so smart." People don't want to go into a field that has a reputation of having illiterate or dumb people, because maybe their girlfriends or boyfriends or relatives will think that it rubs off, guilt by association.

Well, what's the obstacle to all of this? The obstacle is that the entire curriculum has to be redefined. You almost have to say to people, how would you teach everything that you are always supposed to teach without lecturing and without forcing kids to sit and be quiet? That's a good assignment, go home and do that today, figure out how you would teach just one lesson on one subject by doing that. Secondly, you have to develop new forms of staffing, of testing, so forth. It's happening. Carnegie has financed the creation of a national board certified examination and people in Stamford are working on it. There is an interim board on which I sit, the National Professional Teaching Standards, and next year there will be a permanent board so

the equivalent of the American Colleges of Surgeons and the group that puts together the Bar exam, for the first time in American History will be in place next year.

Now, what we need is essentially a lot of support at the state and local level to create schools like this. This really is very much like what GM is doing with Saturn. It's not abandoning it's normal production, it's not absolutely certain that Saturn is going to work yet, but it knows that if something like Saturn doesn't work, we are out of business in this country because our regular modes of production are not competing with the Japanese. And what we now need is not just a bunch of regulations, which is what the first wave of reform was. We now need a bunch of active projects to create a new productive system.

One final thing about financing and the structure of this thing. We do need some more money, but most needs will be financed with money that is already in the system. I don't know how many of you noticed about four weeks ago in the New York Times an article reported that the NYC Board of Education employs 130,000 people, 65,000 of hom are teachers. Well, that means 65,000 are not teachers. Why would any system in which the point of production is teachers have 65,000 people who are not teaching? Well, I'll tell you, if you hire a lot of people for \$12,000-\$13,000 a year you've got to hire somebody else to watch them. No seriously, it's not only a NYC figure. What

percentage of all the operating funds of all the public school systems in this country are used for teacher's salaries? Thirty seven percent, ten years ago it was over 60%. See what we've done progressively is to lower and lower intake standards and then assume that we have a bunch of ignorant people down there that need more and more people to watch them and to tell them what to do. Anybody who is in any system of management or professional firm knows that that's idiotic. You know that the best way to get things done is to have people do it at the job site and therefore you have to have people smart enough to make decisions. Because decisions are always best made there, but they can only be made there if you have the quality of personnel at that level whom you can trust. So, what this whole system that I'm talking about begs for is to have outstanding board certified people as part of teams upfront working with other adults and with students. Essentially it means that you could, over a period of time, phase down this huge structure that you have watching those other folks because you would build the watching into those upfront teams instead of having them downtown at 100 Livingston Street.

I've left a lot out but that's the nature of these discussions. So why don't I stop here and instead of continuing a long speech, make a couple of little ones in response to your comments and questions.

QUESTION:

Is there any organized opposition to the kinds of things that you are talking about? They all sound so sensible. I guess there's a cost to them?

ANSWER:

Yes. There's a lot of organized opposition. The National Education Association believes that all teachers are equal and therefore there should not be different categories of teachers. Our organization feels that that's the only way to professionalize and bring in good teachers. So there's a split among teachers.

Organizations of principals and assistant principals don't like the idea because they say that only the principal can be the instructional leader of the school. In this case, you are going to have board certified teachers who are certified by a national institution; as understanding something about education and this, therefore, diminishes the role of management. So this is the middle manager who says that the dumber the workers are the better off he is. And if you're going to have a higher level worker, he doesn't want any part of it because of the diminishing role. Individual principals are very excited about it and

want to cooperate with it. I'm talking about the organizations that represent principals.

School Boards don't like it because school boards can pick and choose (not in big cities so much, but in smaller towns) relatives, friends of school board members. But if you have a system of national board certification, it essentially says that the evaluation measure is going to be out of their hands. And they don't like that.

Colleges - According to this, every person who becomes a teacher in the future will be a liberal arts graduate. You would start in liberal arts and then go to professional school. In our system, we would do the same thing. We would have all prospective teachers be liberal arts majors and then they would do professional school together with an internship so that what they learn in the professional courses has a practical relationship to what they are doing in school. That does not happen now.

So what you have is several thousand undergraduate schools that have more than half of their students who are education majors. By the way, in our country, being an education major does not necessarily mean that you're going to be a teacher. Education is the easiest field to graduate in. It's the least intellectually demanding, and therefore, a lot of kids who want a college degree to go out and get some other job (they don't want to be teachers)

become education majors. Then when they come to work at your company, and you say "What did you get your degree in?" They say "education." What it really means is that they decided not to work very hard in college. But you do have a lot of faculties in those undergraduate schools and so you've got that problem. So there's a lot of opposition. There's also a lot going for it.

The National Governor's Association has unanimously endorsed this. Carnegie is putting about \$25 million dollars into this in terms of creating a lot of the institutions. You have some of the leading higher education institutions starting to develop teacher training along these lines. Those are your most prestigious institutions, like UCLA, University of Chicago, Harvard, University of Michigan, etc. They are in on this change in teacher education. It's going to be quite a battle. I would say, however, that the main point is not who's for it or who's against it. It's easy to say "This is what it's going to be like." But does it exist now? It doesn't exist. So can you sell something that's only an idea? No, you have to sell something.

There are 40 million kids out there being educated. There are 2.2 million teachers. What you need are several hundred thousand models across the country. You have to put the technology into some of the schools. You have to get a whole bunch of teachers who are excited about this.

You have to get parents who are going to volunteer for this because right now, if a parent walked into a school that was being developed this way, they would say, don't sacrifice my kid on this experimentation. That doesn't look like school when I went. So the next step is a creation of models.

QUESTION.....inaudible

ANSWER:

No, because what we're talking about here is how kids learn -- and what we're talking about is very close to the learning process. There's nothing about decentralization that's close to the learning process. The answer to decentralization was known long before, namely would kids learn any better if instead of having one school district and one superintendent there were 32 school districts with elected boards with 32 separate superintendents.

Well we've known this because most of the rest of the country has smaller school districts and they elect their school boards, and they hire their superintendents and their kids didn't learn any worse or better than our's did. What that means is that if you have a little more or a little less grab, it's a little less expensive to conduct your administration. It was very clear from the

beginning that blacks in that particular time in history decided that they weren't making it through integration, and the new term was "black power." Black Power on one level meant give us a certain amount of states as compensation for slavery, (that was one of the issues). But on the New York level it was give us all of the districts where our kids are in the majority so that we can hire our people to be teachers and have jobs, and we can buy books and supplies and do construction and repair for people in our community because if we're not going to have an integrated society then let's have an ethnic society where you have local control and where the money can provide economic development and opportunity for members of our group. Then there were some people who tried to put on a face that of course children would learn better if they had role models of their own.

Well, everybody knew that black kids had black teachers in the South for centuries before and that if that black kid and teacher resulted in one learning then blacks wouldn't have the gap that they have today. But anyway, that was a whole different set of issues. What we're talking about now is how kids learn. Do they learn better individually or in groups? Do they learn better if they're exposed or embarrassed in front of their colleagues? Is it fair to put a kid who is a year older with a kid who is a year younger? If a kid doesn't learn one way, is it good to have two or three or five other ways of approaching the

kid or does he have to learn the same way with everybody at the same time? If you can't get 2.2 million teachers of the quality you want, is it better to move into a team approach where you have an outstanding person together with other people who are good and who work with each other?

Baltimore last year gave a test to prospective teachers. The test was very simple. They said to each prospective teacher, write a note home to a parent telling the parent about something the child did today either something good or bad and advising the parent to somehow use this in terms of developing a better relationship with the kid. A large number of teachers were found to be illiterate when the exams were marked.

And so the school district sent them a letter saying "You're not being hired because the note that you wrote was illiterate." But this was in May that they were told they were not being hired. Then came September. Now education has a special phrase. The phrase is called "Labor Day Special." The Labor Day Special is those teachers who are still looking for jobs on Labor Day. So these teachers became Labor Day Specials and they were sent telegrams telling them they were hired even though they were previously told that they weren't because there were no other teachers available. Now, that's happening all across the country.

Now remember, when you put a student into a class with a teacher like that for a whole year, that kid might not be just losing a year's work, that kid may be losing the desire to learn. What is important is not the number of facts that you pour into the child's head, as long as you instill in them a desire to learn. If the kid's a little slower, a little faster, it doesn't matter. When the kid says "I'm not playing this game anymore. I don't like it," then education is finished, no matter what the rest of us think. Then it's all a ritual from the outside. Because you'll never pour in from the outside what the kid doesn't want to take in. That's what teachers like that do to kids. So you're really talking about a very destructive process here.

So what we're talking about now is a system that won't have people like that. We're talking about a team which insists that every kid have a relationship to a great teacher. Some relationship, not every day, not every minute. A lot of time they will be with the videotapes or with the audiotapes or with a book, but some time each day will be with somebody who is outstanding and who is able to communicate.

Now, is it possible it won't work? Sure it's possible. That's why we've got to try it first. But when you know that you're not succeeding in teaching that's what you have, the opportunity to rethink the structure that you

have and to try and develop a new process.

QUESTION:

How can business and industry work effectively with the educational community?

ANSWER:

Well, first I think you ought to adopt the philosophy that education is inextricably related to economic development and that therefore this isn't just this year's interest of charity or trendline or something that came out of Naisbitt or somebody else. You've got to be just as interested in education permanently as you would be interested in a tax policy.

It's just as important, and it has to do with the effectiveness of business and our economy on an ongoing basis. I think we need an organization in every state which involves the business community on an ongoing basis with what is happening in education.

For instance, in order to do some of the things that I'm talking about, it's going to take maybe twenty years. A Carnegie Report is like the Flexnor Report - it didn't turn medicine around in just one year. Many of us will be gone

by the time this takes place. But every five years you're going to be able to see things that are substantially different and are on the road to improvement.

Now you know that at one time the education people didn't need the business people. You had about 60% of all the voting population who had kids in school. But today with older people living longer and the birthrate down, about 22% of the voting population has kids in school. As a matter of fact, we're living in a period when there's going to be a massive transfer of public wealth to the aged from youth unless we are concerned. I'm not against the aged. I'm getting there. But I am very concerned that we do this seesaw thing and that if just the political strength of retirees and other people is so great that we take resources from youth and education.

What you need is an ongoing group that meets periodically and talks with educators and with people like those in Carnegie and other major foundations. And we need to do this as a group and with government officials at the city level. For instance, Ed Koch is absolutely certain that the business community doesn't care very much about what goes on in the schools. I doubt very much that there has been two hours worth of discussion in all the years that he's been mayor with any member of the business community about schools. He'll talk about police protection, about fire protection, etc.

I remember during the fiscal crisis, I was having dinner with a leading member of the state assembly, and every five minutes the phone rang and it was a businessman talking about keeping the local hospital there because something happened in their business and the ambulance came right away. Nobody called about schools.

Now, I'm talking about a support mechanism for increasing the use of technology or a creation of differentiated staff meetings. Essentially for monitoring what are some of the more promising ideas. How can the governor or the mayor or whoever is in charge (the school board) within each community understand that not only is there a teacher's union and parent groups, but there is a community out there that monitors this, that understands it pretty well and that has an interest in it and may from time to time make some noise if something disastrous is happening or will be there at your side if you need some help politically. The political help, I feel is more important than anything else.

QUESTION: inaudible.....

ANSWERS:

If you accept an analysis along these lines, I think that what you ought to do in a state like this is try to establish maybe 50 schools around the state that would function on the basis of a totally new model. Some of them in elementary, some in Junior High and some in High School. And essentially, they would ask the question that given the demography of teaching and given the talent you want, how would you restructure the occupation in such a way that you could make use of the talent that you're likely to get or raise the level of talent. Secondly, I think in terms of dealing with not only dropouts, it's also dealing with those who don't drop out.

I don't know how many of you saw last week's release on literacy that came out of the National Assessment of Educational Progress. It's fascinating. It says we've done the job on the basics, everybody can read the Exit Sign and Stop and Go and Fire and they can even read very simple instructions. Ninety-five, ninety-eight, ninety-nine percent are literate to that extent. But the minute you have to take a look at an ad from a supermarket in the newspaper which says that this week beef is on sale for this and lettuce is on sale for that, and somebody has to figure out what it's going to cost and how much change they're going to get for a \$20.00 bill, you drop down very low. When you get up to reading the New York Times or the Washington Post, you're down to 24% of the general population and when you get to reading technical work in

college, it's about 2%.

The more frightening thing is when you get down to whites on the one hand and blacks/hispanics on the other. The differences are enormous in terms of achievement in each of those races. Remember, that now one out of every three kids in New York schools is either black or hispanic which means that the next workforce is going to be either 1/3 black or hispanic, and remember that we used to have 17 people working to keep each retiree on social security alive. We're now going into a period where there is going to be 3 people on the workforce for every social security person and one of those people is either going to be black or hispanic; and if that person doesn't work, we're going to have two people working, one to support the one on social security and the other to support the one who is on welfare. Now just ask yourself what sort of a society this is going to be. Not only what your standards of living are going to be but what kind of questions are we going to ask about whether our form of government works.

Third, it's devastating. So that means that unlike England or countries where they say "Well, maybe only 25% of the people in this country are smart so they'll pass the test and the others will drop out." There are countries where people say that. By the way, England is turning that around too. It doesn't work for them.

We essentially have to say that one of the reasons that only a small percentage of the people in our society is learning is that most people cannot learn by having people talk to them for 5-6 hours every day. And that we have only one way of approaching them and this is through a logical lineal mathematical reasoning that we are not using. And, we're not using enough other methods of experience to try to reach them. I mean, what do we do with our own kids if they don't understand something? We go through a process of simple things in order to reach our kids. If they don't know the different types of experience and different approaches, you would teach them and you would faithfully ask yourself why can't school do the same thing. But basically you need support for the kinds of things that I've been talking about and you would see a lot of our positions change.

QUESTION:

Mr. Shanker, have you put this into a monogram, something we can take back to our offices?

ANSWER:

I haven't done anything specifically for the business community. I have done something like this for teachers and administrators and I've also done it for college

students from the point of view of the difficulties they have in accepting the change and that's coming along real well.

I'd be glad to have the tape of today's session shaped up and get it out to interested business representatives like you people.