DOCUMENT RESUME

ED 185 243 CE 023 955

AUTHOR Martin, Edwin
TITLE New Directions in Vocational Education for the Handicapped: Implications for Research and Development. Occasional Paper No. 35.
INSTITUTION Ohio State Univ., Columbus. National Center for Research in Vocational Education.
PUB DATE Jun 78
NOTE 15p.; Paper presented at the National Center for Research in Vocational Education (Columbus, OH, June 1978).
AVAILABLE FROM National Center Publications, The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, OH 43210 ($1.75)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Access to Education; Curriculum Development; *Disabilities; *Educational Change; Elementary Secondary Education; Enrollment Influences; *Equal Education; Federal Legislation; *Federal Regulation; Job Development; Position Papers; Program Evaluation; Program Implementation; Program Validation; Public Education; *Research Needs; Social Bias; *Vocational Education
IDENTIFIERS Education for All Handicapped Children Act; Individualized Education Programs

ABSTRACT

The history of educational programming for the handicapped has unfortunately been one of quiet discrimination. This pattern has come from the evolution of an isolation-based society. Society is moving increasingly toward the human and equity-based treatment of disabled people. Reflecting some court decisions, the Education of the Handicapped Act (PL 94-142) requires school districts to redistribute their resources to provide appropriate public education to handicapped children. Although the federal government may help by putting in sufficient new dollar resources, it is primarily the problem of local and state governments. To participate in the federal program, PL 94-142 requires states to provide equal and individual education programs for handicapped students. This legislation will impact on other programming, such as vocational education for handicapped junior and senior high school students. The impact of the resistance to encouraging the participation of handicapped children in vocational education is that handicapped young people comprised only 1.74 percent of the total vocational education population as of 1975. Research in vocational education should focus on the characteristics of people who may be successfully integrated into evaluating program outcomes, job design, and modifying existing programs. Program models for handicapped vocational education students should be validated and then disseminated. (The authors' answers to questions from the audience of research and development staff are attached.) (EM)

Occasional Paper No. 36.

NEW DIRECTIONS IN VOCATIONAL EDUCATION FOR THE HANDICAPPED: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

by

Edwin Martin

Deputy Commissioner of Education and Director
Bureau of Education for the Handicapped
U.S. Office of Education

The National Center for Research in Vocational Education
The Ohio State University
Columbus, Ohio 43210

June 1978

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

PREFACE

The National Center for Research in Vocational Education is beholden to Dr. Edwin Martin for his lecture entitled, "New Directions in Vocational Education for the Handicapped: Implications for Research and Development."

The last two decades have seen significant attention focused on providing equal access and educational opportunity for handicapped students of all ages. Dr. Martin discusses the state-of-the-art as it relates to vocational education for handicapped students and implications for research and development that will allow for improvement of existing programs.

Dr. Martin's present position is Deputy Commissioner of Education and Director, Bureau of Education for the Handicapped, U.S. Office of Education. As director of the bureau, his responsibilities include directing more than $1 billion as direct federal aid for educating handicapped children and monitoring related federal efforts affecting handicapped persons in such programs as vocational and adult education, higher education, Headstart, and Gallaudet College. In a composite, he is responsible for the development of policy, planning, and budgeting affecting education of handicapped persons.

Dr. Martin served as Deputy Associate Commissioner of Education for the Handicapped from 1967 to 1970 and Director of the Ad Hoc Subcommittee on the Handicapped, U.S. House of Representatives in 1966. Earlier in his career, Dr. Martin served as Associate Professor of Speech and Speech Pathology at the University of Alabama.

Born in Oceanside, New York, Dr. Martin received an A.B. from Muhlenberg College, an M.A. from the University of Alabama, and obtained his Ph.D. in 1961 from the University of Pittsburgh. In 1974, Emerson College in Boston awarded Dr. Martin an honorary degree, L.H.D. for his work on behalf of the civil rights of handicapped persons.

Dr. Martin is a member of the American Speech and Hearing Association where he has served as Consulting Editor, the American Psychological Association, Council for Exceptional Children, President's Committee on Employment of the Handicapped—Executive Committee, and other professional organizations and committees.

During Dr. Martin's career, he has published both articles and books in the area of handicapped. Among his latest are: *Learning Disabilities,* "The Right to Learn" and "Integration of the Handicapped Child in Regular Schools."

On behalf of the National Center and the Ohio State University, I take pleasure in presenting Dr. Martin's lecture, "New Directions in Vocational Education for the Handicapped: Implications for Research and Development."

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

NEW DIRECTIONS IN VOCATIONAL EDUCATION FOR THE HANDICAPPED: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

The history of educational programming for the handicapped has unfortunately been one of a kind of quiet discrimination. I say that with some fear and trepidation because I don't think people have meant to discriminate against the handicapped. I don't think it's been an active bias. But there has been a pattern which I call discrimination because I think the society and the people in it don't operate by accident. If we see a pattern of failure to provide equal access to public buildings, equal job employment, equal educational opportunity, equal housing accommodations, etc., we tell ourselves that this pattern is not all chance--what is going on? Why is this the way? I don't pretend to know the reasons. I have my own theories. Some of them are practical, and some of them are probably depth psychological, but they relate certainly to the fact that there are cost implications. It costs more to educate handicapped children; it costs more to provide access to public buildings, particularly if it is done after the fact, which is the way society has done it. If we had done it in the first place, it wouldn't have been that costly. I have a little game I always play. I watch how many people walk up the ramps and how many walk through the doors that open automatically. I discover that most of the able-bodied people use those devices. They find it easier than climbing steps, and they certainly don't open the door by hand if there is one that opens automatically. I have a hunch that as we build those designs into society at large, the non-handicapped will profit as well as the handicapped.

I think the discrimination pattern historically has come out of the evolution of the societies. If we look back to primitive societies, we find that in very few of those societies there has been no other response than rejection of handicapped people. In some instances, there has been actual destruction of life and isolation. Our society evolved into essentially an isolation-based society. That's why we have state hospitals, state schools, and separate programs, etc. But it's evolving increasingly in the direction of a very humane, a very equity-based treatment of disabled people. My own guess as to why we've done that is that we're all human and we're all finite. That's the great hang-up in life--being finite which means that we can get sick and die. That is a scary thought, and I think when we see disabled people it stirs that thought in us. It stirs the fear of our finiteness, and it stirs the fear of our children's finiteness, etc. Visiting ill people in the hospital, going to funerals, and all the things we have to do that face us with death make us uncomfortable. That's one of the reasons we unconsciously have tried to keep activities like that out of mind. An other example which doesn't concern the handicapped is the slowly dying taboo about saying the word "cancer." One of the ways we protect ourselves from that particular degree of finiteness is to try to close out that kind of thinking. I think that's what has happened to disabled people. In any event, whether it has or hasn't, the happiest event of recent years has been that we have a country which is committed to an individual--committed to the premise that the individual is more important in many dimensions than the society at large. It's not an easy commitment to make, but it is shot through the American fabric we are based on--as opposed to many other cultures. That's why in our First Amendment and in our Bill of Rights Amendment we find attempts on the part of the framers of the Constitution to protect the individual against the excesses of society, and not the other way around. Now sometimes people say things that make others unhappy. But the fact is, the system conspires to try and allow people to have a say, based on a great wisdom of the framers

of the Constitution that, in the long run, the country was healthier when we kept the government from keeping everybody quiet because it allowed the political system to work and it allowed the people to be, at least reasonably, in charge.

That could lead nowhere but to the gradual assumption we've tried to help promote--that the educational program for the handicapped is not a charity. It is not an extension on the part of the haves to the have-nots based on some charitable impulse--not in this particular country, not in this particular society. That's the way it has been. The problem with charity is we do a little bit more as we can afford it. If we can't afford it, we stop doing it and the assumption is not that we're going to meet a finite need. Some very effective charities do a good job of setting their goals and trying to meet them. Basically, an educational program for the handicapped is not charity. Charity orientation is based on the premise that this is desirable to do. It's different from charity in that it's built into the educational system. The school systems--higher education, elementary and secondary, and vocational education--have operated on that premise--that is, that special education for handicapped kids was a good activity, and we should do it as resources allowed but that it was not the first commitment of the schools. The first commitment is to the non-handicapped child. After that, if there are enough resources, we have a commitment to the handicapped child. In other words, the legislative bodies and school officials have tried hard to combat that. A series of laws has been passed--most of them were at the state level. The first laws were what we call permissive laws in special education, that is, laws that said it's okay to educate your handicapped kids. They were usually coupled with an incentive--a dollar incentive. That worked to some extent. For example, in 1966 when I first came to Washington, about 25 percent or a third of the children in the country were in special education programs. There was a second generation set of laws--those laws requiring the education of handicapped children, again providing extra dollars--resources in most instances. They didn't work well either. There was not a single state that had mandatory laws that had approached 100 percent of full services for handicapped children.

Then the parents, with the help of some of the lawyers who were trained in the civil rights movement of the late sixties, began to see the comparisons between the precedent that was set in Brown vs. the Board of Education in 1954 that led to the desegregation of the schools and the rights of handicapped children. So they began pressing suits, the most widely known of which was the suit in 1971 where Pennsylvania agreed to a consent decree in a case brought by the parents of retarded children. The parents said their handicapped children, particularly retarded children, had been excluded from school. The phrase was that they didn't have compulsory education for the retarded, so they were excused. But the fact was that they didn't get in. So no matter how you frame that, the parents wanted them in, and the courts were leaning in that direction. The state agreed that they wanted to do that, and so the case was settled before judgment was made on a consent basis. Then a few years later in the District of Columbia there was a case against the school district in the District of Columbia which extended that principle of the retarded into the handicapped, in general. The case also made a very important but painful point which is that the District of Columbia said it didn't have enough money. It wanted to do this but just didn't have enough money. The courts said no government has enough money to do all the things it wants to do. That's just the way it always is. It's true in the District of Columbia School System; it's true in the District of Columbia, in the government, and in the state. Nobody has enough money to do all things that society needs, so that's not the problem. The problem is how the money is distributed. Is it distributed in such a way that certain groups pay the price of that insufficiency more than others? We have to redistribute the resources in such a way that, while there may not be enough, we cannot find a group that's bearing that price more heavily than others. Here's a very simple piece of logic, the kind you and I use in our own family. If we have a new baby born in our family, we say we'll have to spread the resources somehow. Well, that's really what the courts said to the District of Columbia. That's really what the new Education of the Handicapped Act is saying to

16,000 school districts in fifty-six and fifty-seven state education agencies. It's a colossal problem, particularly when the systems are structured. To solve it we will need certain painful redistributions of resources. Perhaps the federal government--certainly that's my hope--will help by putting in sufficient new dollar resources to ease the transition period.

But it's clearly not the federal government's responsibility to solve this problem in its entirety. The two-edge sword works both ways, and some of us are bureaucrats to get it sometimes, but at least it serves my purposes to say today that this is not solely a federal problem. This is primarily the problem of all the local and state governments because that's the way education is organized. The federal government's role is to try and help bring about what should have happened in the first place, which is an equity role, rather than inventing a new idea role. Nevertheless the practical reality is that we will profit if we can help to perform this role. Figures on the amount of federal funds quickly become outdated. For example, the House Appropriations Committee agreed this week to the sum of $535 million for the states alone, in addition to another $150 million for other programming, the vocational education money, and Title 3 of the SEA, etc. So the real sum runs now more than three quarters of a billion dollars and is growing very rapidly and might well double within a year or so, if the structure of this bill goes on.

Now 94-142 says that all handicapped children are entitled to a free appropriate public education, if the states want to participate in the federal program. Theoretically, they don't have to. They could say they're not interested in this, and some have said they might consider that option. But if we want to continue getting funds out of the Education of the Handicapped Act, which I point out is a rising curve, then we have to say that by 1978 we will educate all the handicapped children that we can find in this state between the ages of 3 and 18, and by September 1, 1980, the ages of 3 and 21. The ends of that curve are not really as mandated as the middle; that is those 3 to 5, and 18 to 21 are not really mandated. If the state has no practice of educating non-handicapped children in those age groups in elementary and secondary education, it does not have to educate the handicapped. The only premise is one of equity. All the states are educating 5 to 17 year-olds, so they will all have to educate the 5 to 17 year-olds who are handicapped. Some of them are educating non-handicapped people at those extended age ranges, in which case they'll have to provide equitable opportunity for handicapped people too. So, free and appropriate public education is the first premise. The second premise is that each youngster should have an individual education program. This plan would be guided by the school system by getting the people together who are going to work on the education of that child--the special class teacher; the youngsters in vocational education programs; the person who is responsible for that vocational education program, the regular elementary and secondary teacher, for example; some official that represents the school system at large--the principal, guidance counselor, or some other administrative agent; the parent; and where appropriate, the child. These people would meet at least once a year and lay out a program of short-term and long-term objectives. It's not a contract; it's not something that is supposed to be held against the school or against the teacher if you fail to deliver. It's a planning vehicle and the idea would be to try and encourage the dialogue between, for example, the handicapped children that will be involved in programming which includes several different instructional people and the school and the parents, so that they understand what's going on with their youngster and what the school hopes to get. Now if we were to put that into place today, as youngsters approach the end of the elementary school, the school would be having talks with the parents about their hopes for the outcome of that youngster across the junior and senior high school years. Where are we going with your youngster? College? Vocational education? What level of vocational education? What are the directions as we see them? That arena would be opened for discussion and for long-term planning by school officials. There could be some sense of getting some numbers so that a school system could say, here is where we are going. We're going to need this kind of capacity in the vocational education area. We're going to need this kind of capacity in specialized programming for

youngsters in basic language skills, etc., at the secondary school level. Most of special education has been in the first six grades and with a "tail off"; and we're not sure, by the way, in all honesty, why all that "tail off" is there. Not all of it is bad. Some of it is probably pretty good. Some of it means that kids can go into the system but most of us have the feeling that some of the kids drift through the junior and senior high and mark time, and they just get passed out the other end. So we want to try and avoid that if we can.

The impact on other programming like vocational education, to me, is apparent—if the school system of Ohio is committed to free and appropriate public education for all children, for many handicapped children, this will mean vocational education during their junior and senior high school years. That means we've got to know more about this, and we've got to develop some things. Theoretically, there's a penalty in this bill. I say theoretically; I mean literally. There is a penalty in the bill, but I think a theoretical meaning is the only one it will have. The theoretical meaning says that a district could lose its federal funds if it fails to provide a free and appropriate public education. Among the funds they would lose would be the vocational education set-aside funds for the handicapped, as well as the EHA funds and the Title 1 funds, and any other funds that are specified for the handicapped. However, under section 504 of the Rehabilitation Act which is the anti-discrimination provision against the handicapped, the 94-142 rules dealing with elementary and secondary education are fairly well adopted so there is a kind of catch 22—that under section 504 a failure could trigger off the whole weight of the failure to provide adequate treatment for handicapped and could trigger off a terminal case of federal funding. Those things in the past have not been valid political instruments. They very seldom have happened. First of all, there's a kind of perverse logic in the notion of cutting off the funds that are helping to do whatever it is we want to do, secondly, it's a big political hassle. So it doesn't ordinarily happen although there are isolated instances where the government, through the Office of Civil Rights, has, in fact, collided with districts, particularly in the area of racial discrimination and there has been some accommodation made in order to work out the resolution of those problems. I expect there will be a certain amount of litigation on the section 504 as well, not only against the local district and the state, but against us, probably, because if we don't take appropriate remedial action, the parent and others will feel as though we're not helping, so they would sue us right now. For example, HEW is being sued in that famous Adams vs. Califano case for failing to bring about desegregation in higher education institutions, etc. The suit is against the secretary and says he's not doing his job. There have been suits against two or three secretaries now—it's not Califano per se, but whoever happens to have that job.

Concerning vocational education and the handicapped, most of you who have been in this business long enough to know the struggle vocational education has had against a lot of role concepts that see the field as not being critical. We have that argument every year within the Office of Education when the planning people attempt to tell the vocational education people that they are not an essential element in federal education policy—that they are important but their role is not for the federal government. They never win, but in any event the argument goes on. Additionally, there has been a resistance to encouraging the participation of handicapped kids in vocational education, partly perhaps for the societal reasons I mentioned before, and partly because the vocational education people have had image problems of their own. The impact of that is that in the recent project base line report we see that 1.74 percent of the total vocational education population and 1.9 percent in Ohio are made up of handicapped young people as of 1975. The programs for post-secondary and adults are lumped together, and that statistic is lumped with the secondary level but they're not too different. They're about appropriate. Most of the states, by the way, are in that. That's both a mean and a median score although there are some interesting changes. Whether the data are accurate or not, I don't know. Some states such as Delaware have 10 percent. Arizona and Nebraska are a little bit higher—4, 5, or 6 percent, but the large states are at about the 1 to 2 percent

level. Now we don't know all of what that may mean. The most charitable thing it might mean is that there are a lot of handicapped kids in vocational education programs, but they don't require special educational assistance. Thus they are mainstreamed to the degree that nobody knows they are there. The least charitable is that they are not there.

Moreover, research in vocational education should look more carefully at the characteristics of people who may be successfully integrated in the programs. Do they, for example, come out of elementary and secondary schools, educable retarded classes, behavioral and disturbed classes, or classes for children with learning disabilities? I find that not a single superintendent that I know can answer that question. Almost everybody is interested in it, but nobody is doing anything about it. My own feeling is that the federal government may be a clumsy vehicle for trying to get that data. We somehow have managed to overload the whole capacity of the education system to provide data and, on the other hand, we don't know anything about how we manage to have the worst of both worlds. We don't have the answers to any important questions, and we've asked too much already but we've done it. At least that's what people feel. It does seem to me that without conducting national surveys there are small sample techniques by which vocational educators could attempt to get a notion of the demographics, the characteristics of programs, and the characteristics of children. That really ought to be the basis of any vocational education research. We could plunge into curriculum projects and into a lot of efforts that we assume are necessary, but we don't really know much about the characteristics of assisting yet. For example, the vocational education data that I mentioned to you include all the handicapped in one generic bundle, but they don't include whether the handicapped are retarded, deaf, or blind, which are very relevant educational concepts. So we don't know whether 95 percent of that number are deaf, and nothing is being done for anybody else, or whether 94 percent are all retarded, etc. It's not anything that a planner can use to work with, because we don't know what the system really looks like and where we want to go. We knew more about the system in education, for example, so that in our research program we have developed nine or ten curriculum projects. Most of them are for the educable retarded. We discovered that the teachers of educable retarded at the time were using different curricula for each separate class. If there were 15 EMR classes in Columbus, there were probably 15 different curricula, and maybe a common curriculum guide. On the basis of that, we developed math, science, adaptation of science curriculum, a behavioral sciences curriculum project for the retarded, reading, physical education, health, a number of curricula that are all, by the way, marketed commercially, save one. We had to have some sense of where the problem was before we knew whether to put it into deafness, etc. It turned out there was more in deafness than there was in retardation so we went the other way, and the numbers are much greater so it was a cost-effective way to go.

I also think that we need more evaluation of what is happening. The kids are now in the programs, but so what? What happens to them? Where do they go? Do they know what they need to know? When they get out on a job do they start over again from scratch or is their training relevant? I suppose this is the problem that exists in vocational education in general, as it is with special education. What is one of the outputs of the system that we're putting a lot of money into? In this particular case, it seems to me it's a really important dimension. Those of us in special education think that 80 or 85 percent of handicapped kids should be in vocational education programming or in regular education programming above that and that the number who can't profit is very small indeed—maybe less than 5 percent. So we think that there's a great market here, and we want to know where the kids are and what's happening to them. Does vocational education work, and if so, I would think that would be a great incentive to other vocational education programs around the country. Historically, one of the great arguments against education of the handicapped has been that it doesn't do any good—many feel the kids aren't going to learn anything; they can't do this; and we are all going to be wasting our time. Let's give them kind treatment and keep them in a warm, dry place and let it go at that. Let me give you one example—the

National Technical Institute for the Deaf in Rochester, New York, is a subset of the Rochester Institute of Technology. The last time I was there, there were almost 750 deaf young people enrolled, many of whom were integrated at one point in time in the regular educational program of that Institute. There were more than fifty vocational education career modules or possibilities involved. They have been growing very rapidly—probably seventy or eighty now. Ninety-six percent of the kids who completed their programs of study is being employed, and 93 percent is employed in their field of study. That was a small number. They didn't have all 750 in. They had about 150 or 200. They have very intensive programs not left to chance. Their placement program is very important and the choice of these modules is very important, very much related not to what they happen to have around but to what people are buying across the country. The whole area of market analysis counseling impact would be another major area for research in this area. What's happening now? What are the characteristics? What are the demographics? What is the market like? What's the market analysis? How about effective counseling? What, in fact, is required? What kind of placement systems are going to be in place? There they've found out you can't just turn them loose with the diploma. You really have to have systematic contact with various industries and build it from within. It's not a chance business.

Another important area is the whole question of job design, redesign, and modifying existing programs—taking a look at the assumptions. Our experience in special education has been that almost all of our assumptions were wrong, and almost always we've underestimated the ability of the handicapped kids to take part in things, and we've used curricula that were too simple. We had assumptions that were too simple about jobs that people could do. We had assumptions about physical education and recreation programming that suggested we should leave the handicapped kids out. They might get hurt. There is tremendous paternalistic tendency to assume that the kids can't do anything. Those of us in special education are not immune to that. We're just saying that our experience has been that we've been plugging along on a limited set of assumptions. Then some really smart and innovative person would set the level about two steps higher than where everybody was and, and lo and behold, it would work. Everybody would say we've got to do something about this and upgrade our program. I have a hunch that you will find as you get into vocational education for handicapped people that you will make that same mistake. You will assume that the very simple skills are the only things that people can do: the blind can't do this; the deaf can't do that. The research community can be extraordinarily helpful by pointing out through controlled experimentation and through analysis of job design and suggestions, if necessary, about redesign and demonstrations, that our assumptions will limit us more than the characteristics of the children. There is an issue of new technology that's interesting. It ties in with this question of redesign. We have funded two devices—one is an optical scanning device which reads print and then presents it in a tactile display under the finger of the blind person. It reads an "A." It puts an "A" up under the finger of the person. This is different from braille because people who have read braille cannot necessarily recognize an "A" when they feel one. It's tough. It's limited technology. Not everyone can learn it, just as not all blind people can learn braille, but for those who can it has been quite an important breakthrough in allowing them to respond directly to print. Right now I can put a letter on it, learn to press it, and I can begin to read without a reader, etc. It's a definite breakthrough. We've put a couple of million dollars into developing this and we're now marketing it, in the sense that we bought a million dollars worth this year. We're going to buy a million dollars worth in the next couple of years. We're giving them away to school systems, and we're using our training funds to train people to use them at not only schools for the blind, but also local education programs. A bureau like ours has to have training funds and research funds available at the same time to try and integrate these kinds of programs. It would be hard to do that if there was a special bureau running the training program for the handicapped and another bureau running the research program. We could never get ourselves coordinated. So we have been able to put that kind of impact together.

There is another device that is even more fascinating. It is an optical scanning device, but this one is hooked up with the computer and the computer, in turn, is hooked up with a voice generator. It then reads out loud to you--in a strange, mechanical voice--but it reads the print and reads out loud. It is really one of the most sensational things in principle you can imagine. It takes quite a lot of memory to keep up with all of the irregularities in the English language, and that's what the computer has. It also takes a lot of ingenious formulation to try and lay out the laws of the language the computer can use to predict how to say a given word. At certain places it breaks down but if you can't understand what it's saying, you can hit the repeat button. If you can't understand it the second time, you hit another button and it spells it out for you. So it is really a fantastic device. It costs about $50,000 to build one right now. But with the opticon, we have gotten down from $5,000 to less than $1,000. This machine has applications ultimately for translation of foreign languages and a lot of other things, too. So I think we will see more of that, but the point is that as part of our research we really ought to look at the new technology in other areas and see what kind of sirenetic interfaces this might provide to the tests we are doing. Obviously some of the people using the opticon now are doing things they couldn't do before, or did but needed help, for example, computer programming; and they find this extraordinarily helpful. There are a number of skills that these devices may help. Drawing on technology we also can develop devices that might be helpful for the handicapped too, in other directions. But my point is that if one were to set up a way to design vocational education programs with the handicapped and did not know about such devices, he/she would be limited in assumptions about what people can do. So it is important that we keep discovering what is happening in other areas to help us make interfaces between people and jobs.

The modifying curriculum we have touched on has worked in the past--we have modified biological sciences curriculum, environment curriculum, and personal growth curriculum. But I would not lunge into that until I understood better the issues and the barriers to the involvement of the handicapped people in vocational education. As you analyze those barriers you can then decide whether the curricular approach is important or whether a teacher redesign, in a sense, is important. My notion is that it will be important for regular classroom teachers as well as vocational education teachers. Somehow we need to get at that question of attitude. We've done a good job of training regular teachers to feel incompetent about the handicapped, incompetent about virtually everybody who might be a little different, unfortunately. The system has been based on a false premise that a group of people who are neat, normal, homogenous, and don't present learning and behavioral challenges of any great degree, exists; and another group of others who are, in the case of the handicapped, also neat and homogenous, but do present learning degree problems exists. We could put other groups in as far as that's concerned. But the fact is that kids are not that different, and the style of learning is not that different. The rules of learning work. The same kind of things that make a retarded kid learn happen to make a normal kid learn. We've done this to ourselves. It's part of the way we organize knowledge, but it's led us into some traps. In order to get programming for the handicapped we've trained specialists, and the specialists say they're the only ones who can do this. That's been okay with the regular people who don't want to do it in the first place. But we're in that kind of system and what you'll find is that we need to reorient the way we train people toward viewing the fact that they're going to find in the laboratory, in the classroom, or in the experiential setting that people have learning behavioral styles and that a kid with a mild or moderate handicap is not really a different beast. They are the same kids; they have feelings; they want to succeed; they want to be rewarded. I think we'll get past some of those hang-ups. We do need to validate models. We still live in a culture where we can experiment. If we see a great program in another city and want to take a look at it and then develop one, we can.

We've had a good bit of success in our early childhood models with validating models--getting the creative people in the country to keep data a little better, i.e., provide them with some technical

assistance about how to do that. We're starting to get now a body of information and knowledge that holds up to at least some semblance of scientific and professional scrutiny. It demonstrates, in fact, that preschool programs work for kids. They do grow faster than they would if you left them alone. They grow in some very interesting dimensions. One of the things that we've learned is that the ones that are parent based seem to work better than the ones that are not. That tells us something interesting that we haven't wanted to know either, but which is very helpful. We couldn't deliver the services if it had to be professional-based per child. The fact that these early education models that deal with parents and professionals interacting and having the parents delivering the services to the kids are, in fact, more effective, is very important. The other thing that we've learned from those models which comes up again and again is that the more structured the program is, the better it works. That's not something that those of us who are clinical psychologists, like myself, and phenomenologists like to hear but, in any event, that also seems to be true—knowing what your objectives are and laying out a specific course of action toward them seems to work better for disadvantaged populations, for handicapped kids, and maybe for everybody. This doesn't mean you have to go too far, but it suggests that some of our approaches to wanting to just set up a general enrichment curriculum may not be any good and may not work, so that we really ought to try and teach people what we want them to know.

The last aspect I want to mention is that after you validate those models you disseminate them obviously in a much more active and aggressive way than we have before. We need to market our opticon to not just say: we developed it; now let's see what's going to happen. We really need to develop some strategies and some sophistication using private resources, not the government if possible. In the case of the opticon, we felt we would do that but we will get out of that business as soon as we drive the price down to where it can be competitive for schools. But the whole question of the career education thrust, itself, and the introduction of work and work-related concepts into the lives of young handicapped children will be very useful, again because a lot of our thinking has been so paternalistic that we haven't wanted to cross that bridge and haven't done any realistic thinking or orientation of the kids toward it. Instead what we have now in place of vocational education in many instances is a kind of prevocational work readiness. The kids graduate and that's the end of the program and there never was any vocational education. It seems to me that we would be much better off trying to design something vocational/career into the elementary school program and into the junior high perhaps and then bridge into some really sophisticated vocational training and choices as we go along. I feel this in a very optimistic way.

I don't have any doubts that we're going to have a whole lot of struggles and maybe more litigation than anybody would want, but the direction is cast and this country has not moved back. It may move grudgingly into this kind of change, but it does not move back away from any real directions as far as extension of educational opportunity. I don't think we will move away from the principles in the last few years which have gotten disadvantaged young people into college, for example. We may expand them—the next step would be to try and offer more assistance to people of middle class ghettos so that they can get into college as well. But I don't think we'll go away from our earlier commitment in the area of education and in the handicapped area. I think we will leave the charity here or behind and we will open the doors to equitable opportunity. I don't think it will work very well as far as elementary and secondary schooling is concerned, or post-secondary, for that matter, unless the vocational education establishment, the researchers, the teacher trainers, and service deliverers, tie their work together. Over the years I have fought every attempt to sort out handicapped education from vocational education. I have fought to get the 10 percent set-aside, to set up separate vocational education systems within the special education program. We do not need more segregation of handicapped people. There are some kids who need special schooling but, in general, we need more integration of handicapped. We have the technology now that suggests it can work—both the literal mechanical technology and the learning technology. Promising vocational education programs for the handicapped exist throughout the country. They are certainly well documented in the clinical sense as regular education programs are. There's no turning back from this challenge, and I hope you'll help make it a success.

QUESTIONS AND ANSWERS

Question: What is the progress regarding the implementation of the individualized educational plan (IEP)?

The IEP would go into effect in September of 1977. It is part of a regulation that we are going into now. We have a fairly specific statute that lays out a number of things, such as short-term and long-term objectives. In the regulation we tried to clarify the statute and did a super job. I think we will retreat to the legislative language. We worked very hard on the regulations. We involved more people in writing these regulations than anyone in the history of the Office of Education had ever involved before. State people, local people, parents, and specialists of all kinds have been involved, but sometimes it is a hard business to convert a principle into an operation. I think we will have a simple approach to this problem and that we will have a full range of human ability to respond to it from institution to success. But it raises some scary questions. For example, the teachers' unions have asked us if this was going to be another vehicle used to club teachers over the head if the kids don't achieve the objectives. The school systems have asked us if the contract will lead to their being sued by the parents of handicapped children. We are going to try to clarify that it is not meant to be a contractual relationship. The school is not in a position to do that. I am hopeful that we can provide that. That doesn't mean that the school won't get sued any more than the schools are being sued right now for an implied contractual relationship to teach people to read, for example. There are such suits as that.

I think it will go into place, that it will become an interesting document at the least. If teachers can meet in some schools three times a year with the parents, I think we can do it at least once a year with the handicapped. I think it will work, and it may turn out to be an idea that may catch on.

Question: Are you finding the IEP being considered for students in general?

It might just go that route, but probably not right away. First of all, most parents don't hassle the school. I think some parents will say, "I think this is a sensible idea, and if you can do that, why don't you do that for my child, too." But so many children are on a track, right from here into Harvard. But when we start getting choices and have diverse school systems, and have a general track and a vocational track, and a college prep track and so on, I have a hunch this will become a document that will have some interest and integrity.

Question: Can you comment on the possibility of the gifted and talented coming under the PL 94-142?

Slim to none, I would say, for the near future. The Counsel for Exceptional Children has commented to that particular concept. They have recommended it to the Congress. I agreed to support it because I am very interested in what happens to gifted and talented children. We have a small program now which I would like to see expanded. It is a $2.5 million program which has given

some grants, one of which was a small grant for about $20,000 which went to the State of Ohio for hiring someone on the staff to get state education agencies to go out and jostle up some action at the local level. That strategy usually works over a period of years. We also have funded some model projects.

The reason I say slim to none is that the general response I get in the Office of Education and Congress is that with all the problems they have, this is not one with a high priority for the taxpayers' dollars. The general feeling is that gifted children will do okay. That is unfair, not always true, and it is a waste of talent. Society can do much better in many ways. It is true that a lot of extremely bright children will eventually struggle through. And somewhere along the line they will hook onto an area like math or science, and really go out beyond the end of the school, and program themselves. But it can be a tremendous battle for those children in the early years. If a child has artistic or musical talent, the school is a wasteland for him or her.

Question: Should a plan for coordination be developed for administering PL 94-142 and PL 94-482 as they relate to handicapped education programs for children?

It should. That is, both laws encourage that. PL 94-142 says that the state plan for other education programs that deal with the handicapped (e.g., vocational education) should be developed in a manner which will make them harmonious with the provisions in 94-142. The vocational education act itself says about the same thing.

There is increasing contact between the Vocational Education Bureau and ourselves. The vocational education research people and our research people have talked together. We read projects for them and they read projects for us, and so on. We have a task force working now with Dick Carlson, the Director of the Division of Vocational Education on ways we can do better. But it is interesting; there are really a lot of little problems—the data problem is one. For example, we wanted the vocational education people to collect data and to classify the category of handicapped, but between their feelings and their resistance to add greater elements to the data collection system, we really never carried it off. So there are going to be some problems, but I think the way around it is that each school district will have to make a commitment to all of the children who are handicapped in that district. There are going to be a lot of negotiations, but I don't think the federal government is going to get involved in many of them. I think they will be settled at the local level.

There also is going to be an individual education program. This program will have an impact on the vocational education system somewhere or they are going to try and start developing extra classes to do something with these children because they can't get them in the vocational education system.

Question: How do educators compare with different groups of people who intentionally disciminate against the handciapped? Is this not due to the fact that some educators have had very little contact with the handicapped and very little expectation as to how to treat or understand them? Does this not end up having implications in terms of educating the normal as to how to behave? Are you doing anything about that?

Yes, you are right. There is already a kind of backlash occurring. It usually doesn't take a straight-out attack on the handicapped people.

There should be an affirmative action program. This year we have more than $15 million in programs to work with teachers to try and provide them with information about handicapped children and about the kind of feelings they are going to have and perhaps some strategies that might be in place. We also have three large media contacts out now trying to develop material for both classroom use and for children's TV use. But we are struggling with this because not everybody knows what the game is, and those of us who would like to see it happen are not sure how to bring about attitude change and so forth.

Question: Can you comment further on the problems education has had with dealing with the differences which exist among students.

People are different and individual, but they are not that different, and individual. That is the saving grace in the dilemma you pose. We are trying to develop a system that has so much more response capability to differences than the one does now. I don't think this should just be done with the handicapped. I don't know how many of you have taught in a regular classroom or in a vocational education classroom, but my experience has been that there is a range of ability and behavior in a regular classroom. Teachers always have to adapt, to some extent, to the class; now this is with the normal group, too. There also are children who fall out at each end of the continuum. Both of those are true. The teacher bends some, the schools bends some, and some children fall out. Now that's why I think people have continued to explore small group placement. All the different innovations are designed to try and see if they can at least partially emulate the situation. I think the schools have to go in that direction for the survival of the "normal children." Now mildly handicapped children will fit in very well. I think we should expand our notion of normal. We should try and understand that normal is not quite so neat as we wish it was. I think that the system is working that way. I think gradually that that will help and then these two concerns will meet. The individualization that we have will help the children that we now see fall between the cracks.