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ABSTRACT These proceedings of a statewide Texas conference focus on the need for cooperation between the leadership in the fields of special and vocational education in order to meet the needs of handicapped students. Featured presentations (1) stress the necessity for this team approach at the top levels of the education-state agency bureaucracy as well as at the teacher level in the schools; (2) cite examples of such successful teamwork in two schools in Texas; (3) explore the issues of personnel development, accountability, communication, cooperation, and refining the delivery system in vocational education; (4) describe a program for vocational preparation of severely disabled persons; (5) explain the necessity for lifelong career education and vocational education for handicapped persons; and (6) reiterate the need for interagency cooperation and focus on employment. Mini-sessions reported cover practical approaches in vocational training of handicapped persons: behavior problems; modification of vocational curriculum and physical facilities for handicapped students; safety; litigation; Learning Opportunities for Teachers (LOFT) in mainstreaming; motivation; job placement; evaluation of handicapped students; maintaining vocational quality while training handicapped students; and attitudes toward minority handicapped students. A self-portrait of a successful handicapped person, given as a luncheon speech, is also included. (KC)
PROCEEDINGS

THIRD ANNUAL STATEWIDE CONFERENCE
ON VOCATIONAL SPECIAL NEEDS

"Team Leadership Training in Vocational Special Needs"

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In Cooperation with the
Department of Occupational Education and Technology
Texas Education Agency

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Project Director: Tico Foley
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College Station, Texas
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Admission to Texas A&M University and any of its sponsored programs is open to qualified individuals regardless of race, color, religion, sex, national origin or educationally unrelated handicaps.
The commitment, within Texas, to the appropriate vocational education of handicapped students is strong. This can be easily defended by looking at the Vocational Special Needs Program at Texas A&M University.

On the one hand, the state administrators working within the Texas Education Agency have given their ready support for three years to comprehensive inservice development. On the other hand, local administrators have consistently taken advantage of what the Vocational Special Needs Program has to offer.

The statewide conference, Team Leadership Training in Vocational Special Needs, is just one example of this bi-level commitment.

We of the Vocational Special Needs Program at Texas A&M University wish to express our deep appreciation to Dr. Leo Schreiner, Director of Personnel Development, Division of Occupational Education and Technology, Texas Education Agency. He and his work can serve as a national example of what happens when high-level state administrators give their support to an endeavor. We are also deeply indebted to Eleanor Mikulin, Division of Special Education, Texas Education Agency. No one will ever be able to measure how much she has accomplished in Texas for the vocational special needs student.
The steering committee not only helped in planning for the conference, but were also a ready source of assistance and assurance during the last hectic days before the event. Members were:

- Marty Abramson
- Lloyd Boyden
- James Christiansen
- Donald Clark, Houston
- Donald Clark, College Station
- George Dutton
- George Fair
- Harry Fullwood
- Al Goodwin
- Rebecca Haber
- Jerry McCasland
- Eleanor Mikulin
- John Morgan
- Doug Ojias
- Carroll Parker
- Tony Perinich
- Lea Scheiner
- Gayle Todd

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- Dick Kutches, Food Services
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- John R. Richards, Scheduling
- Sharon Welch, Printing Center

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- Pat Lindley
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- Merida McKnight
- Wade Miller
- Chris Palazzi
- Tony Perinich
- Mike Peterson
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- Ruth Quinn
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- Fim Swift, Jr.
- Frankie Swift
- Arie Wanza

Of course, no list of acknowledgements and appreciation would be complete without including the many fine presenters. The editors, Marilyn Kok, Tico Foley, and Nancy Atkinson take full responsibility for any inaccuracy or misrepresentation.
in the transcriptions. We also apologize. Unfortunately, due to faulty tape recorders, we are missing five presentations given by Camille Bell, Ralph White, David Wyer, Gayle Todd, and Clyde Barber. Again, our apologies.

Our typists, Janetta Bates, Sandra Patterson, Debra Teguns, and Tina Westphal, waded through hundreds (literally, over 2,100) pages of typing for these proceedings. Ken Petty did the fine graphics. Thanks to all.

But for all the preparations, all the presentations, provisions, and precautions, the conference would have been of no account without you — the participants!

Thank you for coming to our third annual statewide conference on vocational special needs. And, please, come again to College Station in the springtime of 1980. We look forward to seeing you!

Signed: Staff Members, The Vocational Special Needs Program

Linda H. Parrish, Coordinator
Janetta Bates
Donald L. Clark
Nan Crowell
Jerry Davidson
Tico Foley
Katy Greenwood
Marilyn Kok
J. R. Mathis
Kenne Turner
Tina Westphal
Lindy Wright
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Randy Gallaway

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"What a great time in the field of education
to face the tremendous challenge and promise
of rearranging our lives and the houses we
live in so that all people will be able to
profit fully from the character and personality
of our institutional programs."

Teacher education has been an active part of Texas
A&M University's work for more than half a century. And
even though our College of Education is only ten years
old, we in the college have approximately 10% of the
University's enrollment; in fact, one of our depart-
ments, Curriculum and Instruction, is the largest
single department on this campus.

Just recently I had the opportunity to review some
of the statistics from the State Coordinating Board. In
the University, instead of having average daily attend-
ance as the basis for establishing a foundation program,
we have that precious little unit commodity called the
student credit hour. We're reimbursed for instructional
salaries and for other expenses according to that unit.

The top two institutions in Texas for producing
semester credit hours at the undergraduate level are
within 25 miles of each other. The first of these, at
San Marcos, is Southwest Texas State University. As of
the 1978-79 academic year it is the highest producer of
semester credit hours at the undergraduate level in
teacher education. A few miles north along Interstate 35
stands the University of Texas, the second largest
producer of semester credit hours at the undergraduate
level. Texas A&M University is third for undergraduate
semester hours. At the doctoral level, we're second.
In the past several years, and even more in the future,
our emphasis has been on graduate education, although not at any sacrifice to the resources which our University allocates to undergraduate instruction.

We're elated at the opportunity to host this conference again, and we're pleased with our cooperative relationship with the Texas Education Agency over the past several years. In my role over the past eighteen months as a member of the state Advisory Council, I've become tremendously impressed with the great volume of work which, not only the staff of the Texas Education Agency, but also the staff of the Advisory Council performs in your behalf and that of the people in education, industry, and government all over this state.

It is a fascinating period in which we find ourselves in vocational education. I was at a meeting in St. Louis recently, where I found out what 94-142 really means. This meeting was of deans of teacher education institutions which have Dean's Grants. With these grants the teacher education sectors of colleges and universities redesign their preservice programs to accommodate the new knowledge base, skills, and capabilities required for teachers today in mainstreaming situations. At that meeting a representative from the Bureau of Education of the Handicapped said that he had discovered what 94-142 meant. The 142 represented the average mean IQ which Deans of Education have, and the 94 represented the real world.

But what a great time in the field of education to face this tremendous challenge and promise of rearranging our lives and the houses we live in so that all people will be able to profit fully from the character and personality of our institutional programs. Let's rule the entire educational spectrum. At A&M we're delighted to be a part of this effort and are so pleased that you're here to share this conference with us. Please remember that you're welcome here, that we're delighted that you're here, and you honor us with your presence.
"Even though we have made tremendous strides toward improving the education of handicapped youth, we can't hop on one of those white horses and ride off into never-ending meadows. Instead we should put ourselves on the sure-footed mule, hitch up the plow, and go for another furrow."

The theme of this year's conference is team work, and I can say in complete honesty, that the only way the youth of Texas is going to receive adequate career and vocational preparation is through a team effort. Even though we had the full support and almost complete funding from the vocational division, when we had our first vocational education conference for special needs learners, we had very few participants from vocational education. From a show of hands today, you can see there is a major difference. It's beginning to show that the team spirit is having its place and is being felt.

Last year, at our second conference, we made another innovation that was very important. We finally began to involve handicapped and disabled persons in the conference. This year I am delighted to see that we are continuing that trend. I can only say that in the future not only must we have them in our statewide conferences and in our local conferences, but I think that we are going to see that we need input from handicapped persons and citizens all along the way. We need your input in terms of building the right programs, in giving us assistance at the local school level, assistance at the advisory board level, at the state level and the federal level.

I am delighted that this is being reflected in this year's commitments. We have made a lot of progress, but...
let me just say that we are only getting underway. We have some exemplary programs, some excellent examples of vocational education for the handicapped, some excellent job placement programs. You are going to see some of these. You are also going to hear from people who have really understood that key need for vocational guidance for the adolescent youth, and especially the adolescent youth who have experienced learning problems throughout their education career.

But even though we have certain elements in place, very few of us would be so bold as to say we have the entire system of curriculum materials in place that takes the child through early education, into the lower grades, through elementary school, junior high school, and on into high school. Even though we have some well-packaged and some high priced assessment systems in place, we have hardly even begun to get the kind of monitoring systems that can tell us who really needs what assistance and when they need that assistance. We do have a way of labeling handicapped persons and getting the federal government flow-through dollars. But I'm not really talking about that kind of identification. I am talking about the dynamic identification system that tells us from day to day what support a child needs.

We also need an assessment system that is far more responsive to the dynamics of employment. I could name systems that could give you lots of information about small motor coordination, large motor coordination, career interest, career aptitudes, and all those kinds of things. But there are very few systems that can honestly provide information that you can use in terms of placing a child in a local job, a system that is responsive to the many, many variables that are going to determine the job a student will be in, a system responsive to an economy that varies from region to region, from time to time, and even from industry to industry.

We can point with pride to this conference as an example of inservice and preservice personnel development. And yet I don't think that many school districts could honestly say that they have put in place a personnel development system that gives on-going support, that helps to keep each person in the system fully abreast of promising practices, that has sufficient incentives to make it both possible to enroll in university courses and to participate freely and actively in the locally required inservice training activities that are taking place. Even when we do have incentive systems they are not the kind that help the reluctant learners among us learn about working with handicapped persons.

What I'm trying to say is simply this. Even though we have made tremendous strides toward improving the education of handicapped youths, even though we have involved vocational education, career education and special education,
we still have miles to go. Up my way where people talk in simple ways, they might say we can't hop on one of those white horses and ride off into never-ending green meadows. Instead, we should put ourselves on the sure-footed mule, hitch up the plow, and go for another furrow. I hope that each one of you here today will see your role in that way. Not that the job could be done as long as you had the money, the personnel, and the people that they have in larger cities, but that each exemplary program has to begin with very small beginnings, with a great promise, a great hope, and a great commitment to simply make things work.

The schools really doing something for handicapped youth have made the system work. That's the center of my presentation today. To make a system work here are some of the things that I consider to be of great importance:

First of all, let me be a little more specific in terms of team work and cooperation at various levels. Since leaving the university sector, I have gotten a good perspective on what's going on in our local schools. In fact, after working in the state department of such a small state I could tell you by name every superintendent in the state of Vermont, I am on a first-name basis with every director of special education in Vermont, and on a first-name basis with all fifteen vocational directors in Vermont. With that kind of a system one really sees the hard-core reality of what is going on in public education. I can honestly say that whether students receive appropriate vocational education experiences depends on whether the special education director, the vocational education director, and the various staffs that they represent, actually get together and work together.

If I were a vocational teacher asked to have a handicapped person placed in my class, I would be very tempted to say this: "Yes, I will give full consideration to that placement. But I'll do it in the context of an IEP meeting at which I'm present and at which my vocational director, or my counselor or someone else from the vocational staff will take part. And I will consider it if I can be guaranteed all the support from special education that the student needs." If you vocational teachers are not given full assurance that the special education support system is going to be right there with you all the way, I would say, "No!"

Why is it that we have special education certification standards? Why is it that we require even a VAC*?

*Vocational Adjustment Coordinator
to be a special educator? Why is it that we think that special education needs a preservice and an inservice, and a post service, and a masters and a doctoral level program if we can't get the full support of all of that training in specialization? It is very true that the law, Public Law 94-482, says that we are going to extend 10% of the basic grant to set up a system which will give genuine opportunities to handicapped persons to participate in vocational education. That's good. There is nothing wrong with having 10% of that money. But frankly what I am beginning to see in many parts of the country is that special education departments are relying on that. They are saying vocational education's got the money for it, so let's let vocational education create the system.

I say it can't be done that way. For one thing 10% is an absolute pittance, and at the very best the 10% funds were a license to make vocational education do anything. I no longer think that. In my role as assistant director of special education, I have come to realize that it's got to be a team effort. And that the real bucks for handicapped persons are in special education. The problem is that too many of us in special education have created our own programs instead of really being a support system to handicapped persons placed in the least restrictive environment.

As you start out to become a real team I would like to suggest that each of you take the time to think about what your goals are. Vocational education and special education have almost diametrically opposing goals. Let me clarify what I mean. When your vocational educator comes out of an advisory council meeting, or his trade committee meetings, that guy has been with prestigious leaders in the community. He's been with people like the mayor or the president of the largest corporation in his town, people who live and who work and who are a vital part of that community. When those prestigious people say to him, "John, I tell you what. I hired one of your graduates getting out of ag. and he acted like an Aggie — or whatever else his handicap was." The vocational educator can't ignore what this individual says. The vocational educator has a very deep commitment to the employers in his community.

Special education people have the same kind of commitment to parents. They respond to individual children. As a special educator, the pressure that I get doesn't come from corporate presidents or from personnel managers — it comes from moms and dads. It comes from advocacy groups. It comes from a whole different system and a different source. The special educators who want to do the best they can for handicapped students and for parents and for advocacy groups that can be very influential behind that child, will have to
remember that the vocational educator is being told in no uncertain terms that the tax dollars going into his program are to turn out people who can go right into employment. We've got to be able to come together and talk about these two different thrusts that we have, these two different mind-sets.

Bringing about cooperation and team work is not just a local problem. Let me give you some real live examples from my own state. This year I met with the director of vocational education and my boss, the director of special education. We were talking about what we can do to adequately provide programs for handicapped persons. In the course of the conversation I kept feeling a real sense of resistance from the vocational educator. I learned from him that he had gone to the Vermont General Assembly just a few days before and presented a bill for a special allocation of state monies to match his funds. There's a requirement which says when you put money into the handicapped and disadvantaged you've got to match it on a 50-50 basis with state and local money. Our local people had no way of raising their 50%, so the director of vocational education went to the legislature and asked for a special appropriation so he could free up a lot of money for disadvantaged persons. He was pleased to report the legislature had understood the need and agreed. I told the director that it was a great idea. I asked him if he had considered doing the same thing for the 10% set aside for the handicapped? He looked at me and said, "What are you talking about? You guys in special ed. get all the money in the state." He thought of us as these big fat rich people, with all the money. He didn't need to match the 10% set aside. Had he sought matching funds for the handicapped, we could have easily pulled back the money we were using for the match. We could have done prevocational programs, career education programs in the earlier levels, all kinds of things to support vocational education for the handicapped.

All I'm saying by this example is that if we are not cooperating at the state level, if we are not really talking to each other and interacting with each other, not too much is going to happen, especially in the area of money. We can cooperate and we often do in some ways. We might send our state plan to vocational education and vice versa. But let me say that the real touchy thing is money. The real honest contribution and the real hang-up in the way things get going at the state level is where the bucks are. And I have seldom seen a vocational director and a special educator get together and say, "Listen, I'm going for this many million dollars and you go for that many million dollars and this is how
those dollars are going to totally intermesh so that everthing you do, I can augment." I can give you examples here in Texas where there are programs that are being duplicated. I can give you examples here in Texas where not only are we having duplication in terms of special education and vocational education, we are also having duplication with the rehabilitation commission. If we really want a lasting impact it's going to come about when all of the agencies that are trying to provide services at the state level get together in building budgets.

A few weeks ago there was a conference in Washington which brought together state vocational directors, state special education directors, and state rehabilitation directors. It was great to hear the national leaders make a firm commitment, saying, "Yes, we will cooperate." We will try to do our thing through team work." After these messages about what they were going to do at the federal level in order to cooperate, we broke up into small groups in which the state directors of vocational education and special education were together. My director of vocational education and special education and rehabilitation were the most agreeable folks you ever saw in your entire life. "You bet we'll cooperate, come up with a plan, do all these great things." And, when they got back to Vermont, the first thing they did was to assign the "you bets" to all of their underlings. And believe it or not I was the one who was told, "You're going to be the one to pull it all together."

After trying, I wanted to cry. I'm 36 years old, I've got kids and a wife and everything to make me happy, but I just wanted to cry because all these people at the high level were saying, "Hey, we're going to have a great marriage take place and marvelous things are going to happen," and all the people down there in the trenches were carrying on an absolute war. The people from rehabilitation looked at me and said, "You guys in special education really do have quite a lot of money. Do you know if there would be some way that you could set up a training program for these retarded people? We've got to work with now? We can't find jobs. Employers demand people who work. Can't you help us get these retarded people into something?" Every five minutes they came right back to that: "Can't you give us a little money to get something going?" One guy had a brainstorm and said, "I know what we can do. We've got this big government here. Let's see if we can get the governor to hire a bunch of retarded people and set the program off." And I honestly wanted to cry. Our mission was to develop a cooperative agreement, to lay it right out there in some new, innovative and creative way to honestly work together, pooling our bucks and pooling our resources and pooling our commitments to help the handicapped persons get better access to
vocational training.

Well, let me leave cooperation and interagency planning alone and talk for a moment about long-range planning. If you really want to make the system work for you, you need long-range planning. Let me give you three examples. Four or five years ago I met with a group of very special educators working at the secondary level, trying to do what they could to insure that handicapped adolescents get into some meaningful jobs, get some vocational training. But we knew many things would impede our progress. One of those barriers was that these dedicated special educators were just that — special educators. Many had come up through elementary grades or had at best come through junior high school programs. Now they were being cast into a new role called a vocational adjustment coordinator. VAC's are an important ingredient in education. On-the-job training is perhaps the best way to get individualized training for handicapped persons. I wouldn't do anything to hurt the VAC program. But, five years ago, when the VAC's were getting started, they said, "Would someone help us get some special certification so that we can be legitimate and so that we can ask East Texas and Texas A&M and UT and other universities to give us the kind of training that we really need? How do we go out there and develop jobs for handicapped people and how do we work with all of the concerns that employers have?" The VAC's wanted relevance in their training.

Here's what happened. No one developed a long-range plan. If five years ago we could have gone to Don Partridge and whoever was then director of vocational education and simply said, "Look, we're not going to pressure you, we aren't really going to try to pull anything off that would make you nervous, but we would like to have a long-term plan. We would like to know that five years from now our people are going to be people who know what their job is, are effectively trained for doing that, and have opportunities to honestly gain the competence for doing that role," all of that would have happened. But there wasn't any planning and five years later I think we are just about where we were five years ago.

We have another problem: aides for the vocational education classroom. Three years ago at our statewide conference, the house almost came down when someone from vocational education said they were going to start putting money into aides that can go into the vocational education classroom and give you, honest-to-goodness support. Then we got together the next year and someone asked...
where those aides were. The money hadn't come through that way. Again, here is an example of needing a long-range plan. Don't buy into task forces, either. Studies and task forces are important but when their outcome is simply postponing the decision, rather than solving the problem, there will be few positive benefits. And not only do we need long-range planning but we need to take a strong look at systems development.

I'm not talking about just supporting the system behind the vocational special needs learner. I'm talking about being able to look at an entire network of agencies, curriculum, and departments within a school system — to somehow bring them together so they intertwine and intermesh in an effective way and lead to some positive results on behalf of kids. I'm not here to give you a good lecture on how to develop systems. But I want to give every word of reinforcement that I possibly can to the great need that we have for putting total systems into place.

I want to talk for a moment about the individualized education plan. I think the IEP and the opportunity to develop IEP's has become the very heart and soul of 94-142. I want to raise some grave concerns to you. I am seeing in my own state, that the planning that goes behind the IEP is not being done cooperatively. When the conference is held, the IEP has already been prepared by individuals on their own. Nine out of ten parents are simply told what is going to happen to their child. Parents should be brought in for ideas and thoughts and information that the IEP is going to influence what program their child is placed in. I'm afraid that the IEP is going to be little more than a piece of paper if the planning is all done by people individually rather than as a team cooperatively.

I have seen some cases that really make me nervous. Special educators get together and design the program and even decide that a child should be placed in vocational education without a representative from vocational education even being present. That just won't work. I give you full support in that process of working together as you develop a program for handicapped persons.

Another concern involves an opportunity we can take better advantage of. If you will look in the fine print of Public Law 94-142, it says that parents can be represented by an advocate when they come for a meeting about the IEP, someone the parents want to represent them, or someone the school district suggests. When you come to a particularly difficult problem, when you have a youth in which there are many exceptionally difficult factors to deal with, I would invite you to bring in advocates on behalf of that parent.
Bring in people who have walked in those steps and have seen those barriers before in their own lives. You couldn't do better than to bring in handicapped citizens from your own community.

Let me tell you something that we are almost ready to do in Vermont. We are getting ready to develop an extension to the individualized education program which you might want to consider. We will call it an individualized employability program. You are required to monitor whether or not IEP's are being carried out in the way in which they are written. What we found in Vermont was that most of our IEP's spoke to the disability. If you had a speech handicap you might find that the IEP only dealt with speech. If you had a particular learning handicap your IEP only dealt with that area of learning. I began to say to people, "Look, that's neat, but if you are handicapped and if you are down and in need of full continuous support services then I feel it is absolutely crucial that you incorporate career education and vocational education into that IEP, even if the only problem is severe stuttering." You can't tell me that a severe stuttering problem will not become a barrier to employment. If you don't think it is, try stuttering the next time you go to a superintendent of schools and ask for a job. I say that an individualized employability plan could become a natural extension of an individualized education program.

I hope that at some point in time, either through literature or through some workshops, we will be able to demonstrate to you what the impact of that long-range plan has been. What we envisioned in our individualized employability plan is simply an extension to the IEP so that in every handicapped child's record not only is there on an IEP but also on an individualized employability program input from vocational educators, from vocational guidance counselors, from general guidance counselors, from psychologists, from the community, for whoever else we think must be there. In that employability plan we will have a permanent, ongoing record, one that is not destroyed and renewed each year, but rather one that looks at all strengths that that child must achieve to be truly employable at the end of a program. I recommend that as an idea.

People are talking a lot about mainstreaming. I'm all for mainstreaming. I've seen great results. But I have some real worries. Two years ago I stood in this very room speaking to a group of vocational educators. And I really tried to lay it on them about their need
to incorporate handicapped persons into the mainstream.
I guess everyone has the right to change their minds. Now,
don't think I'm going to say I'm not for mainstreaming. But
I am genuinely and deeply concerned about some things that
I have seen going on under the name of mainstreaming, in the
name of least restrictive environment, in the name of so-called
progress in special education. I have seen mothers so brain-
washed about the great benefits of social integration that
they would allow their child to be pulled out of a compre-
hensive program with vocational education, functional math
and functional reading, social skill development, recreational
development, pulled out of this comprehensive high school and
put into the school that is closest to their home, a school
with 300 students, whose only option for the sophomore year
was World History, English , Earth Science, and Business
Math.

If mainstreaming means giving the student less than the
student has already, then we had better forget it. Main-
streaming is fine. I'm for mainstreaming as much as any
person in here but, folks, it's a one-to-one case. It's an
opportunity to look at every child and have everybody who
is going to be part of that mainstreaming come together and
discuss the support system, the duration, and the outcome,
and the balance. If you don't have that balance, I say
forget it.

One thing I have learned about myself, about the people
I have loved and cared for is that there are many things
that put quality into life. One day I sat down and listed
a series of things that I have found in my own 36 years of
walking through life, that really added quality. I listed
things like friends, a meaningful hobby, the love of nature,
a family that you love and care for and feel comfortable with;
things like music, sports, watching the Dallas Cowboys; going
for a walk in the evening, watching television, sitting down
to a nice meal. And then I began to think: What are we
doing to children when we stop thinking about the quality of
life and start thinking about rights as a principle? I invite
you for the remainder of this conference and the remainder of
your lives to think about life's quality, and make that your
highest priority for your students.
"In the long run, what makes our program work is cooperation among the teachers. It just can't work unless you have that going." Pat Ownby, Plano ISD.

Parrish: The theme of our conference is Team Leadership. In 1976, there was a National Conference with a theme design like ours today. It was designed for vocational teachers, special education teachers, and administrators to meet, get to know each other, and share some ideas about strategies, teaching concepts, and content within vocational education. Their aim was not merely to comply with the laws we hear about, but to appropriately prepare handicapped youths for employment. That's exactly what we're trying to do. We're trying to give people a chance for employment. That major conference in 1976 has had a domino effect on us. States as progressive as Texas have taken that domino and made it apply statewide, because it is a very good idea. Many local school districts have taken the concept even farther and gotten their vocational and special education people together. So we think that the Texas Education Agency, specifically the Occupational Education and Technology Division, should be commended for funding such an activity as this, so that vocational education and special education people in Texas can get together and share these common goals. We think Texas A&M should be commended for having such a specific emphasis in their graduate programs in vocational education for special needs students. Most of all we thank you for having the interest to take time from a busy schedule to attend this workshop, the day after
Today, we're going to discuss issues. Tomorrow, we want you to have all types of interactions and discussions with very good people in the field. There are many sessions. On the third day, we want you to work together to develop some forward plans. This interdisciplinary team approach is most effective in providing appropriate education. When we got together to decide how we should start this conference, we decided to have people in Texas who are really working with vocational education for handicapped students tell us how it's done. Well, our steering committee met last fall to try to choose a school district. There are several in Texas who are doing that: big schools, little schools, all types of schools in Texas. So we decided to get one large and one small. That way, if there are some procedural differences based on school size, we hope to hear of them.

Representing the large school, we have Plano, Texas. Now how large is Plano, Texas? I've been assured that it's very big and still growing. From Plano, we have Leland Dysart, Vocational Administrator; Pat Ownby, Special Education Director; and Ron Pavageau, Auto Paint and Body teacher. They will speak for approximately 30 minutes to tell you some things they are doing in Plano.

When they're through, we're going to have representatives from Brenham School District. Brenham was the first public school in Texas, and they had the first accredited high school in Texas; so they've been around a good time. From Brenham, we have Ed Casburn, the Superintendent; Jim-Tom House, the Vocational Director; and Jerry McCasland, the Vocational Adjustment Coordinator; and Susie Seidel, Health-Occupation teacher. So before you, we have two different types of schools sending representatives from vocational, special education, and administration. Right now, I'll turn it over to the representatives from Plano.

Dysart: First, I want to give you sort of an overview of what our programs are like. Then Dr. Ownby will tell you something about our special education program. We have about 20 industrial programs in Plano, including Auto Paint and Body and Auto Mechanics. We also have nine agriculture programs, and both useful and gainful homemaking. The students we're talking about would fit into all these programs. We have about 1200 students in all our vocational programs in Plano. Our senior high school houses only the eleventh and twelfth grades, so most of our vocational
programs and our shop programs are located in our senior high school. We have about 50,000 people in the city of Plano, and about 20,000 students in our school district. We have one of the best superintendents in the state; he's behind us 100%. If it weren't for him, we wouldn't be here today. Now Dr. Ownby will tell you something about the special education program we have in Plano.

Dr. Ownby: I think most of you know enough about special education programs. I'd like to talk about how we started working together in special education and vocational education. About four and one-half years ago, I was very frightened, brand new at my job, trying to find out what a special education director is supposed to do. I saw that we needed some kind of vocational training, but I didn't know what. I kept hearing those magical initials, VEH, so I went to see the vocational education director, Hayden McDaniel, who took me to visit several VEH programs, the vocational education program, and Plano High School. Both of us came to the same conclusion, that special education could not come up with a vocational training program for our handicapped kids that would compare to the existing vocational education program in Plano High School. So Hayden suggested that we go ahead and put our special education kids in his vocational education program. He suggested that we start back the next fall; select our students very carefully, and see how it progressed.

He said he would take it upon himself to work with his staff members to get them used to the idea. I had him come talk to my special education support staff several times, so that they could begin to understand what vocational education is all about. I think this is really where we had our greatest problems. He always accused me of having more initials than anybody else, but I think vocational education has as many initials as special education does. And none of them make any sense unless you're trained at it. So one of the barriers we had was just learning to talk to each other. I have taken a vocational education course, so I do understand a little bit of it now.

That fall we started on a very small scale. Because Mr. McDaniel was so willing to work with us, I gave him a special education aide, unassigned, and told him to hire somebody he felt would fit in with vocational education to float and be assigned full time to vocational education at the senior high school. This person would work with the vocational education teachers, helping them modify the program to meet the needs of our special
education kids. This aide is still with us, and I would like for Leland to tell you just a little about how he's working now.

Dysart: We really couldn't do without this aide. He works with all our vocational students, not just the special education ones. Mr. Beavers is a unique person; he'd be very hard to replace. He had retired from his own business in Plano. He said he didn't want to make a lot of money, but he'd be glad to work on sort of a trial basis for a half-day. His real livelihood was a small engine repair business. Now, he goes from one shop to the other, all day long, working with these special education students in all programs — Auto Paint and Body, Auto Mechanics, Printing, Electronics, Radio-Television, Cosmetology, and so on. He helps students with problems in reading or with some phase of content, or whatever is giving them trouble. He really knows what he's doing, and can work with those students. At the end of every week, he fills out a report on every single special education student we have in the vocational department. This report goes into the special education department. The students require a lot of individual attention, and he's very capable at this. He has a tremendous amount of freedom, but he uses his time wisely. I believe that every district could find a man like this. Mr. Beavers just happened to fit into our school district this way, but I believe there's a man like Mr. Beavers in every district.

Ownby: From our slow start, we now have 29 special education students participating in vocational education this year at Plano Senior High School. That is 36% of the students in special education.

Basically, to start our team effort, the vocational education director and I met and exchanged a lot of ideas and we tried to work with our staff. Now, he and I continue working together, but we feel that the real emphasis needs to be placed on the teaching level. Whenever new forms have to be developed, for instance, for vocational education, special education, or ARD meetings, or when we have a new procedure we want to set up, Leland and I will get together and discuss it. We're right down the hall from each other, so it's no big problem. The vocational counselor has been really terrific in helping us get our kids in the right classes, and he's very interested in working with our kids. In the long run, what makes our program work is cooperation among the teachers. It just can't work unless you have that going. So we try to keep lines of communication open.
Prior to placing a special education child in a vocational education program, we have a meeting between the special education lead teacher on that campus and the prospective vocational education teacher. We discuss at least four things at this meeting: the student's ability to profit from the program, the child's handicapping condition, the academic level that this child is functioning on, and the ways we have found best to handle this student, academically, emotionally, and socially. If the child does go into the class, the teacher will be well prepared to work with this student. Then it's up to the teacher to say, yes or no, on whether he feels the child can participate in the program with modifications. Now I know this goes against what Dr. Hull said about group decision, but we want to be very fair to vocational education personnel from the start. Then, of course, we do have the placement meeting. The traditional one, of course, is chaired by the principal. The parents are there, or they sign a waiver, and the person who evaluated the child. The special education teacher is there, and from vocational education we have the director or his supervisor, the vocational counselor, and the student's prospective vocational teacher. At this meeting, the IEP is developed for the student for that year in vocational education.

We have had a blind student in commercial foods. We have not been able to do any follow-up on this student, because immediately after graduation his family moved to Georgia. This, I thought, was a real challenge for vocational education. The boy moved to Plano as a senior from the State School for the Blind. He was a fine student and had good mobility skills. He had all of his academics out of the way, and he had two interests: wrestling and cooking. He wanted very much to be in the cooking class. So the commercial foods teacher took him in her class and worked with him all year. At the end of the year, she made a statement that she felt that his being blind did not detract from his learning in the program.

A mentally retarded student that we have now, in her junior year was placed in the child-development block. She also participates in the VAC program, working in a day-care facility in the afternoon. Alice is retarded; she has difficulty understanding abstract Piagetian concepts, but the teacher says she's the best one in the class at actually using the ideas with the kids in the lab. At this point, I'd like to ask Ron to come up and tell about some of the special education students he's working with.
Pavageau: Being prepared for these students is one of the best ways we can help them, and working with the special education teachers, we can be prepared for problems we have to cope with. One of our students is Frank, with a learning and language disability. He's also a VAC student. He has a second-grade reading level, a fourth-grade spelling level, and a fourth-grade math level. You can see that in the Auto Paint and Body field that I teach, this would give him some problems with reading directions, so being prepared for his particular problems gives me an edge in helping him. At the beginning of Frank's first year, he got very upset at the simplest instructions. He couldn't follow through on instructions because he couldn't read directions. This caused problems in the class. We started working with him, and right now he is one of my best students. He's a senior, and he works painting diesel trucks, and taking care of the maintenance on them.

Another student, Donnie, has a learning and language disability. He's brain injured, and has a fifth-grade reading level, fourth-grade spelling level, and third-grade math level. Donnie also has a problem because he is hyperactive, which, as you could imagine, will give you a lot of problems in the shop. He can't concentrate over 15 minutes on a project. Then he starts playing, bothering other students. Being prepared for a student like this is one of the biggest ways we can help him. I give Donnie small projects to work on, where his attention span won't drift away. I have placed Donnie in a work program now, working on fiberglass boats. He fixes small cracks and dings in the fiberglass boats, which follows this training, because he'll work on small jobs. I think we have put him in a field where he can probably progress at his own speed, and I think that Donnie and Frank both are successes because we educators cooperated to work out the problems we were confronted with. Had we not shared the problems, some of us probably would have labeled these two students as mean or discipline problems, because of the way they acted.

Ownby: I'd like to mention some advantages vocational teachers get from this cooperation. They are beginning to identify some of the regular students as handicapped or requiring special services. As a result, I hope we can give them some help, modifying programs to meet the students' needs. Finally, our kids, in most cases, are going to stay in the profession in which they have been trained, which helps in that five-year follow-up.

We would like to end now with Leland talking about two more of our kids. The first is Jerry. He's also
learning disabled, and he's reading on the beginning fifth-grade level, spelling on middle second grade, and math abilities; middle sixth grade.

Dysart: I'm talking about Jerry from the instructor's point of view. The instructor is in the machine shop, and I talked with him for a long time. He said, this boy is here every day, he is never late, and he doesn't ever put anything up until the end of the class period. If he takes a break, it's a minimal break. He never gives any problem in the classroom; he works all the time. He's very receptive to anything the instructor asks him to do. The machine shop instructor told me that he feels like the Plan A* students really work harder than the average ones. He's very proud of Jerry. He takes a personal interest in this student, partly because he has to. Vocational education is a little different from other types of education. We have to give so much personal instruction, most of it individualized instruction. When the teacher works with a student as much as he does, he becomes proud of him and knows him quite well.

Now this particular teacher was very skeptical about taking Plan A students. Most vocational teachers are skeptical about taking Plan A students, and you can understand why. In a machine shop class, his math needs to be pretty good, because they do a lot of technical measurements with micrometers in ten thousandths of an inch. They add and subtract those measurements. And this boy's math was all right. Now he fit into this program. Vocational directors and administrators are a little skeptical about taking some of these students, but you need to talk to the teachers and work with them, always trying to fit the right student into the right program. That's very important. In this case, this boy's problem was reading. His math was fine, so he would fit into the machine shop program. Cosmetology is a very difficult program in which to place a Plan A student, because they have to have a state license, and they have to pass the state board exam at the end of the year. You do the student a disservice if you put any student in the wrong program. Even as a vocational course, technical electronics is probably one of the hardest courses in our high school; it's much more like a high-level physics course. It is a lot of theory, a tremendous amount of math, algebra, trigonometry, and so forth. The teacher is very particular. He is on a daily schedule; everything has to run exactly so, or he can't operate. The teacher

*Mainstreamed special education
Ed Casburn is Superintendent of Brenham ISD.

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took this student because his math was good, but the teacher knew that he was a Plan A student, so he was very skeptical about taking him in. Once he got him in the program, he found out he had to prepare this boy's papers. The boy would tell him what he wanted, and Mr. Hall, the instructor, would help him work the papers. Then the boy would go home at night, and his mother would type up the papers with the boy dictating. The next day, John Hall would get the papers and grade them, and that's the way this boy took this course. He couldn't read, really, and he couldn't write. But everything else he did, all his handwork, was just perfect. Now this is about two years ago. He entered our VICA contest, and won the district. He deserved it; no one had a better project than this boy did. That just goes to show you what another one of these students can do if you fit the right student into the right programs.

Parrish: Thank you very much, Plano. Now we'll hear from Brenham. Mr. Casburn, would you like to start off?

Casburn: I too would like to say how pleased we are to be a part of the program today. I don't know how familiar you are with Brenham. We are a community of about 10,000 people, almost a one-county school. About 50% of our students ride a bus. The school district population is 3,600. I think the key to our program both in special education and in vocational is commitment, so I'd like to give you just a brief background to help you understand our system. We have a full-day kindergarten program, and a very strong early childhood program, which starts identifying some handicapping conditions. We run a motor development program, and an L/LD program connected with that. This idea of sharing starts there. Brenham has a very strong Title I program, team teaching with the regular teacher coordinated with the Title I teachers. We have a trainable unit starting in the elementary grades. There are five schools, and all of our students in one grade go to the same school. K-1 and 2 are an elementary school of about 800. The next school houses grades 3 and 4; middle school is 5 and 6; junior high is 7 and 8. Each of these has about 600, and our high school, 9-12, houses about 1,100. In our junior high, we have EMR, L/LD, VEH, and CVAE programs. From the VEH program come most of the VAC students in high school. High school continues a CVAE program, continues some of those students in the VEH program, and adds the VAC program. It takes a large amount of coordination, so that the child is not lost in there with all the guidelines of the programs. The secret is commitment and administrative clarity. You can't work two bosses, so the teacher has to be responsible ultimately to the special education director or the vocational director. The duties
must be separated and the teachers must understand what
they are. VAC, as you know, is special education, but
we do something different which gets it into the vocational
realm. Our teacher who is here today is housed in the
vocational building and really associates more with the
vocational teachers and students than with special
education in the high school. We do the opposite with
VEH, which is more of a vocational program than a
special education program, even though they both go
through the ARD committee. That's because the shops are
located on a different campus than the junior high or the
high school, and that's a facility problem. But our
special education director looks out for the needs of
those youngsters, even though our vocational director
takes care of the funding and paper work. So we try to
be sure that we understand who's administratively
responsible to the Agency for which reports and how the
students are designated. Then locally, we set up our
guidelines of who works with the teachers and takes care
of those needs, such that we don't have two people looking
at the same program. Basically, that's what I'm trying
to say to you as you set up your program. First, you
must be committed to it, or your personnel won't be
dedicated to the idea. Second, you have to set up your
administrative guidelines so that you have a clear set of
responsibilities. And now to carry our program further,
I'd like to turn it over to Mr. Jim Tom House, our
vocational director.

House: Our part of the presentation is going to be
divided into two segments. First, I'm going to tell you
very briefly about our vocational department, and then
I'm going to talk about some coincidences. We have 18
teachers in our vocational department, 15 housed on a
high school campus, and three housed on the junior high
campus. We have a vocational director, a vocational
counselor, and two auxiliary personnel. Our only full-
time shop program is Auto Mechanics. We have three home
ecomomics teachers who are in useful homemaking. We also
have Home and Family Living, and Home Management. Then
we have vocational office education, with a half-unit of
pre-lab and a half-unit of co-op. Our vocational
agriculture department has two production teachers and one
coop teacher. As Dr. Casburn told you, we have CVAE on
the junior high level: General Construction Trades, Home
Economics, and Home and Community Service. We have two
VEH programs, beginning in the 8th or 9th grade, and
continuing all the way through 12th. In high school,
there's a shop that is also General Construction Trades,
and Vocational Education for the Handicapped Homemaking,
in grades 8 through 12. Then, we have all six co-op
programs: Vocational Agriculture, Distributive Education, Home Economics Cooperative Education (HECE), Industrial Cooperative Training (ICT), Vocational Office Education (VOE), and then Health Occupations (HOCE). The Health Occupations teacher is a half-unit of co-op and a half-unit of pre-lab. She teaches health care science, a sophomore, junior level course.

Now for the coincidences. The whole thing has been a bunch of happy coincidences. I'd say one of the happiest was in hiring Mrs. McCasland as the Vocational Adjustment Coordinator. Shortly after she was hired, they were looking for an office for her and moved her into one of the two offices in the Vocational Building. When they hired a counselor, they moved her to the office of a VOE coordinator. So she is in our building, which makes it very good. Mrs. McCasland is our Mr. Beavers. Not only does she serve as Vocational Adjustment Coordinator; she serves as the head of the Special Education Department in the high school. We have two academic teachers, two VEH teachers, and two aides, and she serves as the coordinator. That's one of the happy coincidences.

Another is the fact that, being a small school, we have very little turnover. We've had DE for 12 years now, but we've only had two DE coordinators. I've been the only director. We've only had two counselors. The teachers become familiar with the school district and the students. They are able to understand what's going on, and we get along very well. Our newest teacher, another happy coincidence, is Mrs. Seidel, in Health Occupations. Health Occupations is in its third year, and Mrs. Seidel is an RN, and a home-town girl. She's going to take over now and tell you some of her impressions as a Vocational teacher, and some of the things she has done as a HOCE Coordinator.

Seidel: I feel it's a real privilege to be here to share what I'm doing and to learn from you. Now I'd like to tell you about one of our very special students. Laurie is a 19-year-old female, and was classified academically as a sophomore. She enrolled in my Health Care Science class in the fall of 1978. During the 14 weeks that she was to remain in my classroom, I became aware of certain limitations. Laurie was a very cooperative girl. She always seemed eager to please, and this is one of the reasons I became so concerned with her. I felt that her under-achievement in the classroom was not a result of lack of personal motivation, but possibly from causes that she couldn't control. Laurie's
reading and comprehension abilities were considerably below the rest of the class. Later testing scores indicated that Laurie's reading and comprehension abilities were at the third- or fourth-grade level. Laurie was unable to answer questions or even discuss material that she had read. Realizing that she might have a visual learning problem, I began to lecture and use more class discussion, but Laurie continued to have problems. Even with combinations of visual and auditory methods, Laurie's grades were extremely low, although at this time, the rest of the class was really pulling along. Eight weeks into the school year, I started a skills lab portion of Health Care Science. This is a time when the students learn proper hand washing techniques, and how to take a pulse, blood pressure, and temperature. They learn how to make a hospital bed, and assist patients, and so forth. We would go over the technique in class and I would demonstrate it. Then the students would practice over and over until they could do it. Suddenly, Laurie was achieving. After being allowed to repeatedly practice the simple tasks, hand washing, making the bed, feeding the patient, she was able to demonstrate these skills satisfactorily. I went to Jerry McCasland, our VAC. Jerry was genuinely interested in this student and told me all about the possibilities. With some hesitation and lots of thought, I decided to make a referral to the high school principal's office. At the same time, I continued to work with Laurie on her skills. By this time, the Christmas holidays rolled around. When we returned to school in January, Laurie came to report to us that she had found a job in a local nursing home on her own. Within a few weeks, Laurie was tested, an ARD meeting was held, and Laurie was accepted into the VAC program. Laurie will graduate from Brenham High School in May, 1979. She continues to receive excellent evaluations from her employer at the nursing home. Laurie's very happy; she loves her job, and she likes knowing that she's a productive member of society. She's one of our real success stories.

I'm also the coordinator of Health Occupations. My co-op students work in various health care agencies in the community. None of those students have obvious physical defects, or handicapping conditions. I felt it might be beneficial to them to know in some way how disabled a person feels, so each student in my classroom was to spend a day in the life of a handicapped person. The students chose their handicaps at random. We simulated blindness with eye patches. We taped mouths, and that was really something for high school students! We wrapped limbs in hopes of simulating a loss of limb. The students rode around in wheel chairs as quadraplegics and
McCasland: As you may guess, I am the VAC. Our program at the high school is a three-phase program. First, we have the academic skills. We have two special education teachers that give us the emphasis on practical math, English, and so on. Then we have a vocational program, which has already been explained to you, the VEH program. Then there's my program, which is the combination of the whole thing.

Our students in high school are not placed just by chance. Most of them come up through the ranks, but we also get some students from the other classes. We're working with one student right now who is in the regular curriculum. He is a sophomore, with about three hours credit. He is very much interested in Auto Mechanics, and we are working on placement for him. We have notified the parents and we have had a meeting. We thought we were going to place this student, but out of that meeting we decided we were not going to place him right now. He said to us that he really hadn't been trying in class. He hadn't been trying to get along with his teachers, hadn't been taking any books home. We decided to make a deal with him, even though he qualifies for our program. We are watching him the rest of this year. We could have given him the easy way out, but we chose not to, and sure enough, that student is really coming along. Probably we're going to place him next year, a half day in Auto Mechanics and a half day on the job. But it is not an automatic thing with us.
I came to the conclusion a long time ago that, as a VAC, I've got to communicate with parents, teachers, with anybody who can give me some help in knowing what to do with and for these students. I go to their houses, even when we have the ARD committee meetings and write the IEP. If that parent chooses not to be at that meeting, I take that IEP to that house, and I go over it with them, hoping they will understand what we are talking about. Consequently, when my parents need something, they tend to call me. In other words, we communicate, and that's a lot of what makes our program work.
The broad topics of concern are personnel development, accountability, communication, cooperation and coordination. Several concerns seem to fall into one topic called developing and refining the delivery system.

Greenwood: As members of the Issues Exploration Panel we have individuals from the Texas Education Agency, Texas Rehabilitation Commission, a large school district, a small school district and a community college. From the Texas Education Agency we have Hayden McDaniel in vocational education, Eleanor Mikulin in special education, and Bill Grusy in the post-secondary division. Representing the Texas Rehabilitation Commission is Frank Perdue. Representing a large school district, we have Ronald Pressly, Vocational Counselor from Odessa, and representing a small school, we have JoAnn Ford from Georgetown. JoAnn is a former vocational director, and is currently completing her doctorate in vocational education and has just completed a very interesting internship on how agencies interact and cooperate to provide services for vocational education and the handicapped. Representing a community college, we have Larry Bonner from Richmond College, part of the Dallas Community College District.

Last night the project staff took the issues statements that you made and came up with the key issues that you seem most concerned about. The broad topics are personnel development, accountability concerns,
communication, cooperation and coordination. Several concerns seem to fall into one topic called developing and refining the delivery system in vocational education for the handicapped.

So, we'll focus first on personnel development. The specific concern seems to relate to both cross-training opportunities for various personnel and specific training for VAC's (Vocational Adjustment Coordinators). We'll direct our first questions concerning personnel development to the staff at TEA. Are you working on certification requirements which will provide cross-training for VEH and VAC personnel? What new provisions for cross-training do you envision for vocational counselors, vocational supervisors, or administrators?

McDaniel: At the present time, there's no cross-training, but there will be.

Greenwood: Okay, we have other concerns about the role of the VAC. What plans are currently envisioned to establish guidelines, curriculum, and accountability procedures for VAC programs? I think Eleanor Mikulin will answer that.

Mikulin: I can address some of these issues. Guidelines are in the process of being developed for VAC's. We are about 85% complete in developing a job description for VAC's. Again, as far as certification goes, special education certification will be the only requirement, but training is planned in the future for VAC's. As for curriculum, we are at present in the process of piloting a plan for secondary programs for handicapped students. It is in the middle of the first year. Next year this plan will go into effect in 18 school districts representing the entire state. Every service center and 18 school districts from the size of Hamlin to Houston are involved in the project. So, after next year, there will be a curriculum guide from which school districts may work.

Greenwood: Thank you, Eleanor. Another question: Are aides currently being provided to vocational teachers, and to what extent, and what personnel development is provided for these aides prior to their entry?

McDaniel: There will be aides this year. Now, please secondary people, don't write me a letter and ask for them, because we have to be sure it's legal and how to do it. It's cleared and there will be aides; you will receive a letter on how to get them and so forth. We haven't done any training at this time; we have not had them yet. We have to
be careful because if one school doesn't get them, they cause trouble so we haven't been able to put them out until we can serve everybody. We think that funds will be available now. Wait for that letter and when it comes put in for your aides for the coming year.

Greenwood: Thank you very much. We also have a concern regarding post-secondary inservice training. TEA is providing inservice for secondary programs. To what extent is inservice being provided for community college personnel?

Grusy: I think it would be in order, first, to make a comment that in the post-secondary division we here-to-fore have had very little involvement in the programs for the handicapped. We have had handicapped in our programs ever since we have had post-secondary institutions, but we have just accommodated through the regular routine, through mainstreaming, but we did not identify a program for the handicapped. So, we have not had specific training for post-secondary teachers.

Greenwood: Thank you. Another issue was accountability. In vocational education particularly, accountability questions have been with us for about five years. Questions of evaluation, of data collection, of management information systems, and so forth crept into your concerns yesterday: questions like how do we count people? How do we account for money? How do we measure success? We will open this up to the entire panel, but we would like to ask the local level people specifically, how do you determine the present level of performance of handicapped students as required on the IEP? Or, how do you proceed in setting a vocational assessment program for these special students? Can either JoAnn or Ron speak to that issue?

Pressly: We don't have anything specifically set up this time for accountability. We do try to take each student who is recommended to us by the special education people, but we don't have anything set up at this time.

Ford: From a smaller school district than yours, we certainly don't either. It is strictly on an individual basis, utilizing the personnel that are available and, attempting to make the best decision for each student as they occur. No formal program is actually established.

Greenwood: Okay, thank you. Another question regarding funds in TEA. Can the state set aside funds in vocational
education for the handicapped students presently be tracked for accountability purposes and evaluation of program effectiveness?

McDaniel: I don't know exactly what you mean by program effectiveness, but, yes, funds can be tracked down to the last dime. We don't know exactly what's going to happen when we allocate funds, because those funds belong to you until you drop them back, and you drop back millions every year. That's something we have to guess on, so it is very difficult for me to give an answer as to where we stand. Now, for the handicapped itself, there are funds available. I don't see any problem with it. They do a good job in financing, matching these up to where we can spend as much as possible. Unfortunately, we can't outguess or even get a pattern from what happened at the local level from the previous year or two or three years, so we can't make firm plans for the future.

Greenwood: Another question had to do with enrollment data. To what extent are figures available on how many handicapped students, by condition, are currently in vocational classes by program area?

McDaniel: I guess that's mine again. We now have a new secondary form for organization report, Form 103, which has the breakdown of students as to their handicapping condition and where they are. This can be put on computer and we can break this out now. We started this about a year ago, as you remember, and so we will have a tab on that.

Greenwood: Another question regarding evaluation and accountability criteria was how can success be measured in vocational education for the handicapped? Will the same accountability criteria apply for handicapped students as for regular vocational education students? In other words, will placement on the job be the criteria for success? Has this question been addressed at TEA or in the local schools or anywhere else? I'd like to leave that question open for the panel, for anyone who would like to address it.

Pressly: The only criteria for success in vocational education is placement in a job. This may occur right after graduation, it might occur before graduation, or it may be several years after graduation, but, if we have succeeded in teaching these youngsters a skill that they can sell, then they can go out and sell it. Of course, even with our regular students, we don't bite a 100% there, so we don't
expect to place 100% of these handicapped youngsters either. But when we do, we know we have succeeded.

Greenwood: Okay, another broad issue that was defined had to do with all kinds of communication linkages, cooperation, and coordination. We had questions concerning how we can communicate better between agencies, how we can communicate better to our community, how we can communicate better to parents, how we can increase cooperation in a regulatory way, and an attitudinal way. We have questions that reveal to us many concerns about how this whole system can work in a smoother manner, how it can begin to cooperate, communicate, and coordinate. So, in the beginning of this topic let's ask JoAnn Ford to respond to the question as to what extent there is duplication of effort or cooperation among agencies serving the handicapped. What strategies do you envision would improve communication, cooperation, and coordination?

Ford: Well, I've just done a needs assessment with the school districts in the state, and I certainly think your concern about communication is one felt across the state of Texas. It showed up again and again on this instrument. There is a real problem, as you are well aware, in communication within the school district and the agencies that serve these students within the community. The cry seems to be overwhelming in the state for some sort of uniformity to be developed that would allow schools to be able to deal with an intermediate source, perhaps, or at least some direct source. As I see the issue at this time, if the situation is to improve, we're going to have to continue to raise our problem and our concern because it's the same problem that these agencies seem to be facing too, in trying to communicate with us out in the field. It's a very real one that we're facing locally as we work with our parents more closely for the first time. We're realizing the need for a better channel for communication. If I had the solution for this problem I'd bottle it, cap it and sell it and retire tomorrow, but it is something that we all are going to have to work on. A good relationship is just a matter of improving the system so that we can better serve the youngsters.

Greenwood: Can anyone else speak to this particular question, what evidence do you have that communication is increasing, cooperation is improving. Anyone else.

Mikulin: It is often said that Texas Education Agency lives in a building to themselves and does not even
communicate between floors. I would like to tell you that this is not 100% true. I live on the third floor myself, Hayden and Bill live on the fourth floor and the fifth floor is above that. James Cogdell is also on the fourth floor. We communicate rather readily. Down to specifics, I mentioned a plan for secondary programming for handicapped students a moment ago. This plan has been developed originally by an interagency committee composed of members from regular education which are in a different building. So, we even went across the alley to join the regular educators to work on the plan; the committee was composed of people that are in Dr. Davison's shop in academic education, or general education, and persons in secondary education and vocational education. In addition, special education had a few things to do with developing the plan, so we are coordinating from that standpoint. I'm sure that there will be continued coordination between both vocational education and special education.

Greenwood: Thank you. Another similar question and one we'll explore a little bit further is; what evidence do we have, or what plans are in the mill for cooperative planning to benefit the handicapped student; joint meetings of vocational education, administrators and special education administrators, joint planning sessions at TEA, school superintendents with other vocational education groups or special education groups, school counselors with other groups? Can you give testimony on this effect?

Mikulin: It may seem to you that the plan for secondary programming is the only thing happening at the agency, but it is exciting to us and we are using school personnel to meet and work out problems to develop this plan. The 18 school districts that I mentioned earlier have representatives from administration. We asked for a building principal, a vocational director, a special education director and a person from regular education. These people make up the team from each of the 18 school districts, so this is one instance when all areas of education are communicating and working together to plan for educating the handicapped student.

Greenwood: Any other comments on this particular question? How can TRC* make sure that public schools know what services are available? Will services continue at both secondary and post-secondary levels?

*Texas Rehabilitation Commission.
EXPLORATION OF ISSUES

Perdue: First of all, yes, services will continue. But could I back up just a minute and add a testimony to what was said earlier? Another evidence of cooperative endeavors among educators and particularly special education, vocational education, regular education, and community, state, and federal agencies, goes something like this. The schools are realizing that they have a number of severely handicapped youngsters who need sheltered workshop training which may enable the youngster to become vocationally independent some day. They're looking toward developing sheltered workshops on campus for school age and above school age youngsters, and I think it's great. I personally have been in several planning meetings. Now, we go to meetings all of the time, and not all of them are happy, joyful kind of meetings where we get a lot accomplished, but in these meetings a great deal has been accomplished and as a matter of fact the people go forward by saying, "We are going to do this," or "We are going to do that." They have set dates for accomplishing their goals. I think this is evidence that there's a great deal of cooperation going on. People want to do it and have a goal in mind.

Back to the question here on the sheet. How can you make sure the public schools know what services are available? Now from TRC's standpoint, we have done several things in the past year in trying to acquaint people, school people and others what services are available. I'd like to indicate that our services cut across special education, regular education, vocational education, and post-secondary education. We are allowed to come and work cooperatively with students in all of these areas. Even school drop outs or potential school drop outs may be eligible for our services.

One of the things we've done in the last year is to encourage and even require supervisors and counselors working with public schools to have meetings with special education directors, vocational adjustment coordinators, high school counselors, school nurses, physical education teachers, counselors (special education, or whatever). We want them to meet with anyone who comes across handicapped students who might be served by our program. I've personally been involved in some of these meetings in the southern part of the state. I know that as a result of those meetings we have better communication because people know what services our agency can provide. Naturally, when we get into these meetings, we get into specific individuals who might need our services and sometimes we work it out right there on
the spot who may be eligible, when to refer to those youngsters, and so forth.

We're also working cooperatively with Texas Tech Research and Training Center on Mental Retardation and having statewide conferences where we are inviting school representatives from regular education, special education, vocational education, and so on. We are also developing, or revising a brochure that we developed for high school counselors to know what services are available through the Texas Rehabilitation Commission. This gives the breakdown of all the services that we provide and how they may be provided.

In spite of all these things, I want to encourage whoever may be responsible at your school for making referrals to the agency. We're not getting a fraction of the appropriate referrals from regular education, particularly in the 11th and 12th grades, that we should be getting for youngsters who need vocational training or whatever after high school graduation. These are some of the things that we've been trying to do over the past year, but we would certainly be open for ideas about how we might communicate the services available through the agency.

Our services are still available. Our funding has been cut, and cut, and cut, to the extent that we are having a difficult time, financially speaking, but we are still hanging in there trying to serve students. I might encourage you to refer youngsters to us in spite of all the cuts in funding, because we're still out to make overrides or exceptions to policy where individual students need our services. We want you to be very strongly encouraged to work with the more severely handicapped.

Greenwood: Thank you very much, Mr. Perdue. Another question dealt with educating the community, letting parents know. The question is, whose responsibility is this? Is it the local school? Is it also the state agency? Who is doing what to educate community and parents concerning vocational opportunities for the handicapped?

Pressly: Well, I certainly feel at the local level that this responsibility is the school district's. I think the various agencies give us the support information we need. We at the local level are able to communicate better individually within our own communities and our own districts. I think this is definitely our responsibility at that level.
Audience: In our system, we don't have any set plan, but the VAC and the vocational counselors do work pretty closely in trying to get out information to the various handicapped students. The VAC's do a whole lot more than we do, but they come to us and want to know where they can put a particular student. We're usually able to show them where. Sometimes there are personalities involved that we wouldn't want to place a particular student with a particular teacher. After a while we know which teachers we can work with and so forth.

Greenwood: Anyone else? Thank you very much. Another concern had to do with putting the whole system together. We have had two laws within the last two years that are creating new systems of delivery. We've had other forces that impact on those systems, and these have led to concerns as to how this whole system is put together. There were questions about funding, questions about at what level funds will come, articulation questions, pre-vocational, post-secondary, and so on, so we grouped this under a category called developing and refining the delivery system in vocational education for the handicapped. One question was, what is currently being done in career orientation or pre-vocational education in Texas for the handicapped?

McDaniel: Well we have occupational orientation and we encourage the handicapped to get into this, and we have industrial arts, which we are having problems getting funded under the vocational funding part of it. They're still doing their part and I think becoming closer to the handicapped student. They are putting out an effort to bring them in to handle them in smaller classes whenever necessary.

Bonner: The community colleges and also some of the other four-year colleges are providing career planning courses which are credit and non-credit. TRC is sponsoring several job readiness and career planning courses throughout the state.

Greenwood: Thank you, Larry. What provisions are available to make sure articulation regarding the handicapped occurs between the secondary and post-secondary levels?

McDaniel: We'll say there's not much more than for a regular students. It's a difficult thing to do because these two types of agencies have to do it themselves locally. All we can do is encourage.

Larry Bonner is Coordinator for the Handicapped at Richland College in Dallas.
Greenwood: Thank you. We had several questions concerning opportunities for the handicapped at the post-secondary level. Is there an equivalent to the IEP? Who signs it, and so forth?

Grusy: On the question of who funds, I suppose that you all know that there is set aside 10% of the federal monies, which has gone into the state for the handicapped and this is in turn matched by the state. Through a meeting of the minds, we decide who gets what in the secondary and post-secondary institutions. This is accomplished at this level. The law further states, as we've mentioned earlier, that the primary way in which these persons would be handled is through mainstreaming in their regular programs and then it continues to say that the federal monies will be used for support services in those programs, not for their so-called regular program cost. This of course applies to post-secondary, as well as secondary. I mentioned earlier that we have gone through the schools with the guidelines and we've told them to mainstream whenever possible and advise us of those support services which are called "excess cost" in the law. These could be funded with the handicapped monies. With our regular state appropriations, we will fund the base cost for the program.

Bonner: A person with a disability can enter our college. We are not aware that a person has a disability until after admission, and as for opportunities, if they have the essential mental and physical traits to complete the course requirements they can achieve as a so-called normal individual. Who pays at our college? The majority of the individuals pay their own tuition, books, and special fees. Some receive assistance from the Texas Commission for the Blind, Texas Rehabilitation Commission, the BEOG* grant, scholarships, and other awards. We do a degree plan on all students coming in. The only additional thing for handicapped students would be a list of the auxiliary aids needed. We do not have an individual education plan.

Perdue: As Larry mentioned, the Texas Rehabilitation Commission sponsors a number of students in college programs who are handicapped and eligible for our program. Funds are available. We also utilize other funds for our clients that we pick up in the secondary program while they are juniors and seniors in high school. As far as an equivalent to the IEP, we have what is called an IWRP (an individualized written rehabilitation program) which corresponds somewhat.

*Basic Education Opportunity Grant.
to other program plans. This calls for developing a vocational objective, a vocational goal; determining what will be done in the way of training, or counseling guidance, or placement; how it will be done, by whom, and the cost and even the commitment on the part of the client (what they will do, how they will be involved). It is done in conjunction with the client as your IEP is done in conjunction with the student and the parents.

Greenwood: Thank you. We have several questions concerning the ARD committees and the IEP's. There are several questions dealing with how this process can be shortened, how it can be streamlined. Do you have any suggestions on that?

McDaniel: I don't think you're going to get any suggestions on it. It's a very difficult thing to do and I have all the sympathy in the world with Dallas, Ft. Worth, Houston and El Paso. How are we going to do this and do it right? If you on the local level, when you understand one another, something can be done. The vocational ARD committee wasn't set up by the agency. It was put into effect by the agency and the vocational directors themselves are the ones that decided on it, with Eleanor and some others in on it. This whole thing will not be successful overnight. I want to say this, though. I have found in local school systems that supervisors of special education did not understand, vocational education. You on the local level are not communicating as to what each has and what's going on. Vocational education doesn't particularly want to turn students away, but vocational courses are specialized and students shouldn't be in there unless they actually have a desire and a use for it. So, these are things that we would like for you to bring out at the meetings.

As to how we can streamline the process, I'd ask you to think about what we can do and let me know. I'll call in 15 local directors sometime before September and discuss this whole thing. We've done this before and most of the things you've asked for, you've gotten. I hope to continue this, but we need some help from you, so tell us how you think the ARD committee can be improved. What can you do to speed it up? How can we help? I assure you, if it will help you there, we're going to put it into effect.

Greenwood: Thank you, Hayden. The other question involving the IEP was, to what extent are students involved in writing the IEP?
Mikulin: I would imagine it's different for each student. If the guidelines for both special education and vocational education say that a student may be a member of the ARD committee, if appropriate, then certainly if you are planning for the student's future, we would hope the student would be included in developing the educational plan.

Greenwood: Are funds still available from the Texas Rehabilitation Commission for building construction and renovation? If so, how can these be obtained?

Perdue: The deadline for applying for establishment grants from the Texas Rehabilitation Commission was February 15. So, for this year the answer is no. But next year is another story. We don't know what next year's going to hold, but keep in mind that whenever any rehabilitation facilities or school districts want to apply for a grant, the deadline for writing your letter of intent to apply is February the 15th. We have the state divided into seven regions. If you're going to make application for an establishment grant, be sure to communicate carefully with the director of the region you live in. Let the director know what your plans are, get support in determining that your need is a great need, because he has to prioritize all the letters and all the requests coming into his region. When grants are funded or awarded, they are awarded on the last day of September, which is the end of our fiscal year.

Greenwood: Thank you very much. The project staff wanted your analysis of issues early in the workshop. We did not think all your concerns would be solved by ten o'clock this morning, but the panel has given some insight and some thought to your questions and will continue to do so throughout the workshop. This will be evident in the mini-sessions and the planning session tomorrow. If you will jot down your continued questions, particularly in these four areas, and either give them to me now or give them to Tico tomorrow, we will continue to focus on these particular issues. We want to thank the panel for their participation, we appreciate their efforts, individually and cooperatively in providing quality vocational education for the handicapped.
"As people become productive, competent people, they tend to be perceived as less deviant and more competent and more socially acceptable by the people around them."

I'd like to do three things in the time that we have. One is to address the question of whether vocational preparation should be a part of the educational process in serving the severely, profoundly handicapped student. Next, I want to ask what we should teach if we have vocational preparation. And then I want to address how we are going to do it, given that we're just now in the beginning processes of extending those services to people considered mildly handicapped.

As a foundation for addressing those three questions, I'd like to talk to you about the work we are doing at the University of Oregon, and the kind of services we are providing. I invite you to step back a little bit from those day-to-day hassles in vocational preparation for handicapped individuals and think about some broader long-term issues, about what role the public school system should be playing in the lives of severely handicapped people, about long-term projections of work opportunities for severely handicapped people.

I will start with an overview of what we're doing right now in adult services. In 1972, I started work at the University of Oregon. As we projected community services for handicapped individuals, looked at population trends, and tried to figure out what services we were providing and would be asked to provide over the
next few years, the group that seemed to be cared for the least in the present system were the severely or profoundly retarded. The average age of developmentally disabled people is increasing, so that the long-term focus will be more and more on adult services, rather than on school-age services. As a result of mandated public school education for all children, a lot of individuals ages 20 and 21 are expecting services in the community which typically have not been there. Some planners say that Texas needs a lot more sheltered workshops. But do sheltered workshops, as they are currently designed, really meet the needs of severely handicapped people? Let's take a community study to find out what procedures will be necessary, what we will in fact need to do, what communities will have to know, what mechanisms will need to exist and how that kind of program will be structured.

At Oregon, we did that. All of you have seen a lot of university showcase programs, I suspect, and as you look at them, you know and they know that you really couldn't do that with adults if you have a community setting. We hope our success as a university-based research program will always be measured by the overall quality of services in the region in which we are trying to have an impact.

First, I need to discuss some value judgements we made in providing community services. It appeared to us that it is impossible to talk about a normal lifestyle in the United States without focusing on work as a central element. I suspect that as regional vocational educators you will agree with that much more readily than other audiences I have addressed. You would be surprised at the number of people who are willing to say that work is important for most people, but if you score low on an IQ test, it's not important for you. So we made a value judgement that work is an important element of any community lifestyle, for just about any person in our society, regardless of the degree of disability.

That led us to figure out how to provide work for someone with severe language deficits or no language at all, with IQ's ranging from "I can't test this person; they don't pass any items," to an IQ of 20, 25, 40, 30. How do you provide realistic opportunities in communities for people like that? We started by teaching the students, designing tasks so they can be accomplished. Then we figured out the kinds of environments, the kinds of social structures where the handicapped people can work in our society. And then, after all that, we came back to asking what happened to the people's lifestyle. What other things do people have that relate to quality of life? Those are the three issues our research group is working with.
We started by creating a small sub-contract assembly shop at the University of Oregon. And serving in that shop, selected as randomly as this sort of system would allow us to select them, are people who were labeled severely retarded, but without any major additional physical disabilities. This last was a limitation we imposed. Whether it was a good limitation I don't know, but it focused our attention more on issues of training than on issues of engineering.

We looked for people who live in the community who met our criteria. Then we went to the state institutions and looked for people who were adults and met our criteria, and randomly selected people to leave the institutions. We ended up with a group of 15 people, who ranged in age from 19 to 52. Their average IQ was 18. Three of them had some expressive language, two others had enough receptive language that they could follow simple step directions. None of them had skills that would allow them to imitate the motor movements involved in these vocational tasks.

We then looked at our economic community and tried to figure out what work we should do in this vocational program. We made that decision on an economic rather than a surface or research basis. There's always a temptation in a university setting to work on tasks that are theoretically interesting, which help you write research publications. The entire economy in our area is based on the University of Oregon and a few wood products industries that didn't lend themselves very well to subcontract work in a small assembly shop, so we found ourselves looking at the broader economic markets in Portland, Seattle, and the Bay area. Because of the distances involved, we needed to get a lot of labor in a small box that didn't weigh too much so we could ship it back to the customers. That led us fairly quickly to electronics and other kinds of small-parts assembly. Over the last six years, we've built cam switch actuators for oscilloscopes that function a lot like your television selector. It is a multiple switch ranging from 17 to 56 parts. We trained one individual to complete the entire product using tweezers, small pliers, and so forth. We do some gross soldering of circuit boards, but we've never been very successful at fine soldering. We have major contracts for putting together some sprockets for chain saws. So we combined people chosen by service criteria and tasks chosen through economic criteria. Our next problem was to develop skills and to maintain those skills once developed.
Vocational education for quite a long time has been a focus for techniques to analyze manual skills into components, and to specify criteria and develop teaching programs based on these criteria. These techniques were developed in the vocationally oriented tasks long before special education latched onto the terminology of task analysis programming, so I suspect that you already understand the teaching process. We start with the task, we figure out the quality standards, we define the behavioral elements to meet those quality standards, and then we go about teaching those behavioral elements. Probably the only distinction in the way we did this is that the steps we break things down into are much finer. In fact, most tasks can be conceptualized as discrete chains of responses, so that each time you do something you create a certain situation to which you respond in a certain way which breeds another situation, to which you respond, and on and on in a fairly chain-like fashion.

So the first part of trying to match that group of people with that group of tasks was going back to the literature and learning a whole lot of engineering about task analysis, about job design and redesign, about a lot of the things that have been in the military industrial literature for quite a long time. We did not invent any new processes for that; we adapted it to the extent that we ended up with much finer steps in the analysis than we would have for teaching workers in industry. In fact, we had finer steps than we would have had for teaching mildly handicapped people in either school or work environments. No new technology was necessary.

Training was a little different for two or three reasons. First, we're talking about people with very limited language skills. We're talking about people who probably couldn't do a thing after we showed them what to do. We're talking about people who probably couldn't do it after we physically guided their hand around exactly like we wanted them to do something. I think we've developed some procedures that have fairly wide generality for other populations. In a sense, after you've decided what it is you're going to teach, training only involves three things: 1) Provide some assistance, so the person will respond correctly, 2) Reinforce or reward correct responding, and 3) Have very good assessment so you can figure out exactly how much assistance and reinforcement to provide as the person repeats the task. You're trying to get independent correct performance with the least possible amount of help and the least possible amount of readjustment.

Over time, you're asking the person to perform more and
more independently. You're making a guess every time exactly how little help they need. If you helped with the hand last time, can you do it from the wrist this time? If you said, "Turn it over" last time, can you say, "Try again," this time? If you provided a complete model of the whole thing one time, can you only model the first step or two the next time? You're constantly trying to figure out what least possible amount of help you can provide and still have the person respond correctly so you can reinforce the correct response. It's conceptually simple, but practically very difficult.

There's a great deal of wizardry in the particular ways you do assistance, assessment, and reinforcement, as you learn to develop your talents. Fading out assistance is still an art; we don't have a cookbook to suggest that this is the way to train. What we have are some general principles and a lot of responsibility for the person who's right there doing the training. You're starting with people where they are, accommodating to individual differences. You're not saying that everybody has to be a certain way, or that everybody has to respond to printed materials in order to be in a vocational preparation program. We have a system that's designed around some generic concepts, systems of assistance, reinforcement, and assessment. It's our job as people responsible for direct service to figure out how to accommodate the individual differences with which we're faced in applying these major concepts. Okay, so much for training.

As a trainer works with an individual student, he or she will allow the student to progress through the entire task and will collect data on the specific responses in the tasks that are performed correctly and incorrectly. As a person makes a correct response to one step of the task, the trainer will make a slash mark on the numeral opposite that step. After the person has completed the entire assembly, the number of slash marks will be counted and a circle or square is drawn around that number, which gives you a graph of the progress over time of the number of steps performed independently by the worker. It involves a lot of data transcription. The system was originally developed by Richard Saunders in Kansas, for working with special education kids and is very, very useful to us in taking data on vocational performance.

After a person has learned the task, the next step is maintaining performance on that task over extended time periods. Most of you in education have a very pleasant luxury. After a person masters a task, you go
on to another task. This allows you to take advantage of the interest intrinsic in gradually more difficult material. In adult service environments, that's less likely to happen. It's also less likely the case in our own working environments. We have an interesting criteria for adults in our society. As adults, we're not necessarily expected to learn something new every day the way a child is. Instead, we're expected to be very good at something and do that over and over again. We tend to value children in our society and praise them and attribute worth to them when they are very good at acquiring new skills. We tend to praise adults and value them in our society when they are very good at doing something that we like to have somebody else do.

By any standard you might impose on sheltered workshops, the tasks done in sheltered workshops are interesting and colorful. But I can tell you, both the staff and the workers still get bored. It doesn't matter how interesting it is — after you've done it enough times it stops being interesting. Then the issue becomes one of how to go about designing a work environment so that people can do repetitive work over extended periods of time and enjoy doing it. The problem is not that different from what a lot of the management literature in business is facing right now.

We looked at the problem in much the same way we looked at the issue of training: What's in the literature? What can we take that other people have done? The literature is full of studies that say if you reinforce the person with this and this and this, every time they finish so many products, the work rate will go way up and everybody will be happy. You figure that what they did was measure performance during ten five-minute work periods. It's considerably different when you measure performance in an eight-hour day five days a week.

In our workshops, we can't just tell someone with some severe language deficits that there is a relationship between what we do and what we get. We can't tell them that we expect certain quality standards to be met over and over and over again. Instead, we have to communicate by contingency, by making very sure that the worker experiences something different when things are done right versus when things are done wrong. We do that by establishing a partial immediate payment system that functions a little like a token economy. People get partial payment in cash immediately for products that are completed correctly, and they get to re-do products that are completed incorrectly. To get a handle on teaching by contingency, think of a simple game with a deck of cards.
You arbitrarily say that all nines, sevens, and red cards are correct and everything else is incorrect. You are trying to communicate that rule to a friend without any instruction at all, but rather by having them give you a card and say yes or no. With most of us, it wouldn't take too long to figure out what the rule was. But think for a moment how hard it would be to figure out what the rule is if, about every fourth or fifth time, the person trying to teach felt sorry for us and decided to tell us something was right, even if it was wrong. So we manage production supervision by communicating through contingency. In fact, we differentially reward higher production rates by using this partial immediate payment as a consequence for work done correctly, accurately, and quickly.

For those of you who are interested in some of the broader set-up questions, we have people working at individual work stations, completing a long cycle-time product. We avoid assembly lines almost completely. Line balancing means that the work moves evenly down the line and you don't have some people waiting on others to finish products. We've tried to do line balancing, but it's a difficult task, even with normal workers. So we've learned that efficient design of the work itself is one of the most important aspects of behavior management in the work environment. It's certainly much more pleasant to reward people for work accomplished well than it is to punish somebody for deviant behavior which occurred because they didn't have anything to do.

We've also used several smaller techniques, like setting a kitchen timer for the person's average production rate during the past week. We provided an additional bonus in their partial immediate payment for working more rapidly than they have in the past. That tends to set a goal that is easily attainable, and it leads to gradual improvement in productivity and accuracy.

We know how to do vocational training; we know how to adapt some traditional analyses so that the more severely, profoundly handicapped people can learn these tasks; we know how to supervise production so that a fairly high production rate maintains over time. Why is it that nobody's doing this? For one thing, we were making a very different assumption from the one that was being made in most community programs serving handicapped adults. The assumptions we were making was that the person who was going to be right there eight hours a day was a competent, skilled, professional person, who would be able to figure out how to apply training principles to
individual workers, how to apply production supervision contingencies to individual workers, who would have some job design skills, task analysis skills, who knew how to do some measurement, change programs over time in response to data and that sort of thing. And what we found was that people who have that kind of education and background working in community facilities, worked in the front office with a rug, not back there where the people were. The folks who were there eight hours a day are usually seated employees who were going to be gone in two weeks.

We've got a lot of data that investing money in program managers, counselors, and evaluators really is a very useful way of getting a lot of mildly handicapped people into jobs. We don't have much data at all that suggests that those strategies work for the severely handicapped people. In fact, we've got a lot of data that suggests that they don't. So the strategy we took was to make the jobs all very different in serving severely handicapped people. Rather than ask a community facility to have both professional support service staff, and professional direct service staff, we developed some specialized models. Now the people who are there eight hours a day are the professionals. It's turned out really well so far. We have shops running in Eugene, Oregon; Seattle, Washington; Spokane, Washington; Reno, Nevada; and Bend, Oregon. And we're negotiating from Anchorage down to West Tacoma right now to set up additional programs. Each of these serves severely and profoundly retarded people doing electronics and other small-parts assembly work. We're showing that, if we can design a structure, severely and profoundly handicapped people can earn non-trivial wages and can participate in the economic mainstream of their community.

Now a brief look at the entire program: The work system is designed around what any good business would have. We get a task that is a potential contract, such as a 19-piece assembly of a printer for a desk-top computer. We try to figure out exactly how we're going to build it. We figure out exactly what kinds of fixtures would substitute for someone's third hand when necessary, and what the least expensive way would be. We design the work stations and make a task analysis with the stop watch. We provide direct training to an individual worker and fade out that trainer's assistance over time until the person is working independently in a production setting. We coordinate that work with what other people are doing on the same task and put that into the context of organized materials.
The organizational model we use is based on a consortia of workshops or a consortium of programs, all of which use fairly tightly defined operational procedures. It's a bit like a franchise operation. We start out with a program as a manual that specifies job descriptions, data collection procedures, file content, and so on. Those programs then join into a business cooperative, so that they share resources for computer, data processing, sales, engineering, operations managements, and so on.

We have one sales person working primarily out of Portland, Seattle, sending industrial sub-contracts as much as 400 or 500 miles away, which is a fairly long distance for us. We think that kind of sales cooperative will work, because of the procedural standardization in the programs we're working with. We know a lot of sheltered workshops have tried to do that sort of joint contracting before. Usually what happens is some conflict in the system, because some workshops are better able than others to turn out higher quality products in time, so they tend to get the better contracts. After three or four years, tension builds within the system.

Our data system is designed around a fairly simple concept; people have to make decisions at all levels. There are some very important decisions made every day on the production floor. Others are made every week or month by the appropriate manager; and still others are made every month or quarter or year by the state management. We try to use the data system to get the information to the people as they need the data. One very obvious example, every sheltered workshop in the country takes data on individual productivity and keeps it on file as required by the Department of Labor for two years. In visiting some 70 or eighty workshops over the last two or three years, I've only seen two or three that return the data so the production supervisor can see the day-to-day variability and change in individual productivity. Yet it's the supervisor who's making most of the decisions that will affect the individual productivity!

We also asked, what happens as a function of providing work opportunities to severely and profoundly retarded adults? Was that initial value judgement we made, stressing the importance of work, really accurate? Should we instead have been providing more activity-oriented programs? It is hard to measure something like that, because in a sense what we're doing is asking: what is the quality of life? What's a better life style? Over the past three or four years, we've been taking data on such things as social behavior in an unstructured leisure
I can give you a great deal of data to suggest that, as people become productive, competent people, they tend to be perceived as less deviant and more competent and more socially acceptable by the people around them. This tends to be other generalized skill acquisition and less dissatisfaction in the living environment. Social behavior tends to be more open, and on and on.

Let me tell you about one gentleman, 36 years old, who entered our shop after 35 years in the lowest level ambulatory ward of the state institution. Now, although he still doesn't work at 100% productivity, he's competent on about seven different assembly tasks. So he fits in better within the university community. Another individual is 32. His teeth were pulled in the institution because he bit people as a kid. He now assembles, does a lot of component prep work for circuit boards, assembles test adapters, and has done some wiring harness work. He jogs four miles a day, attends church independently, goes to a local spa twice a week. He still has no language. The third individual has spent one year in a public school setting, before the TMR class decided he wasn't smart enough to attend. He spent about eight years in institutions, on the lowest-level ambulatory ward. He has no expressive language skills, but he's developed fairly good receptive skills now. First, he learned how to put together a 26-piece print head assembly out of the grocery store labeling gun. Then he learned how to build a cam switch actuator, and to stuff circuit board components. Over the next six months, he learned how to assemble 14 different kinds of cam switches. Right now, we could probably bring any cam assembly task into the environment and in the course of an hour, have him working fairly competently at it. He has been averaging above minimum wage. We've been able to keep him busy for the last 3 1/2 years.

In the few minutes we have left, let me address the question of vocational preparation for severely and profoundly handicapped students. Three basic questions again: 1) Should we do it? 2) If we're going to do it, what should be the content of vocational preparation? and 3) What are the techniques we should be thinking about?

I think the "should we do it" question really involves our prediction of what's going to happen over the next few years. If you think very broadly about education, there are two strategies. One would be that what we are doing is preparing people for competent living in the environments we are projecting over the next 40-45 years.
Especially for vocational preparation from a vocational preparation standpoint, we assume the person has a work life of about 40 years. We're in the business of predicting what that work environment will be like for the next 40 years. Then we try to figure exactly what skills will maximize a person's independence, competence, earnings, and so forth in the predicted environment. That's one strategy, and I think it is one that most of us have accepted.

The alternate would be based on something like Postman and Weingartner's work. They're talking about education as a subversive activity. You can project that to an alternate way of thinking about education. You can use the educational process as a method for shaping the future into what you want it to be. American education has always been some combination of those two things. I suppose it would probably be more committed to the former than to the latter in an institutional sense. That puts us in the situation of trying to predict vocational environments, or whether vocational environments will be available to people that are labeled severely and profoundly handicapped in today's public school programs.

There are a lot of ways to predict the future. The first and most obvious way would be to say things are going to stay pretty much the way they are over the next 40 years. If we're going to prepare people labeled severely and profoundly retarded for the adult environments they are in now, we should teach them to sit quietly by the television as it changes from program to program without panicking too much, to string beans, cut out paper dolls, and enjoy the service club's sympathy parties that come our way in the activity center. There are very few active creative things expected of adults labeled severely and profoundly retarded in our society right now. So, if we're going to predict that things are going to stay the way they are, then I guess we'd have to say, no, you shouldn't do vocational preparation.

Another way to predict the future is to ask people who are directly involved in services what they think should happen, by projecting their values. People who are in the process of doing adult services really think that vocational opportunities should be provided. It is simply a question of how to do it. If we project people's value systems, there will be some major changes.

If we look at what's happening in the courts and in Congress, we see that all the changes that occurred as a
result of the political activism of women and blacks over the last 20 years have been extended to handicapped individuals. All those changes have been extended in the law to anyone who can either demonstrate that a handicap is present or who can show a social presumption that a handicap is present. The legal basis for providing services is there. There is increasingly less legal justification for providing vocational opportunities to some handicapped people, but not for other handicapped people.

In a sense, what has happened is that people like me and some others have generated the factual basis for those legal activities, by showing that yes, severely handicapped people can learn; yes, they can be very productive. That's all the information that's really needed for the court, but it's not enough for you and me to go out and deliver the service. We don't know very much about the economic and social impact. We don't know very much about the ideal service structures. We don't know very much yet about the administrative arrangements that will have to be developed in order to really provide those structures. And we're all likely to get caught in the middle. I understand that, but I also think we're going to be pushed by the courts and by Congress, to develop those administrative structures.

There are other reasons for predicting that vocational opportunities will be provided to adults. In the last ten years, there have been two very thorough economic studies dealing with cost benefits. Both concluded almost the same thing, that vocational services were useful and cost beneficial from about IQ 40 on up, and that for IQ 40 down, people don't know how to do that yet. And it certainly wouldn't be cost beneficial.

Unfortunately, they might have asked the right question, but things are changing so quickly that I think their answers are already out of date. We have developed many social service entitlements over the last three or four years. If you look at what handicapped people are entitled to under the welfare systems we have, they are entitled to SSIP, SSDIP, Title 19 or Title 20 benefits. They are entitled to supportive residential options, and much more. The cost of not providing vocational services has skyrocketed over the last few years. The cost of maintaining individuals in institutions has gone from an average of $20 a day not very long ago, to an average of $70 or $80 a day now, and there are very few experts in the field who believe it is possible to meet current, federal guidelines for the Title 19 program, which is funding most of the institutions right now, at less than $80 to $100 a day. The state director of developmental
disabilities in California estimates right now that from the time a developmentally disabled person turns 21, society as a whole is looking at about a million dollars per person of public support, during a person's projected lifetime.

So the issue is no longer what we've been talking about with rehabilitation for a long time, how much tax dollars does it take to rehabilitate somebody and how many tax dollars that person is going to return to society. The real financial issue that we've got to face is can we, by providing some kind of vocational preparation, reduce this immense social service consumption that we're projecting for handicapped individuals? Each of those social service entitlements are hard-won political battles. By the same token, I think it's incumbent on us to think financially and economically about the ultimate benefit of what we are doing, in terms of dollars. If you were in the Office of Management Budget, writing federal policy, would you be supporting vocational preparation for severely handicapped people? My prediction is that five years from now that answer will be yes, and perhaps it will be sooner than that.

I was involved in the follow-up to the Philadelphia PA.R.C.* case, that predated P.L. 94-142, in which the judge affirmed that all handicapped children have a right to free public education as appropriate to their needs. That went back to court with the challenge from one group of parents who had two severely handicapped children. They were charging that their children did not receive appropriate education, and one of the major things they cited was that there had been no vocational preparation for these two severely retarded multi-handicapped children. The person who was a director of vocational education for the Philadelphia school district in the deposition said, "Well, as a matter of course, we have all these different vocational preparation programs, and about four or five of them are open to mildly handicapped people, and you know we even include markedly handicapped people in our sort and assembly program, but not in the others, and clearly we don't have severely handicapped people in any of them." After several of us finished testifying, the judge said, "What you all are telling me is that this is a neanderthal document, right?"

Once again, we're going to be pushed by the courts

*Pennsylvania Association for Retarded Citizens
before we're ready to be pushed. We're going to be pushed by the courts because we're documenting individual potential, not because we've developed broad systems of service. And we're going to be caught in the middle trying to develop a system to service, simply because there is a lot of discrepancy between what we know how to do and some research-based sense. I think you and I understand a lot of the reasons why that discrepancy is there, and it has nothing to do with maliciousness. Our court system isn't tuned in to responding in exactly that way. We'll be asked to develop those systems a bit sooner than we wanted to. But yes, we should provide the training.

Exactly what services should we be providing? Most of this will not be new to those of you involved in vocational education, although I find it often new to people involved in special education. What are the skills that are really going to help somebody in the 30-year working history we're projecting? The day of a single work task, the day when the single competence for the single task makes you very productive, are long gone. And you should not be impressed any longer when somebody like me stands up and says, "Gee whiz, look what a wonderful task I taught somebody how to do." If you're going to survive in any sub-contract facility, or even in most production environments right now, you'd better be able to change rapidly from task to task. You'd better be able to learn those tasks rapidly, and so forth. Research going on now in computer-control robot assembly is drastically changing the economics of automation in production. As a result, instead of having a million units per year over a certain time frame, you have to have a plan that's cut by a tenth. The tasks we've been seeing in sheltered workshops — high-volume, long-term tasks — are vanishing rapidly, if they haven't already done so.

The same thing is true on a broader scale when we talk about placing moderately handicapped people in competitive jobs. There's a great deal of data that, from the first early wave of institutionalization in the '60's, even mildly handicapped people brought out of the institution and placed in community jobs seldom had stable jobs that lasted over a long period of time. Rather people got jobs, lost jobs, got on welfare, got off welfare, were on food stamps for a while, then to the sheltered workshops, got a new job, and so forth. And activity in that work environment is possible only if you have either skills that are generic or across several job clusters or if you're very rapidly able to acquire new skills.

A third projection argues for the flexibility of
skills that we teach. Most analyses of future labor markets suggest that the production component of the labor market would be shrinking in size relative to service occupations. That's nothing new. That's been around for a long time. But one thing about service occupations I think we should know. Service occupations, more often than not, require performance of some definable set of skills, across several somewhat different environments. So you have to have skills that you can perform, and perform with a certain level of competence, even though you are performing in slightly different situations one time after another.

All those projections, it seems to me, add some very interesting practical, technical problems to the things we've been doing research on. Our research started with teaching single tasks to individuals. After coming head to head with some of the real financial problems involved in running a sub-contract assembly shop, we stopped doing that and started trying to teach strategies for circuit board assembly, so the person could build a new board. We designed strategies for cable harness work, so that we could match the sample cues to reduce the training time, and we developed simple systems so that the people who had no language and couldn't read could still acquire some of the information required for a task, through symbols or pictures. That's the vocational preparation we all need to be thinking about now, for the moderately and severely handicapped individuals.

How do we do it? I think one of the best concepts I've heard was the one that Lou Brown from Madison mentioned a long time ago: We can probably teach any sort of skill to just about anybody, as long as the IQ of the trainer and the trainee add up to 200. The more severely handicapped your students, the more time, effort, ingenuity, and sheer training skill will be demanded from the trainer. The more severely handicapped the students, the more you're going to have to be precise about what you teach, the more you're going to have to be precise about how you teach it, and the less you're going to be able to assume that the person will learn anything by chance.
"It is important to teach learning skills and the attitude of seeking information required to meet current needs throughout life. It is incorrect to think of the first years as those of students, the middle years as work, and the last as former worker."

Lifelong learning is perhaps first a philosophy that assumes that both individuals and society are subject to change; individuals proceed through various stages of development physiologically, emotionally, socially, and intellectually, and have different learning needs at each developmental level. Changes are occurring in society at a pace sufficiently fast that it becomes inappropriate to attempt to teach individuals all that they need to know in their lifetime; much of the data and processes taught will become obsolete and erroneous during that lifetime. Hence, it is important to teach learning skills and the attitude of seeking information required to meet current needs throughout life. According to this philosophy, it is incorrect to think of the first years as those of student, the middle years as worker, and the last as former worker. Public schools should not be planned to prepare people for a static job, but should facilitate the learning according to present needs. The student will expect to return to educational agency whenever learning needs occur, such as remedying early educational deficits, upgrading current vocational skills, acquiring new ones, acquiring avocational skills, and learning about themselves and society. Responsible government agencies would then provide learning programs for early childhood education, elementary and secondary education, higher education, and..."
adult education, and would also recognize learning experiences outside of schools. Adults have and will continue to have learning needs. In the United States the increased enrollment in adult education as well as in vocational, technical, community college, and university programs reflect unmet learning needs of adults. Public Law 94-482, the lifelong learning legislation, was passed because so many uncoordinated programs existed that Congress felt a need for assessing adult learning needs and for determining ways federal resources and programs might best be used to help meet these needs. Specifically the objectives established by this legislation are to:

- plan, assess, and coordinate projects related to lifelong learning
- assist states to plan for and assess the status of lifelong learning and
- improve a wide range of activities that affect the availability of opportunities for lifelong learning.

**Career Education**

In the early days of vocational guidance, the counselor worked primarily with persons considering employment. Although some of these individuals were still enrolled in secondary school programs, employment was an immediate concern. As the goals of vocational guidance were incorporated more extensively into secondary school programs across the nation, the focus broadened until today career education is a concern in the elementary school. Model programs have been developed for the various age groups, based on developmental capabilities of the students and are being implemented. Thus, a philosophy compatible with lifelong learning exists in the career education programs which are based on developmental characteristics of the learner. Unfortunately these programs are available to the handicapped, and especially the severely handicapped, less often than they are to the non-handicapped.

Our position is that people can be understood best by viewing each as a whole person with human emotions and goals. The definition proposed by Brolin (1978) is our working definition:

"Career education is the process of systematically facilitating all school, family and community components together to facilitate each individual's potentials for economic, social and personal fulfillment (p:"

"whole person with human emotions and goals."
Career development is thus designed to further each individual's "life career development," reflecting concern for the whole individual in the various roles played in many settings, and recognizing that, as people develop, they continue to change and possess different needs at different stages of their lives (Gysbers and Moore, 1973).

THE SPECIAL SITUATION OF THE HANDICAPPED

While lifelong learning and the ideals it fosters are important to all, they are crucial in the development of the total life roles of handicapped individuals. These individuals, because of the fragmentation, short duration and limited focus of existing educational, rehabilitation, and training programs, and the attitudinal barriers erected by society, have not been prepared to function fully in many of the roles to which they aspire. Thus, if and when they do enter the mainstream of society, it is often in a "one-down" position. This lack of training and employment is statistically documented by Halloran, Levitan and Taggart, and others, who attest to the fact that employment rates for handicapped are far lower than for non-handicapped. Full-time employment is the norm for the non-handicapped, but not so for the handicapped. The handicapped persons had less education. Compounding the employment problem is membership in a minority status. Being black and handicapped or being a woman and handicapped means extra disadvantages.

The need for additional career education programs is documented by other studies reporting evaluation results of rehabilitation clients from a variety of settings. Only about 25% have been employed in regular competitive jobs, while about half have become unemployed.

In studying the post-secondary school adjustment of educable retarded students from ten Minneapolis high schools during 1966-1972, Brodlin and his colleagues (1975) found that students in a work-study group attained a significantly better overall degree of vocational adjustment than those who followed a traditional academic curriculum. However, even the work-study group had serious adjustment problems. Forty-four percent of all the students were unemployed at follow-up. Speaking at the President's Committee on Employment of the Handicapped, Viscardi (1976) has reported that only four million of eleven million employable handicapped individuals are actually employed. He states
that factors contributing to this situation include inappropriate or inadequate preparation by the schools and inadequate post-school services. In general, we may describe the severely handicapped, the population of primary concern for lifelong learning and career development needs, as individuals who reside in our communities, who may or may not have been previously institutionalized, and may or may not have participated in special education, rehabilitation or training programs. Their major commonality, regardless of handicapping condition, is that, while they are not in an institutional setting, neither have they been prepared to function at full potential as active members of society. Left in a vague in-between status, they often lose skills they may have learned from previous programs and may not have access to further skill development programs and an integrated system of support services. Thus, their state of objective encapsulation or isolation may be attributed to 1) lack of continuous lifelong programs to develop the vast array of role skills, 2) the barriers willingly or unwittingly placed before these individuals by society, barriers which may be attitudinal, or architectural, and 3) the actual limitations imposed by the disability, even with the progress made by medicine and technology.

Shrey (1976) recognized the limitations of vocational and rehabilitation agencies. He suggested that post-employment services are necessary to assist individuals with personal-social adjustment at home, at work, and in the community. He suggested classes dealing with social and communication skills and recreational activities as needed alternatives to typical rehabilitation approaches. The Michigan Vocational Rehabilitation Service, after a two-year period, came to similar conclusions. Both found a substantial amount of unemployment among former clients, and a sizeable number of clients desired post-closure services. While post-employment services are authorized in the 1973 Rehabilitation Act, they are not being rendered in a quantity sufficient to meet the needs of all clients.

Appell (1977) strongly advocates instructing handicapped individuals in vocational preparation programs in personal and social skills as "vocational failure is not predicted on lack of vocational skills as much as the inability to acquire and use social interaction skills" (p. 77). Barriers to vocational skill programs also need to be removed.

Brolin (1978) has developed a three-way classification system within Project PRICE which he refers to as major domains. These are daily living skills, personal-social
written in relationship to these three areas and form the groundwork for the Lifelong Career Development Project.

Professional Attitudes and the Handicapped

Phelps (1976) has indicated that educators have traditionally used definitions based on a medical model for handicapped individuals. Such labeling works to the detriment of the individual. An alternative definition proposed by Phelps refers to an individual with special needs as someone who is:

having difficulty succeeding in a regular or special, career-oriented educational program due to the effects of a disability, disadvantage, and/or dysfunctional school placement, and who requires individually prescribed, unique and more powerful teaching techniques, supplemental or supportive services which vary in type and extent depending on individual need, and additional resources from society for his/her education and for his/her acceptance by society (p. 27).

By accepting such a definition, we are accepting responsibility for the development of opportunities and programs that will fill these special needs. These programs must point to competencies and skills that the handicapped must attain. The attitude involved in the new definition proposed by Phelps is one of hope and belief in the capacities of clients. It is consistent with those who believe in lifelong education, who believe that programs can make a difference, and who request positive programs geared to achievable goals.

DELIVERY SYSTEMS AND CONSUMERISM

Federal legislation providing for rehabilitation services for the physically disabled was first passed approximately sixty years ago.

Since this first federal law was passed, the program has broadened its scope not only to a wider variety of clients such as the emotionally disturbed but also to those whose disabilities are more severe. Hoehne (1977) has expressed that the philosophy of this system is to provide
services as "a matter of equity, enlightenment, justice and basic individual right" (p. 373). He concludes that the present delivery system works well for those persons who receive services but explains that there are many handicapped individuals who do not meet eligibility criteria of the program or whose problems are such that this delivery system is not responsive to them. Weaknesses seen by consumers in most of our human service delivery systems include large caseloads, inadequate funding, and bureaucratic red tape.

There are weaknesses in the system, but its strengths are many. One reason why the rehabilitation program is effective is that it is concerned solely with assisting handicapped individuals. Management Services Associates, an independent (non-governmental) firm specializing in the planning and evaluation of government programs in the field of human services, studied the effectiveness of state-federal programs for the blind in organizational structures in the states. They concluded that the same skills used in management and program delivery work well in tangible endeavors, such as materials procurement, but do not work well in intangible fields, such as human service delivery systems. Success can be attained in combined human service fields "only if the personal client relationships are preserved and the intensity of the relationships maintained."

The report claims that the failure of welfare programs to meet needs is due to the failure to resolve the problems that create the needs" (Hoehne, 1977, p. 379). Two myths are involved in the thinking of those management-oriented persons who wish to develop "umbrella" agencies. The first is that because some functions sound alike they are alike. The second is "economy of scale," implying that "more" is of greater efficiency. When talking of people problems, neither concept applies. The "umbrella" agency philosophy ignores vital considerations, such as "differences in approach, operational strategy, clients being served, and specialized training of staff for effective client services" (Mailib 1975, p. 10-11).

Consumer Involvement

Regardless of whether the agency is large or small, weaknesses in both program delivery and human relations will exist. Handicapped people have recently banded together and become more assertive, like the civil rights groups of the 1960's. Prior to this time, the blind were the only group of handicapped persons who had organized and presented their requests to Congress. The experience of this group was, no
doubt, helpful in bringing together persons with all kinds of disabilities. In addition dissatisfaction already mentioned, President Nixon had vetoed two rehabilitation acts passed by Congress. Their protests to the attention of their congressmen strongly enough to be heard, and they were asked to testify about the strengths, weaknesses, and needed changes in the rehabilitation program prior to the passage of the 1973 Rehabilitation Act. As a result of this legislation, the consumer and the provider of rehabilitation services are mandated to work together.

Specific consumer activities required by the 1973 Rehabilitation Act include advisory councils for state agencies, affirmative action personnel policies, client assistance projects to develop a model of client advocacy, individualized written rehabilitation plans for each client to be developed in a cooperative manner, participation in training programs, and a reordering of priorities in favor of the severely handicapped.

Section V of this legislation is "civil rights legislation" and is being sued by Congress to direct HEW and the Office of Civil Rights to police programs for the handicapped, as provided by the Rehabilitation Act, the Education for All Handicapped Children Act, and the Educational Amendments of 1976. New opportunities and programs should develop which will offset many of the external discriminatory variables such as architectural barriers; hopefully these will lead to a change in the subjective state of many of these handicapped individuals. Without these new programs, the obstacles to overcoming feelings of anomie and entrapment may be so great and the coping skills required so far beyond the resources available in any one person's repertoire, that even those who are highly motivated to achieve may abandon their plan. These laws make it possible for consumers and providers to focus on removal of physical and attitudinal barriers rather than label the restricted individual a "mental health" case; one need not accept these barriers as permanent to accept his/her disability.

It is important to emphasize at this point that the success of any program should be measured by the progress of individual participants toward holistic development, optimal life adjustment, and a positive self concept. The initial step to make these goals a reality is to offer opportunities to learn life skills in a manner most appropriate to individual needs. In the past, special needs persons other have not been given these opportunities. Personal
productivity, motivation, self-esteem, improvement in the quality of life, and an increase in the number of options available to the handicapped individual are but a few of the by-products on a continuum of personal growth possible, once specific skill needs are assessed and appropriate learning opportunities and support services offered. Programs will be successful to the extent that our attitudes are helpful rather than harmful, we accept the handicapped as individuals with varying personalities, potentials, and goals, and accept the responsibility to develop appropriate processes for implementing these programs. Daniels (1976) points out that the rise of consumer involvement reflects a political and social maturation on the part of disabled citizens and that the career education professional can now develop a more nearly equal-to-equal relationship with clients. In the rehabilitation process the client must now be treated as an adult capable of making career decisions. The consumer can be a resource in many ways and both the rehabilitation process and the consumer will be strengthened.

LCD AND COMMUNITY COLLEGES

In order to implement lifelong learning programs for the handicapped, we must look to agencies whose directors recognize the need for learning opportunities for persons of diversified backgrounds. While a large number of federal and state agencies are designed to alleviate a wide range of human needs, it is difficult to conceive of an agency that provides for multi-learning needs to a greater extent than does the community college.

The University of Missouri-Columbia was awarded a three-year Research and Demonstration Grant from the U. S. Office of Education's Bureau of Education for the Handicapped (BEH) for September 1, 1978 - August 31, 1981, to design a Lifelong Career Development Model for Severely Handicapped Individuals. The project, entitled the "Lifelong Career Development (LCD) Project," is an offshoot of a previous BEH project (Project PRICE) which was conducted at this university from 1974-1977.

The LCD will focus on seven major handicapping conditions: blindness and visual impairment; deafness and hard of hearing; mental retardation; cerebral palsy; epilepsy; orthopedic handicapped; and multiple handicapped. LCD will emphasize the lifelong learning and guidance needs of individuals in these groups, as they relate primarily to the
LIFELONG CAREER DEVELOPMENT

22 career development competencies identified from Project PRICE as most critical for community functioning. Its objective is to study the extent to which community colleges can become substantially involved in contributing to the lifelong career development needs of severely handicapped individuals. The project is intended to:

1. develop a conceptual career development prototype model that can be implemented at a community college to assure and coordinate continuous delivery of services to severely handicapped individuals throughout their lifetime;

2. develop a staff development training program and materials to train various types of community personnel to provide lifelong career development services to severely handicapped individuals;

3. implement and field test the staff development training model to determine its applicability for community settings; and

4. implement and field test the comprehensive career development training program for severely handicapped individuals which will effectively meet their lifelong learning needs.

The final products of the LCD project will consist of:

1. A Lifelong Career Development Inservice Trainer's Guide. For community colleges to train their own staff, other agency and school personnel, parents, and employers to provide career development services to various types of severely handicapped individuals.

2. A Career Development Program, Resource and Implementation Guide. For explaining techniques and procedures to teach, train, counsel and otherwise assist handicapped individuals to learn various career development competencies. This Guide will also contain information about instructional/guidance materials, equipment, funding sources, support services, materials/development, vocational assessment systems and procedures and other pertinent data. Procedures for implementing the LIFELONG CAREER DEVELOPMENT MODEL in community settings will be contained in this Guide.

3. Working Papers on special topics related to career development. These publications will be available
throughout the course of the project by contacting the project director.

4. Newsletters.

The initial field/pilot of the project is currently underway at three community colleges. The final field-testing, however, will be conducted at three new sites. The three (3) community colleges have been selected as coordinating agencies for the field-based model are very different from one another. One is located in a rural area of north central Minnesota. It has been very successful in mobilizing the various community agencies in that city and its area so that they are informed of the project and have agreed to participate. Television and radio publicity has been secured and several local community organizations have volunteered their services for the project activities. The community college represents a mid-sized geographical area and serves seven counties in north central Iowa. This community college has been engaging in an Experience Based Career Education (EBCE) project for the handicapped over the past two years, in which we also have been involved. Thus, the interest is very high from the community college standpoint for this project, and they are effectively gaining the cooperation of a wide array of community and civic organizations that deal with handicapped persons. The third community college represents the St. Louis urban setting, in which a myriad of agencies and other resources exist. It has just recently begun serving handicapped students and has a wide array of staff members available for project use. Cooperation from agencies in this community college district has also been excellent.

Each of the three community colleges has designated a local coordinator to serve as liaison with the project staff and to engage in the many activities we request. They have been extremely cooperative and are spending a great deal of time arranging and organizing their college and community for the various activities required for project involvement. We also have the support of four advisory committees to provide consultation, evaluation, and review of materials, and to assist with coordinating the project: A UMC Advisory Committee, a Community College Advisory Committee and coordinator, a Community Advising Committee at each site (involving concerned citizens and agency representatives) and a National Advisory Committee.
Needs Assessment Survey

A comprehensive, field-based needs assessment study was devised during the first six months of the project to determine the competency attainment and learning needs of disabled persons, and to get an indication of what services are not available to each disability group from community agencies, thereby revealing the role community college and family will need to assume if all competencies are to be taught to severely handicapped persons. The data will also serve as information for the community college in a referral role. A third major outcome of the data will be the identification of training needs by various personnel in meeting the needs of the severely handicapped.

Individuals from agencies in the three community college areas, including those at the college and their students, were trained to conduct personal surveys of disabled persons, relatives, employers, and agency personnel. General information and an explanation of the project were provided to all interviewers. Our samples were drawn from caseloads of agency workers, from the community college, and from the community at large. Four survey instruments were devised and used to answer a series of questions. I will describe these instruments, our samples, and preliminary results. Final data analysis with all of our findings will be available in published form from the project at the end of May.

The first form was the Disabled Person Questionnaire (Form A). Our sample consisted of 161 subjects distributed across the seven disability groups. Our survey was designed to indicate:

1. The general competency level of each disability group by campus, thus pinpointing learning needs.
2. If there was a significant difference in competency level among the seven disability groups.
3. The employment status of each disability group (competitive or sheltered, types of jobs held by each group).
4. The proportion of subjects by disability and by campus who would like to receive training from appropriate community agencies.

Competencies. Of the 22 competencies those in which...
each group did least well are as follows: (they are not in rank order)

**Visually Handicapped**
- buying and caring for clothing
- acquiring self-confidence
- mobility
- managing finances
- maintaining employment
- selecting and planning occupational choices

**Deaf**
- managing finances
- selecting, managing and maintaining a home
- family living and raising children
- engaging in civic activities
- acquiring self-confidence
- communicating adequately with others

**Mentally Retarded**
- managing family finances
- family living and raising children
- engaging in civic activities
- knowing and exploring occupational possibilities
- selecting and planning occupational choices
- seeking, securing and maintaining employment

**Cerebral Palsied**
- managing family finances
- selecting, managing, and maintaining a home
- planning, buying and preparing food
- mobility
- seeking, securing and maintaining employment

**Epilepsy**
- family living and raising children
- acquiring self confidence
- knowing and exploring occupational possibilities
- selecting and planning occupational choices
- utilizing recreation and leisure
- possessing physical/manual skills

**Orthopedically Handicapped**
- selecting, managing and maintaining a home
- family living and raising children
- buying and caring for clothing
- mobility
- acquiring self confidence
- knowing and exploring occupational possibilities
Multiple Handicapped
Managing family finances
selecting, managing and maintaining a home
family living and raising children
buying and caring for clothing
mobility
knowing and exploring occupational possibilities

Employment. Of the 161 subjects 55 (approximately 33%) are currently employed (45 in competitive employment, 10 in sheltered settings). Eleven percent are currently in school or training programs. We therefore have approximately 56% who are spending their time in other ways.

One open-ended question posed to the disabled person and relative concerned their perception of what barriers prevent them from attaining desired career and personal goals. The responses included:

handicapping condition
transportation
the attitudes of others
lack of training/skills/academic preparation/inadequate educational background
lack of self-confidence
the job market and lack of experience
lack of motivation

The Disabled Person's Relative Questionnaire (Form B) was directly administered to 105 relatives, spread across the seven disability groups. It was similar to the Disabled Person Questionnaire. The relatives, as expected, were primarily spouses or parents. We wanted to find out the competency level, as perceived by a relative, as well as their perception of barriers to goal attainment. In general, an older relative's perception is more in agreement with the disabled person's score, whereas a younger relative felt the disabled person was able to do more. Hard data for this questionnaire is not yet available.

We gained insight into family dynamics by interviewing both the disabled person and relative; in addition, we've received letters of interest from several parents and hope this will, in the future, indicate a willingness to participate in the program.

The Agency Questionnaire (Form C) was administered to 40 agencies in the three sites to determine the number of services available to disabled persons through area agencies.
relative to the 22 competencies. A diverse variety of agencies were surveyed representing rehabilitation, employment, education, social services, health care and so on.

Specifically, by asking agency representatives to respond to all 118 questions we will find out if services are available relative to all competencies and for all disability groups, if there is a significant difference between needed services and available services, and what types of assistance the agencies would need in providing career development services. We found that less than half of all agencies surveyed provided services related to financial matters; housing; self-awareness and personality development; family, marriage and housekeeping skills; legal rights and responsibilities, leisure time activities; and transportation. After close perusal of remaining data we will be able to match needs and services to determine where gaps exist.

The last form used was the Attitudes Toward Disabled Persons Questionnaire (ATDP: Yuker, Block, and Young, 1970) which is a measure of perceived differences between disabled and non-disabled persons. Scores fall on a continuum of individualized versus stereotypical attitudes toward disabled, with stereotypical attitudes having a negative connotation. The scale was administered to 118 individuals representing two groups on each campus: community college personnel including faculty and staff and a representation of area businesses and employers. The mean scores for the two groups on each campus were statistically different on one campus only, with the staff scoring in a more positive direction. All mean scores fall within the 50th to 75th percentile rank on test manual norms. However, the standard deviations for all groups were large, indicating a general need for workshops, presentations or educational materials to engender a more positive attitudinal shift.

The community college seems to be the ideal agency to coordinate and provide services, offering counseling, testing, career development services, basic adult education programs, remedial programs in many areas of communication and mathematical skills, vocational and technical programs of short-term duration and two-year transfer programs.
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special short-term academic courses
non-credit popular interest courses

As an agency or institution

it commands a positive image in the community
its doors are open to both day and evening students,
full-time and part-time students, students of all ages and of all backgrounds
vocational/technical programs offered in the community
college are generally based on needs assessment
surveys of immediate and surrounding communities
of which they are a part
many of the student personnel staff are highly visible
in that they interact with local secondary students
and staff and assist potential students with
admission, advisement and enrollment including
placement in appropriate level courses
many of the community colleges have developed wide-
ranging outreach programs including special programs
and personnel for the disadvantaged and handicapped
most of the community colleges are housed in fairly
new facilities with fewer architectural barriers
than older, more established facilities
monies are now available through the Regional Education
Program for Handicapped Persons, administered by
the Bureau of Education for the Handicapped, to
administrators who wish to provide their handicapped
students with special programming and other
assistance.

The programs and services of the community college
referred to above are designed to assist the handicapped
individual whose physical and intellectual abilities and
whose goals are in accord with college or vocational/
technical instruction. Some community colleges have already
extended their services to groups not usually served by
such agencies of higher education.

1. Broward Community College has developed a program
offering practical continuing education courses,
companionship, and social activities to mentally
retarded young adults. Instruction is provided
both in old skills which have been lost through
lack or use of lack of reinforcement and in new
skills needed for survival.
2. The State of Washington Community Colleges System offering a wide range of evening courses to adult retarded individuals. The goal for these persons is integration into regular community college courses, for the enrichment such experiences would provide.

3. Feather River College has an "Enabler Program" to provide services to all physical, developmental, learning-disabled and other health-impaired students. The major goal is to allow all disabled students to fully participate in all college programs and activities. They provide mobility training, counseling, liaison with other agencies, special equipment and facilities, and job preparation and placement.

4. J. Hardee Reynolds Community College provides a full range of special services for the deaf and has had recent expansion into services for the visually impaired.

In the course of the LCD project we have been in touch with approximately 20 community colleges providing special programs across the nation. While we believe that the number of community college programs designed for various disability groups is small, their presence reflects the richness and diversity of the community college.

We have taken the position that severely handicapped individuals face lifelong career education needs parallel to non-handicapped persons and that programs to provide these services do not now exist. Through the development and implementation of the Lifelong Career Development Project, it will be possible for those handicapped individuals served, to find the support and coordinated services necessary to enable them to function at their fullest potential and effectively meet their lifelong learning needs.
REFERENCES

Appell, 1977. Editors apologize for the absence of this reference.


Daniels, 1976. Editors apologize for the absence of this reference.


Hoehne, 1977. Editors apologize for the absence of this reference.

Mallas, 1975. Editors apologize for the absence of this reference.


Shrey, 1976. Editors apologize for the absence of this reference.


Yuker, 1970. Editors apologize for the absence of this reference.
"Accept that ultimate challenge, plan ahead toward all the resources you haven't tapped yet, to all the challenges you haven't met."

In wrapping up this terrific conference, there are just three things I'd like to do. First, I want to reiterate what I heard you saying as a summary, so you can go from there. Then, I'd like to mention two things I didn't hear you say, a minor thing and a major thing. And then, I'd like to present you with just a few ideas.

There are a couple of words or phrases I heard over and over again. I'll just send them back to you, so that in this coming year, when you hear one of these words or phrases, you'll say, "Ahhh, Texas A&M Conference. I remember. We had such great times." I heard "teamwork" and "team effort." I liked it when Marc Hull said, "You still see the vision." And of course, there were words like "cooperation," "communication," "commitment." Those are all key words. Marc Hull coined a new phrase when he said "individualized employability plan." We're just getting the IEP under way; and Marc's already off in another direction with another goal to aim for.

I thought I heard you say that you've made a lot of progress, but you're just getting under way. There are still some things you want to accomplish. You have miles and miles to go before you get there, before you find the right kind of assessment to take in handicapped needs and relate them to employability. You asked repeatedly how to make the system work. My interpretation of the system is...
"interagency cooperation." There's a whole big picture out there, and there should be a systematic way of doing things. You're trying at one local level. You've got some committed people here and there. But you want to kind of pull it all together. You're saying, "How do we do this; how do we really make it work?"

I heard you ask some interesting questions of the Issues Panel. You wanted to know about cross-training between special education and vocational education, and you wanted career guidelines for that program. You wanted vocational aides in the classroom, which is understandable, and trained post-secondary teachers. You wanted to know how to put the whole system together, and how to get funds to support the related services in vocational education. These are major issues.

Now about the things I didn't hear you say. One is a minor concern; maybe it's picky, but I'd like to think it has some pretty broad applications. In everything I heard about Public Law 94-142, never did anyone define special education as specially designed vocational education for handicapped students. This is critical, because this is part of the definition as written in P. L. 94-142 and can be used for funding. Someone said they needed special driver education handbooks for handicapped kids. Well, the funds can be covered through P. L. 94-142. The people at the Bureau of Education for the Handicapped are very responsive, and if you wanted to spend funds that way, you could.

The second thing I didn't hear you say was in response to the recent national conference Marc mentioned in his presentation, the interagency conference for all state directors in vocational education, special education, and vocational rehabilitation. These people were invited to Washington to start planning interagency cooperation, to make a commitment, to start writing their action plans for interagency cooperation on behalf of the handicapped. Wouldn't it have been terrific if you had invited here, to this statewide meeting, your state directors of vocational education, special education, and vocational rehabilitation, or at least their designees, so they could say, "Hey, we're at least committed to try interagency cooperation." It would have been inspiring for you, I'm sure, because then you could have gone ahead and worked with all the problems that would come because of that commitment. It seems to me that you're committed from the
I know some of you are really excited with the blend and interagency and that you're going to con-
tinue working toward it for a goal. But what is it going to take to get the people together who can really do something, to make that commitment, to interact, to coordinate efforts, to at least designate someone who can really make this happen and stand behind that commitment and support it?

I'm really thrilled that you have involved handicapped people in your conference. Keep it up; it's critical, because when you have the disabled with you, you can really begin to assess or measure your goals. The fact is that parents, advocates, and consumers can often provide pressure within a state, and within a nation, even within a local school district, that you as a professional can't, because you want to maintain your job. That doesn't mean you can't provide the input to these people. Consumers have a very strong advocacy role now, and people expect them to stand up and be noticed and to take the lead. Disabled people look to education as a way to eliminate dependency costs, so they have a great stake in it, and will support you.

I want to share my commitment to coordinating services and focusing on employment. I know some of you have many problems, but there's no reason why you can't set a specific goal. We put a man on the moon by setting a specific goal. You can say to yourselves, by next April, 1980, we'll have those three state directors here, and they'll either speak to interagency cooperation of their commitment, or they'll have it in writing, or they'll have their designates here. That's a small goal, but it could prove to be a major goal.

There's a tremendous potential here, and it's up to you to make it happen. You don't want to keep moving ahead, you've gotten where you are from a couple of years of planning and talking, interacting and communicating. You've had to build, you've had to set goals, and you'll have to keep doing the same to move forward. And from what I've seen at this conference, you've got what it takes.

In closing, I'm just going to ask you to accept that ultimate challenge, to think about planning ahead, toward all the resources that you haven't tapped yet or all the challenges you haven't met. Keep alive that hope, keep the flame alive!
"There's so much to like, emotionally, physically, spiritually, and we need to help people find the most and not let people settle for second best, or third best, but to really make the most out of life."

I'm going to put my watch here on the podium. It's still set on California time, so I have exactly two hours and thirty minutes for this message. Of course, you know what it means when a preacher takes his watch off and lays it on the podium — nothing, absolutely nothing.

I'm glad to be here today. I know that the results of this conference and what you've learned and what is going to be accomplished out there in our state in the next year is going to be done by you, not by me. You're the experts, I'm just here as a guest. I hope that what I have to share with you in the next few minutes will be helpful and will motivate you to go back and help your goals and ideals come to pass. My presentation today is going to be more of a story than a message or a documentary or anything like that. I'd like to just share with you some experiences that I have had in going from being an average person just like you, to being handicapped. Of course some of you aren't too average. ... Now, it's okay to laugh. We need to get that straight right now because I want to have a good time, and it will help me if you just go ahead and laugh. And if you want to raise your hand, or say, "Amen!" you just go right ahead, because that will help me feel right at home.

Randy Gallaway is the Area Director for Baptist Student Union in Riverside, California.
I began life as just an average kid on the block. I rode my bicycle and threw rocks at windows and did everything that all the other kids did. I had two hands and I could swim and just do everything. I was a real active kid. I wanted to do things, and so when I was 14 I got a part-time job after school, and I worked in a gas station. I learned how to handle big old tires and how to pump gas and grease cars. I rode a motor scooter and everything else a healthy adolescent could do. When I was 16 I got a part-time job at a construction company and I learned how to build swimming pools and sand blast and gun out and do all kinds of construction. When I was 17 I got a job in a factory. My 18th birthday came in September when I was working in a factory that had grown from about 300 employees to over 3,000 employees in about two years. Understandably the management was kind of shaky. They hired just about anyone they could find for management, and communication was bad. One group would be working over here and not knowing what the other was doing.

Now I had a job in the electrical department of this factory. I started off as a helper and then became a Class B electrician and one day, in March, after I'd been there about 10 months they asked a senior electrician and me to go up on top of a building and do some work on a transformer bank. They promised us that the electricity would all be turned off, that everything would be safe, that a contractor would come in and disconnect the high voltage lines way up the road and we wouldn't have anything to worry about. So we went up and performed the tests that we had to make sure that it was safe, and it was. Everything checked out. We began work at six o'clock in the morning. At about nine o'clock someone made a mistake. Someone was careless. Someone noticed the electricity was off and, without asking, turned it back on. And 13,500 volts went through me and through my partner. George was killed instantly, just incinerated like a matchstick. We were working up on top of the transformers, tightening the final connections when the electricity came on. George was blown over the side of the building and landed three stories below on the ground. I was blown at a slightly different angle and landed on the edge of the roof. When I came to, a few minutes later, the electricity that had passed through me had destroyed my right arm, and my left hand. It had melted the steel tools in my tool kit, destroyed two ribs and set my clothes on fire. Some men were pounding on me trying to put the fire out, because my clothes were still smoldering. I came to and said, "Lord, please save me!"
believe I survived that morning as an answer to that prayer. The fire department came and got me down off the building. Usually the fire department's great, right? Well, they almost killed me getting me down. They got me on the stretcher and it had too much slack in the ropes and they dropped it. I felt like a yo-yo at the end of that rope, but they finally got me down and to the emergency room where people recognized that I was in desperate shape, and that I would need the best doctor money could buy if I were going to survive. They called a little Spanish man from Old Mexico, Dr. Valentine Gracia, tremendous plastic surgeon, a burn specialist, who was working in Fort Worth where the accident happened. By the time Dr. Gracia had rushed to the hospital, I was already going into convulsions and on the verge of death. He did the emergency procedures, a tracheotomy and all the other treatments to try to keep me alive.

By now my parents had come to the hospital with friends and my pastor and others. Dr. Gracia told my parents after that if I could live 48 hours I might have a chance, but he didn't think I'd make it. Well, people began to pray, and I lived the 48 hours and then another 24 hours, and then it looked like death had come. They took me to the operating room and Dr. Gracia called in five other specialists to help. He knew he'd have to amputate. Gangrene had set in and I was in deep shock. The anesthesiologist said, "Dr. Gracia, there's nothing we can do. Anesthetics alone will kill him. There's nothing we can do."

But this little Spanish doctor had a tremendous drive and fight to save my life. He believed he could save my life. He had an argument with the anesthesiologist and with the other doctors. The anesthesiologist told me all about it later, so I know this is true. They had such a heated argument that Dr. Gracia grabbed the other doctor and began to shake him and then hit him and threw him down and all the time they're in little green suits, little green hats. The other guy finally said, "Okay, okay, I'll put him to sleep." They tell me that just in the nick of time they completed the surgery and my vital signs began to get stronger and I began to perk up. That was the first of 38 surgeries, getting patched up, skin grafts and a tendon graft to hook my elbow back up. The biceps muscle was burned in two at the elbow, and they got that hooked back up. After a year and a half in the hospital, I had just about wasted away. I weighed 89 pounds when I got out, and I was six feet tall. Now that is the definition of skinny.
I had a dream of getting some artificial arms. Texas law only required the insurance company that was responsible for the medical bills to pay $250 toward the purchase of artificial arms. Those of you familiar with purchasing prosthetics know that's a joke. So I went to the Texas Rehabilitation Commission and they paid the rest and got my first set for me.

Now, this was just when electronic arms were beginning to be invented and I expected to be a Six Million Dollar Man. I mean, I expected batteries and motors and all kinds of things. I found out that those electronic arms were still experimental and they didn't work very well back then. If I were to get one it would work about a week and it would break, and I would have to mail it to Chicago to get it fixed. So, they gave me an old tried and true. Let me describe it for you. Right here in the 20th century, the most reliable artificial arm still has a hook with rubber bands and straps around my back to hold it on. When I reach out the hooks open and when I relax they close. So they gave me that and a mechanical arm for my right side. And I began to practice with them, and I did all the things that you're supposed to do. I was laughing about these goblets here today. In all the old movies, amputees have to use goblets which are so hard to use and the amputees always spill their drinks. I poured my iced tea in my coffee cup today because I didn't want to take any chances.

But when I was starting out I constantly spilled my tea and made all the other predictable clumsy moves. I eventually learned how to write, though, with a big old crayon, and I learned how to drive a car again, and I learned how to take my glasses on and off, but my therapist made one mistake. She was too kind. She never forced me to go ahead and fight to learn how to get dressed. It was time to go back home, but she should have made me stay and tough it out to where I could dress, because without begin able to dress, and without being able to get my arms on and off by myself, I could not be independent. But she released me, anyway, and I went back home to a loving family who continued to care for me and button my shirt and do some things like that. It was several more years before I made the transition to independence. One summer I volunteered to be a summer missionary and work with some foreign students, and while I was there I realized that I had to master this. I invented some ways to get into a shirt by putting the collar of a shirt in a clip board and hanging it on a nail on the wall and backing up to it and getting this arm in and this arm and wiggling down into the end of the shirt. And I got some velcro sewed under the
I haven't told you about college yet. When I got my new arms and I could barely write, I was tremendously self-conscious. See, even in high school before I got hurt, I would take an "F" rather than stand up in front of a group. I wasn't very social. That has changed a lot! Three years ago I got to speak to a group of 14,000 young people in one meeting, and didn't mind it a bit. But back then I was very self-conscious. I walked on that college campus of 11,000 and a student who was active in one of the Christian groups on campus found me and introduced himself to me and took me over to the Baptist Student Union Center. I became part of a support group, a fellowship on that campus. They took me on trips. They took me everywhere they went and helped me get over my self-consciousness and my embarrassment about my artificial arms and spilling things.

There were some very interesting people in that group. One was Wayne Ashlock. One night when we were on a trip, we were having dinner with three girls and three guys. One was a very pretty girl. You know, even amputees like pretty girls. So, I was really trying to be on my P's and not get any mashed potatoes in my ear; or accidental green beans all over the table. I was being very careful. About halfway through dinner Wayne got me aside and said, "Randy, everybody's scared they're going to hurt your feelings, so tonight at supper I'm going to embarrass you real good and just laugh, and then everybody will know they don't have to be nervous. It'll be okay." So here I was, trying to be real cool, and Wayne looks up and says, "Randy, I just thought of something." "What's that, Wayne?" I ask. He comes back with, "I bet it's really hard to pick your nose with those things." And of course, I wasn't ready for that! I gasped and everybody else at the table gasped with me, and then looked at me real closely. Then I remembered, "Laugh, dummy," so I started laughing, and when I laughed it broke the ice. They realized that I was human too. They didn't have to be afraid about mentioning my hand, or making some boo-boo like suggesting baseball.
And from that experience I began to learn how to help people relax a little bit. It helps people when I use a little bit of humor. I'll shake hands with someone, you know, and I'll say, "If I squeeze too tight, just scream." A little quip like that helps people relax and tells them that I'm at peace with myself, I'm okay, and they can relax too. Then we can talk honestly about it. I don't call it a handicap, I call it an inconvenience. The difference between me and you is it takes me a little bit longer to get my snow skis on and it's a little bit harder for me to get out of the water and back in the boat when I ski. And while there are some things I cannot do, I just sacrifice those and I major on the things that I can do.

When my wife and I go to a restaurant now, I find it interesting to watch the different people's reactions to someone who's had some difficulty. Half the people in the restaurant will get uptight, especially people with little kids. These little kids will look at me and their eyes will get as big as pancakes, and they'll say, "Mommy, Mommy, look." Well, half the parents will get uptight. "Shut up. Don't look," they say. And then, of course the kid wants to look twice as bad. And then other parents will say, "That man's lost his arm, and that's a metal hand." And if I can get the parent's attention I say, "Send him on over, I'll show him how it works." And the kids come over and I say, "It opens and it closes and I can pick up my pen and I can pick up my spoon." And they say, "Oh, wow, that's neat," and then they'll go back and sit down and finish their supper.

I think people in general do that. When we see someone who's got a difficulty we feel empathy, we feel pain for them, we feel fear. What if that ever happened to me? If we could just learn to talk to people and say, "Hey, tell me about this. How did you get hurt? What happened? How do you tie your shoes?" You know, just honestly communicate about the gut-level things in life, we'll be a big step towards being a unity, being together.

Well, I enjoyed learning how to relate to people. My college career included engineering. I'd always wanted to be an engineer, studied engineering, did well in engineering, but I was beginning to develop an interest in people. I know many of you are here today because you care about helping people become all that they could be. I began to care about that, and I began to get involved in different ministry projects working in poverty communities, working in convalescent homes, and other ministries. And I began to feel a call towards Christian work, so when I graduated...
I took a job as a Christian worker on a college campus.

During the year I was out of college, the dream of getting married was becoming a definite possibility for my life. When I was a freshman I said, "Oh Lord, let it be this year, let me meet her." Then the sophomore year, the same thing, and all five years in my engineering curriculum. You know, "Hurry up. When will I ever meet some one that could love me?" During the year I had this job working on different campuses around that state for a year, I met Maryann and we fell in love and later were married, and have been married almost four years now.

As you counsel handicapped people, they will wonder, "Will I ever be able to marry? Could anyone ever love me?" You know there's about two billion men out there in the world and about two billion women, and of course, some of them are married, and some are too old and some of them are too young. But out of that two billion there is someone who could love you and share their life with you and enjoy doing it, and after all you only need one! I found my one. Sure we have some extra hassles because I've lost two hands, but we work on that, we talk about that and we're committed to making it work.

There's so much to life, emotionally, physically, spiritually, and we need to help people find the most and not let people settle for second best, or third best, but to challenge people to be all that they can be and to really make the very most of life. I work now with about 80 college students directly and indirectly. It's exciting to see college students who are drifting, to find a day, and a purpose in their life. Something to do with life that will make a difference. I believe there is someone out there for every person, whether they have arms or legs, whether they have ears or eyes. There is something meaningful and important that every one of us can do, and we need to do whatever we can to help our students or clients become all they can become.

I am where I am today because I was thrust out into society and forced to compete, forced to function in a normal society. In college, I had to get out there and do my best. I was very careful not use my handicap as a crutch. I would not even introduce myself to the teachers until after the first exam, so that there would be no question about my wanting special favors. After the first exam, if I had done well, I'd go up and introduce myself, and if not, well I'd
wait until the second exam. We need to help people fight
t heir way to the top and become what they can become.

Before my closing remarks, I'd like to give you a
chance to ask questions. I'd love to do this with elementary
school kids because I have no inhibitions, they just ask. They ask better. I really wish
adults were more like that. If you have some question
about my rehabilitation or life, or anything you want
me to ask, how I comb my hair, pick my nose, whatever, I'll
give you a demonstration. So just raise your hand and
let's be friends here for a few minutes.

Audience: What kind of physical barriers in the
environment have you had the most difficulty with?

Gallaway: I hate greasy doorknobs. I really do.
Some guy's been using Brill Cream, you know, and after he
walks out, I just stand there. I can't get any traction.
I'll be glad when we go to European doorknobs, and just
have the handle coming out and anybody can use it. That's
one of the main things.

I was coming out of the L. A. airport the other day,
and I got my hand hung in the door. I pulled it open and
the wind kind of grabbed it and bent it around, and it got
a really strong leverage point on my hook and broke my hook,
right there in the L. A. airport. I went to a pay phone. I
had a friend with me, and he had to dial because my hand was
broken. I finally found a place that would fix it. It cost
me $200 just because of that door.

Audience: I'd love to know about your electronic arm.

Gallaway: Okay. My right one is the electronic one,
and because it's noisy, I sometimes leave it shut off when
I'm speaking. Also, when I get excited, sometimes it
twitches and hits me. It is called the Boston arm. It was
made and developed by the Liberty Mutual Insurance Company.
They spent about 15 years in research and development. It
has a battery pack right below the elbow, and electronics
in the lower forearm. When I twitch a muscle in the front
of my shoulder, this arm comes up. When I twitch one in
the back it goes down. It has speed control and position
control, and some electronic feedback in the elbow. If I
twitch very gently, it comes up very slowly. So it's given
me a tremendous increase in function with this right arm.
Before, if I tried to use my right hand, I'd drop what I
was holding in my left hand, because the same strap that
pulled the right hand open, was connected to the left hand by
a figure eight strap. So I was a one-horse person. I could
do one thing. This new arm has given me a real big
advantage. When I want to open the hand I pull my shoulders
forward and it opens, and when I want to close I pull my
shoulders backward and it closes, like this, and if I want
to open it wider where I can hold a glass or a Dr. Pepper
can or something like that, it will open. I can also
squeeze, of course, and it has a two-position thumb. It
works pretty well and has given me tremendously more
functioning ability.

This electronic arm was a gift from my church in Dallas.
They heard about it and surprised me with a gift for the,
funds to get it. At the time I was in seminary and there
was no way I could afford it. The first time I went to
church with it, I shook hands with this sweet little old
lady. She must have been at least 80. I said, "I hope
I'm not squeezing too hard," and she gasped, "Hard enough!"

It's been fun to learn how people react. Once in the
hospital right after the amputation, and I was laying there
and they put a big sheet up over me. What was left of my
left arm was in a cast all the way up to my shoulder because
of the tendon graft, and my right side was completely gone.
This precious little nurse's aide hadn't been informed what
had happened and she came in to take my blood pressure.
She came over to this side and she pulled the sheet down and
saw I was in a cast so she couldn't take the blood pressure
over there. Well, she just kept her cool and walked around
to the other side and pulled the sheet down over there and
there wasn't anything there. All she could think to say was,
"Where do we take your blood pressure? Or do we just forget
it?" So there are a lot of funny things that happen also.
"The essential characteristics for keeping a job may not necessarily be the actual job skills themselves, as much as they may be some kind of personality or social factors."

Over the years, we have learned a great deal about what determines vocational success versus what determines failure in certain settings or in certain kinds of environments. We know what contributes to the success of handicapped persons in a vocational setting; and we also know, perhaps even better than we know the successes, those things that account for failure. Things that account for success are often unrelated to the performance of job-related skills. That probably sounds a little bit strange, but if you look at your own lives, at the kinds of people whom you deal with on a day-to-day basis, you recognize that there are individuals who tend to be incompetent. Yet when we look at them, they are often the people who have been around the longest. They are often the individuals whom we like the most. But even though they are nice people, they don't necessarily perform their jobs very well. So the essential characteristics for keeping a job may not necessarily be the actual job skills themselves, as much as they may be some kind of personality or social factors.

If that is indeed the case, then perhaps we've been wrong in emphasizing job skills as opposed to social behavioral skills. I want to give you some way of looking at behaviors that are both social and emotional,
that are personal in nature, and then give some job-related skills as well.

There are certain things, then, that are considered to be rather important to vocational opportunity, and you can break them down into these factors. Let's take the job-related skills that are considered important in terms of job performance first. One must be able to communicate, to be able to understand or to express job concerns. It's necessary to be punctual, to be reliable, to be flexible in the jobs that we are capable of doing, to retain and recall information related to the job. How quickly we learn a new task is important, as is the quality of the work we turn out, and the level of productivity.

There is another whole area of skills that could be considered social behavioral or social emotional aspects. One is appearance, which is partly physical appearance, but more often just appearance in terms of overall interest in a job. Behavioral characteristics include peer relationships — how we get along with supervisors, how we get along with our fellow workers, how we get along with other handicapped individuals, and so on. There is the ability to ask for help when it's needed. If you're stuck on a particular task and you can't go any further, do you have the necessary social skills to re-orient yourself and say, "Hey, I don't know how the widgett attaches to the wadgett," or "What is it that I need to know?" Do you know how to go out and ask for the directions or the instruction as to how to put something together? If the machine breaks down, man I go and ask somebody! Then there's response to criticism. All of us are criticized at some point in our lives. Most of us don't like it, but our response to it is not necessarily inappropriate. That comes back to social-emotional attitudes towards supervision. Other things include motivation, frustration, tolerance, safety attitudes, and all those intangible things that are so important to the job. What I'm suggesting to you is that these variables are at least as important if not more important than is the actual job itself.

There was a survey done some place in Texas, in which employers were asked to give a number of reasons why they rejected job applicants, and also why they would hire one applicant over another. If you'll look at some of these elements, they don't tend to be related to job performance. "Little interest" or "poor reasons for wanting a job" probably have very little to do with the applicant's actual
performance of the job. "Applicant has a past history of job hopping, is unable to persevere, is not able to continue at a particular job," again, may not be necessarily related to the job itself. "Inability of applicant to communicate" is probably not job related. "Health record, immaturity," probably again not related to the job itself. Lack of job-related skills falls way down on the list. The elements that are really critical or are important are personality characteristics far more than the job-related skills. How can you get a student to demonstrate interest in a job? Basically, at some point in working with handicapped students, it becomes, at least partly, a con job. And it may well be that indeed what you have to do is develop in that person an enthusiasm, an interest to tell them, "Hey, go in there and tell them you're really excited about the job. Maybe you won't like it, but at least show him that you think you will like it, okay?"

Employers were also asked about the improvement that they felt was needed in a variety of areas that prepare handicapped persons for entry into full-time work. What are those essential aspects that needed greater preparation on the part of the teachers or trainers to prepare handicapped persons to enter the work environment? Those listed included "concern for productivity," (not actual productivity, but concern for that productivity); some real effort, real interest on the part of the handicapped person in performing better, in turning out more, and being more conscientious. "Pride of craftsmanship" and "quality of work" probably are not directly tied to the job; but again, one of those intangible constructs important to an employer. "Dependability, work habits; attitudes toward company and employer." Do you as teachers and trainers of the handicapped try to instill positive attitudes toward the company or the employer? "The ability to write and to speak effectively, the ability to follow instruction," and others. These are the factors that seem to be most important. How is it then that you can look at the behaviors of your students and begin to prepare them for a job? There's a motto that I find to be extremely useful, because it's easy for teachers to use. All behavior is characterized as one of two functions: any behavior is either in excess, or in short supply. Okay? All of the kids that you deal with either do too much of something, or they don't do enough of it. If you have a child that doesn't have a skill, you try to teach him the skill. If a kid who deals in a lot of inappropriate behavior, doing too much of it, so you try to reduce it.
whole variety of techniques to reduce, to eliminate, or to restrict excess behavior. If I have a deficit behavior, I have another whole series of little tricks, a whole series of management techniques that can be used to increase behavior, or to get it to occur in another kind of setting. So when I make that first discrimination between excess and deficit, it begins to lead to possible approaches. It serves as an organizer for my thoughts.

But a further breakdown is essential. There are a number of different kinds of deficits that could exist. The behavior that I want may not be present at all because of a lack of opportunity to learn it. If you're sitting with a student, and it's time for him to fill out an application form, and you stick the application form in front of him and he just looks at it, it may be that you never taught him how to fill out the application form. You have a behavioral deficit — he can't perform the filling out of the form — but it is really just a simple teacher situation. Or the deficit may be environmental rather than educational. Or the opportunity might not have been appropriate to learn, even though it was present. It may be that the desired behavior is the individual's repertoire, but it doesn't occur consistently. There may be a student, for example, who knows how to be quiet, who knows how to greet you in the morning. "Hello, how are you? It's a nice day," but who never does so. The behavior is present, is accessible to the child, he has or she has the potential to use it, but he seldom does. So again, you have a type of deficit that differs from the first one, where the behavior is not actually present at all.

It may also be that the desired behavior occurs but under restricted conditions, only in certain environments, only at certain times, and only with certain people. All of you who have worked in an educational setting are familiar with this. Have you ever prepared a child in the classroom, taken him into the job setting, asked him to perform the same job that he did in the classroom, and he won't do anything? It's as though you hadn't taught him at all. And you know he probably didn't forget. Instead, he's having problems making the transfer from the environment in which he was taught into the new environment. While the behavior actually can occur, it will only do so under certain restricted situations. It may also be that the desired behavior occurs, but in an inappropriate form. If you're on the A&M campus, it's probably okay to say "Howdy." If you're almost anywhere but College Station and Bryan it's probably not nearly as appropriate to say,
"Howdy." People say "Hi" or "Hello." The behavior occurs, but it may occur inappropriately.

There are a number of areas in which behavior deficits can occur. Often, depending on how severely handicapped the population is, there are deficits in terms of self-care and self-help skills. If any of you work in sheltered workshop environments, or for the Association for Retarded Children, you are probably very familiar with this. A number of children, particularly with severe handicaps tend to have difficulties in toileting, dressing, and other self-help skills. Language and cognitive deficits also are fairly common among the handicapped. They tend to exhibit deficits in terms of language functioning, inappropriate language, language that is non-functional in use, and other cognitive behavior. They may have difficulties in terms of memory; they may not have a normal memory span. Many times, what we learn is a result of imitation, watching other people. For some handicapped children, the inability to imitate, becomes a deficit. They don't necessarily have the capability to imitate others in their environment.

So handicapped students could have a number of language and cognitive behavior deficits. They could also have some academic behavior deficits. Here now, you talk about deficits that can either be general or specific, such as deficits of reading, writing, spelling, arithmetic. They may also have difficulties in manual skills, primarily gross and fine motor activities. The inability to coordinate one's actions, to coordinate large and fine motor muscle systems also can be considered deficit forms of behaviors. You will find deficits in task-related prerequisite skills, and most of these are rather important. Often kids we deal with have tremendous problems in terms of attention. Not only do they not pay much attention, but they often don't persist at a task for a long enough period of time to be successful. You may also find interpersonal and social behavior deficits, leisure or social interaction skills. Some students can't interact well with others, they don't have their own leisure activities. You have emotional behavior deficits, kids who lack emotional capability. They don't get upset where getting upset might be appropriate. You have motivational deficits, in which individuals are not sufficiently motivated to have reasonable involvement in the situation they're dealing with. And then lastly, you have some age relevant personal deficit. We most often tend to think of those as being
immature behaviors. Those younger forms of behaviors in some sense are competing with the more appropriate forms of behavior. Okay, so you have a whole series of different behavior deficits that kids often get.

The excess model, the other half of this, is not nearly as complicated as the deficit model is. Behaviors that are in excess are considered relative to some other kinds of behaviors. There is not one single behavior that is unusual for any handicapped child. There is not one excess behavior in itself that is any different than the behaviors all of us engage in. The only difference in an excess behavior is in the intensity of the behavior, the frequency of that behavior, or perhaps where that behavior occurs. It occurs too frequently or it occurs with a too high of a rate of intensity. One of those things we are considering in relation to job settings is the ability to ask for help when needed. That's a legitimate kind of concern. The machine breaks down and you ask, "Could somebody put a new belt on?" That's okay. But what happens if you ask for that same thing twenty times, thirty times, forty times? It's not the behavior itself that is wrong, it's the amount of that behavior. The only time we really need to be concerned with a particular excess is when it interferes with a behavior that is considered to be more appropriate, that cannot, in some sense, be performed because of the excess behavior.

Okay, just as there were types of deficit behavior, there are also a number of behavioral excesses. Some people exhibit verbal or physical aggression. The word we often use for this is non-compliance. There is also socially inappropriate behavior, usually labelled delinquent. Truancy, lying, stealing, fire setting, property damage: all are considered inappropriate forms of behavior. There are excessive non-functional, competing behaviors: excessive eating, excessive daydreaming, hand flapping, finger twirling, playing, manipulating objects and so on. There are also excessive emotional behaviors. Some kids respond to certain kinds of reprimand or aversive situations inappropriately. That is where I started. A lot of people don't like criticism, but not everyone blows up. Excessive motor behaviors include hyperactivity, distractability, stuttering, talking too loudly, and so on. They're excessive, beyond what is called for, what is required.

And then you have the last two: excessive avoidance of tasks or activities. Some folks don't like to work. And not only do they not like to work, but they like to
avoid any task or activity that they possibly can. They don't persist at things long enough to derive some enjoyment from them. Also some people isolate themselves. They can't get along with other people, and end up doing them by themselves. In most job settings it is difficult to avoid people.

Once you have decided that you have certain excesses and deficits, there are a whole series of techniques that you can use. You can begin to become proficient and to develop skills in these techniques. I encourage you to learn some of these behavior management and behavior modification techniques and use them in your classrooms for your students who may have inappropriate behavior deficits and excesses.
MODIFYING VOCATIONAL CURRICULUM
FOR HANDICAPPED STUDENTS

Betty Anderson
Rita Bryant

"You want them to use things that they
know already. The transfer of learning
from the classroom to the work training
situation, and then into the world is
extremely important." Betty Anderson

Bryant: There is a career education learning system
in the state of Texas, which, if it were ever implemented
from grade one, would help eliminate many of the problems
that are now facing secondary educators. There would not
be a need for occupational orientation, which is really
a stop-gap thing. The basic learner outcomes for this
system are an outgrowth of interviews with 6,000 people
across the state. They represent what the people of Texas
want 17-year-olds to be able to do. They're not very
grandiose, and they're not elegantly stated, but they are
the very same things that all of you are working toward
in vocational programs and special education programs:
pride in work; an honest day's work for a day's pay; the
ability to get along with other people; very fundamental
things. The materials and the training programs are
available in the education service centers throughout the
state.

Anderson: One problem I see with a vocational
curriculum, is that we're asking handicapped kids to
begin making decisions about their lives when they reach
about 14, 15, or 16, and yet we have given them no
awareness of what they can do, what tasks they can
accomplish, what each job requires. They have no orient-
tation to the whole world of work.

Bryant: How does that differ from other kids?
Anderson: Really, very little is different, because we don't do that very often, except perhaps with our brighter students. With a comprehensive vocational training program we have allowed our non-handicapped youngsters to bloom and grow. The handicapped youngster, however, usually gets what we call a watered down curriculum. I go into special education classes, and I see a 6th or 7th grade youngster who is in a 3rd or 4th grade book — math, reading, spelling. And the same thing happens in vocational education. We're still trying to con the academics into this kid when he is 15 or 16 years of age, and it's just not going to work. So we water down the curriculum and only give him part of it, or give him what we think he can handle. We're beginning to find out that we haven't been giving him enough. What he needs is a program structured to meet his specific needs.

Bryant: Some of us tend to think about stereotypes for these youngsters. We slot them into things without considering the students themselves. Yet we can always generate so many more ideas that are possibilities for these young people. That's a good reason that we all need to talk together. What other teachers talk about might never occur to me in working with special education students.

Anderson: I think we ought to look at commercial products. You can see some of those if you attend the CEC conference, or if you go to your regional service centers. Most of them have instructional materials there. There are some excellent products on the market that are sequentially developed. They hit decision making, hit values clarification, positive attitudes toward work, and awareness of available jobs.

Audience: These materials that you say are available, are they written on the handicapped student's level?

Anderson: Yes, sir. They are graded with readability levels. Some of them have been field tested with handicapped youngsters.

Audience: I haven't had any experience with handicapped students, but reports that I've had indicate that handicapped students cannot handle the written words, so you're telling us that we need to illustrate rather than write.

Anderson: Well, that may be, if that's the way the student has to go. If you're teaching where to put things, an illustration of the item on the wall where it goes will show the student where to put it. He needs pictures to illustrate some of the activities that he's going to be doing. You have to get down to the very basic things.
Audience: You also have to have words with some of these illustrations.

Anderson: When we do that, then we're going to use labels, because most handicapped kids can develop a sight-word vocabulary. You're going to teach some of the survival words, you know, so they know "men's" from "women's," they know "exit," "poison," and so on. If they are working with equipment, or tools, why not label them? It's rather simple to put a name on a machine. A student will gradually learn to recognize, through the visual presentation. He may never be able to spell it, but that isn't important. The important thing is that he can visually recognize it.

Bryant: The vocational teacher and the special education or the remedial reading teacher working together can do a lot. One suggestion has been made that instead of just putting the one-word label, you put, "This is a _____." He can identify the word with the object, but if you really want to help him learn to read, give him something to put with "this is" or "that is" or "here is," because those are the intangibles, the abstract things that he can't learn to read, and yet that's what you said. To me, that's where the other people have to help the vocational teacher. Working together, teachers can decide what step-by-step sequential developmental materials can be placed there, the size, the labels that would be most effective, what color coding could be used, the key, and whether or not you would need audio materials with this, too. We have all kinds of parent groups, civic organizations, student groups who are looking for projects. Betty works with a student CEC group that would be available to help public school teachers by making the audio tapes. Give them a service project. Now we're back to the communicating aspect. The more people know about what we're trying to do, the more effective and more supportive the effort will be.

Anderson: I think the special education teachers should be a resource to other teachers in the school. In times when I was able to work with principals to put over that idea, we had some very effective communications and exchange of ideas between regular classroom teachers and special education. Sure, they were out in that building, out in the backyard, but when their kids had to leave early because they were bussed hither and yon, that teacher could come in and provide a resource to other teachers. For example, if Johnny was having trouble in second grade and I just didn't know what to do with him, a special education teacher could come in and make suggestions.
The same thing can happen at the secondary level. It's just that we've got to get our different people, with all our different skills together, to provide the services that are available within our school.

We mentioned color coding. This is one simple thing that can be done in the classroom to help the kids. Don't we all use color coding?

Bryant: You can't get through an airport if it's not color coded. We all rely on that. Did you have a comment?

Audience: Some of the vocational shops can use color coding also to indicate dangerous parts of machines. Handicapped kids could learn just as rapidly as regular students.

Anderson: You want them to use things that they know already. The transfer of training from the classroom to the work training situation, and then into the world, is extremely important. It's one of the hardest steps to accomplish. Task analysis is what we've been talking about. Look at the task, whether it be elementary or secondary level, whether you're talking about academics or vocational, then break it down to the point where you can sequence your steps. The child will achieve the ultimate goal.

Bryant: For task analysis, it would be so helpful to have a cooperative effort as you develop curriculum to analyze the steps inherent in performance of a certain task. Many of us give two or three steps of instruction, without realizing how complicated that is for that student who is not functioning at that particular level. Getting it down on paper is extremely helpful in analyzing the task to be performed, the prerequisite knowledge and skills that are required. How about your other information?

Anderson: Safety rules are extremely important in any shop; you mentioned some things that you could do such as color coding and so on. Then there are survival skills. What do you do if there's a fire in the plant, or if there's an explosion? All this needs to be taught so that the students can transfer the learning from the classroom to the job. This is where the handicapped kids have the greatest problem.

One day, I was in a state school close to a highway. When I got there, an emergency unit and the police were there, and I thought there had been an accident. So, I went on to the state school and I found out one of the residents loves to get out and direct traffic. And, he was in the middle of this four-lane highway directing traffic. He's 45, 50 years old, and they've been telling him for years
he couldn't do that, but every once in a while he gets out and where does he go? They know he's going to head right down the expressway, and he's going to be on it directing traffic. He cannot transfer the training that they taught him. This happens often.

Bryant: We were talking about how to handle teamwork among students. If we can get that situation going, we could alleviate some of the problems.

Anderson: Student teachers tell me, "I've told my kid a hundred times how to do that, and he still comes up and asks me." What she's saying is, "I told him the same way over and over again, and he's not learning that way." So find another way. Sometimes his buddy can teach him better than you can. Why not pair off two of your brighter kids with one of your handicapped kids, and let them take over? That's where your teamwork is. One of the things that should be taught, for example, is interdependence of workers. If you're not punctual, what happens? The other guy can't do his work. If you can't pick him up on time to go to work, that's a problem. Everybody has to work together. One of the biggest reasons why handicapped kids lose jobs is that they do not have the social or interpersonal skills to stay in the job. I remember one youngster had six jobs in about as many months. He was not by today's standards eligible for special education. He was over the 70 IQ, and he was very personable, but he couldn't take directions. He would get in a huff once in a while and storm off the job. Finally the rehabilitation counselor said, "Look I've gotten him six jobs; I've got to pay attention to other people." So this is one of the important things that you have to do for youngsters. Help them develop social interpersonal skills.

Bryant: We have found that school people outside of the vocational teachers, are extremely naive about what goes on in the world of work. You people who know what employers expect could help plan staff development. One time, we had a man who had charge of wiring the buildings for security systems, and a teacher asked him, "Now, what if a student was tardy, late to work?" He said, "I'd fire him. Why, he'd just fall off the turnip truck, of course I'd fire him." And she said, "Oh, I mean he's just late for the first time." And the employer said, "I'd fire him for the first time. I've got four people sitting there waiting for his job. I've got plenty of young people who are willing to get there and go to work on time." Well, teachers can talk forever about punctuality, but let that man stand there and say, "You're late, you're fired," and it does communicate.
I think that it would make much more interesting staff development sessions if we had some of these people come in and talk to all faculty members about what the world of work is like. Each person has a fascinating story. And having employers talk to the academic teachers who can support vocational training, will help these teachers know what employers think is important.

Anderson: Now, we want to tie it all together. We've been talking about some of the expected learner outcomes. There should be a continuum from primary all through secondary, because you can't all of a sudden start career education at the secondary level. We must develop positive attitudes towards pride in accomplishment, the dignity of work and the self worth in all pupils. All school subjects should be linked together in the mind of the students to make education personally and professionally useful to them. In other words, it shouldn't be academic here and vocational there. There's no reason why you can't have a reading lesson of vocational career materials.

Bryant: We have, in every education service center, samples of lessons in which the learner outcomes adhere to the subject areas. It doesn't mean stretching a curriculum completely out of shape to cover a learner outcome, if it occurs naturally in your area. There's no "Whole Earth Catalog" of activities, but there are starter sets. It would be helpful to get some lessons on attitude toward self, toward work. Does society really hold with the work ethic? What are my responsibilities to myself, to my fellow workers, and as a citizen? That's what we're talking about in vocational education, special education, for all these people; but it has to start early and be supported in the home as well as the school and community, and it has to be a continuous kind of developmental program.

Anderson: We also want to prepare the student with some of the basic coping skills, and we want to create a knowledge of career opportunities.

Bryant: We have to look at these youngsters individually. Instead of the Three R's, that never did cover the area, would you consider the Three C's: communication, computation, and coping. Communication is a lot broader than just reading. Unless you incorporate the listening and speaking and writing with reading, the reading is not going to be effective. Reading is only a fourth of the whole communication scene. We can give students those Three C's by working together.
"Special education is new territory for many vocational teachers, but there are excellent maps available, some of which may even help us become more familiar with our own home teaching territory."

Recent legislation bringing handicapped students into the mainstream of education has given vocational teachers some new problems. Along with the problems, however, have come resources to help solve them. One of these is a human resource: the special educator. He or she may give you expert assistance in:

1) learning the student's capabilities, skills, and background;
2) determining the instructional level (readability, "do-ability") of any or all materials you use to teach; and
3) adapting those materials to the needs of the special student without infringing on the rights of the other learners in the class.

When a student is referred to special educators as handicapped, they are required to give him many tests and to interview him, his parents, past and present teachers, doctors, and others, to put together a clear picture of his strengths, weaknesses, abilities, idiosyncrasies, and so on. If you ask, the special educators can provide a fat file of information, and various experts to interpret it and answer your questions about the person it describes.
The file includes the student's performance level in various academic subjects, his specific learning competencies, and the services he needs. It also includes a description of his handicap, his language history, his psychomotor abilities, and his behaviors and attitudes in or out of school. Thus, before you ever meet the special student, you can find out exactly how to make your teaching environment safe and useful to him.

How well aware are you of the level of difficulty of your text, supplementary texts, workbooks, dittoed handouts, exercises, and so forth? What reading level are they written for? How good is their vocabulary for a novice in the field? The special educator knows of several readability formulas and can quickly tell you about the "do-ability" of your teaching materials. Ask about this while you're going over the new student's folder.

The special educator has also absorbed a lot of theory and practice on adapting material to the needs of special learners. Materials can be taped, pictured, video taped, demonstrated, or self-demonstrated with signs. It can be put together to repeat once or a thousand times. Whatever problem a student may have in vision, hearing, comprehension, retention, or motor skills, material can be adapted to his needs, without slighting the needs of other students.

Take advantage of the human resource offered you by special education, and see how much easier it can make your teaching. If your particular question isn't answered by someone in your own school, ask your special education director to get a consultant from another school to assist you. Failing this, call the Service Center and ask for help.

Special education is new territory for many vocational teachers, but there are excellent maps available, some of which may even help us become more familiar with our own home teaching territory.
"Probably the most extensive and most vital modification of any human behavior or physical facilities is simply the attitude of the teacher."

I am going to approach this topic from a generic viewpoint rather than dealing with specific vocational areas. And I will base whatever I say on several presumptions. The first is that in many cases absolutely no modifications are needed for these children. Modifications must be determined individually. Second, any student can experience success and achievement if you deal with the student as though he or she can. Third, you may be required to make some special adjustments. We'll talk more about the different kinds a little later on.

Now, in any physical setting there are two basic approaches to making something safe. This holds true whether you are dealing with the laboratory, a shop, a factory, a kitchen, a house, or an automobile. The first approach deals with the mechanical aspect. This includes guards, markings in aisles, signs, differentiating color codes, or any other physical adjustment, manipulation, change or element that you do in order to make the place safe. The second approach deals with the human mind. In terms of total accidents only about 25% of all injuries occur because of a mechanical aspect. The other 75% relate to the human mind. The second approach has something to do with education and attitudes and requires preventive maintenance.
Most teachers, when you say they are going to have special kids in their program envision a shop or lab replete with gadgetry. Their response is, "We don't know how to deal with the students." So in terms of the educational implications, a lot of the education will probably be done through the instructor. Not necessarily by the instructor, to the instructor.

In terms of educating the special needs student there is probably only one factor that should be considered vitally important and probably is for all kids. If students are using machinery and tools and sharp objects and things of this nature, students must be taught to use them correctly, because if you teach them to do the job correctly, you will teach them to do it safely. Safety is the most basic part of your instruction. Never distinguish between safety and workmanship. Now, many kids will think that they already know how to do something because they think Dad, out in the garage, did it the right way. First and foremost when teaching safety, teach your students to do everything your way. Then establish a hard and fast rule, "Don't work with anything unless you are authorized to work with it." And don't authorize them until they do it your way. Make sure the kids understand this, no matter what else they understand.

The second important thing when working with special needs students is that you must build positive thinking and positive feedback into your program. For this, you must plan your instruction for each individual. Teach so that each student can succeed, rather than going so fast that the slow ones fail every day. Adjust your teaching to each student's ability to accomplish. That doesn't mean that you have to sit down every night and make out 32 different lesson plans. If you've got a group of students, use the group process. Start off with the basic lecture and demonstration for that group, then allow enough modification to occur individually so that the good students can add more and the slower students can add less. Allow it to be modified in terms of size and strength, as well, so that those people who lack coordination or muscular strength need not be involved in something they can't physically do. In this way you can break your instruction down into increments and small pieces. Most students are going to be able to succeed with your group instruction, but some of your more capable kids may become important and want to add to it, and some of your students may lose track and need special attention on a one-to-one basis.
Breaking your instruction into small segments allows even your slowest students to succeed. Imagine what it is like for a kid, who has not been succeeding in a regular school situation for quite some time, to come into your facility and have you smile at him, accept him, give him something that he can do, and when he is doing it, gets a pat on the back from you. If you use this approach, you really won't need to be overly concerned about special adaptation for the student.

Thus, probably the most extensive and most vital modification of human behavior or physical facilities is simply the attitude of the teacher. Most of our studies show that kids with special needs are as safe as any other type of kid. Most of our studies show that the physical facilities need few, if any, major modification. Attitudes do require change though.

Letting teachers know what to expect is extremely important. Most common classroom teachers are going to react negatively without any preparation for special needs students. If they are in a crowded situation with lots of activity and physical hazards, they will be very concerned. If you are a classroom teacher and someone sends you a student and labels that student as being slow, would you have any specific techniques that you would use to teach that kid? Or if the student is an epileptic, or blind, or deaf? Most regular teachers haven't the slightest idea of what to do. If you are an administrator and are seeing students with special needs going to regular classes, by all means give the teacher a crash course in how to work with these students. There are materials available. Let the teacher know what to expect.

If there are some physical considerations in terms of modification or machines, listen to the teacher. I think the student should probably be aware of these concerns as well. If modifications are necessary, and they might be, I would like to throw out a suggestion. If, in the best professional judgment of the teacher or person in charge, the physical facilities require some modification, the teacher should give this statement in writing to the administrators, complete with description of the modification and some cost estimates. Then the teacher will not be liable in case of accidents. If the teacher in the classroom has done everything morally and legally required, has made an individual assessment of the student's limitation and of the physical facilities, and has made a formal request in writing, the teacher will no longer be liable in case of accident.
Audience: Do you mean in case the administration doesn't follow through with the modification?

Baker: Right. If you as a teacher say it is totally unsafe for the student and you give a reason and the administration keeps the student in there anyway, if the student is hurt, it will be the administrator's fault.

Audience: Suppose the administration agrees but the parent doesn't?

Baker: In that case, if you were an administrator, I think I would put it in writing and send it registered mail to the parents. I think I would probably talk to someone beyond the educational scene, such as a lawyer, local judge, or someone of that nature. This situation would be extremely rare. Usually, you seek to compromise.

Audience: What about driver's education specifically?

Baker: In terms of modification there, if you are not equipped to rig a van for a paraplegic, if you simply don't have the money, then you are not legally required to provide that instruction. That may startle you, but it is true. You are not required legally to provide a full range of instruction for every student. If the student cannot perform and the modifications are not possible within your budget or the parent's income and there are no support monies from state or federal resources, you are not legally required to provide that program. You could not deny students access to classroom instruction but you can legally deny them involvement in those activities for which they are not prepared or cannot perform safely.

Audience: If you can't teach a child behind the wheel you might send him to a special rehabilitation school.

Audience: I was in a school district where we had to pay for special education students at a special school but in that case TEA gave us money to pay it. We had an autistic child who needed special facilities set up. TEA helped us do it.

Baker: In terms of the vocational training, if you are going to train students to perform a job you should use tools and facilities they will encounter on the job. You still have some leeway, though. First of all, you might not have to prepare for the entire occupation. If you have an automotive program and you have a student who
is not physically strong enough to do all of the operations that an automotive mechanic might encounter (such as pulling an engine out of a car using a chain hoist) the student might be fully capable of doing specialized jobs. You have all seen the houses that specialize in bumpers, brakes, tune-ups. If there is legitimate opportunity in your neighborhood for this type of employment then you can take a student into your automotive program and modify the content of that program for a student's career potential. You are not obligated to provide everything. You are obligated to provide what the student can successfully complete.

Other types of content modification would include modifying the structure of your training program. In woodworking class a student can make small objects with less detail rather than large objects. But don't deny access to the facility if there seems to be a legitimate claim for it. The denial of legitimate access causes a lot of legal action. The best attitude is probably to let any student take any part of your program to the limit of his abilities. This means looking at people as individuals rather than as groups that must conform. And then you can make modifications to fit the student.

You may not have to modify the actual facility. I'll give you an example. Suppose you have a student in a wheelchair, who has almost normal arm strength. There are two ways that you can deal with a student in a woodshop or home economics facility. The first would be to provide a lap board across the wheelchair with a large smooth surface. This could clamp across the arms so that it won't fall off and could be the work station. Another modification is to make a ramp. I had a situation once where the teacher thought they were going to have to cut the legs off all the tables just for one student in a wheelchair. That's not necessary. After all, in modifying equipment you cannot deny the use of that equipment to the regular kids. The solution is to build a small ramp, which costs about four dollars, but just be careful to cog the ramp so the wheelchair won't roll off it. Sometimes students will bring their own modified tools with them, tools which they can reach a little farther with; a hook or clip that they can reach switches with; a rubber hose that they can clip over the handles of other tools to compensate for the loss of hand strength.
In summary there are only three things to be concerned about in terms of safety:

1. Appreciate the student as an individual;

2. Have some idea of how to cope in terms of instructional content and instructional technique; how to modify or how to teach a student who is a little slow or ahead;

3. Have an open, responsive line of communication with your administration.

With these three, you will have a safe program.
"In order for us to understand litigations concerning handicapped children, we have to understand the basic laws giving and recognizing the right to education for these children."

Since the United States Supreme Court and the United States Congress have now come to recognize that handicapped children are citizens just like you and I are, and that they are therefore entitled to a free appropriate public education in the public school system as are non-handicapped children, there has been a virtual explosion of new laws. In order for us to understand litigations concerning handicapped children, we have to understand the basic laws giving and recognizing the right to education for these children. It will be impossible to do more than introduce you to the basic concepts today, but we will briefly examine P.L. 94-142 and Section 504, and some of the problems and solutions arising from them.

The first significant development in educating handicapped children did not occur in the United States until 1972. Every time I give this talk, I am amazed to think that in the United States of America handicapped children were not entitled to education in the public school system until 1972. An early case was the Pennsylvania Association for Retarded Citizens versus the State of Pennsylvania. The federal judge held that mentally retarded children could be educated, could benefit from education. I think this case was extremely important, because up until that time, educators and society in general had assumed that handicapped children, particularly mentally retarded children, could not be educated, could not benefit from educational services. Therefore,
they were denied educational programs. Some school districts provided education to handicapped children, but only if they had extra funds, or had some special interest in educating them. Until this early court case said that mentally retarded children could be educated and could benefit from education, it was not recognized as a handicapped student's right.

The landmark case was Mills vs. Board of Education. That was decided in 1972, the first time the federal courts in our nation recognized that all handicapped children could benefit from special education. This was a class action case, brought in the District of Columbia, to challenge the fact that handicapped children were regularly excluded from publicly-supported educational services. The court held that the handicapped children did have the right to an appropriate education, on the basis of the United States Constitution, and on the basis of due process. So the court set out a number of very specific steps that the school district must follow and a number of protections that must be given to handicapped children in the process of deciding whether or not they would receive an education and what kind of education they would receive. Congress then took the case, Mills vs. Board of Education, and enacted it into law, Public Law 94-142: "The Equal Education for All Handicapped Children Act."

A number of the due process protections that the judge set out have been modified in the law. We will just take a very brief overview of it. Basically, Public Law 94-142 is a funding statute. It says to the state, "If you will agree to abide by a number of due process protections for handicapped children, then we will agree to fund you." So 94-142 is a funding statute.

Texas did submit a plan, did have it approved, and did therefore receive funds from HEW to provide educational services. The important thing about P.L. 94-142 is that it does codify a lot of the due process protections for the handicapped children in the educational process. The purpose of the act is to ensure that all handicapped children have available to them a free, appropriate, public education — "free" meaning at no cost to the parents, "appropriate" meaning that the child has been evaluated by a team of professionals and that an individualized education plan has been written for him. It also means that a team of professionals and the parents have sat down together, looked at the evaluations conducted on that child, determined the child's needs, and what kind of educational services that child is going to receive. Those are then written into an individual education plan. "Public" means that the service is to be provided by the public schools, by the state...
eductional agency, or by the local independent school districts, or whatever public agency is responsible for providing that education, and it will be supervised by those public agencies.

So now, under 94-142 and under Texas Law, all children between the ages of three and twenty-one are entitled to a free, appropriate, public education. For children who are blind, visually or auditorially impaired, it applies to ages zero to twenty-two. P.L. 94-142 specifically defines what special education is: specially designed instruction, at no cost to the parent, to meet the unique needs of the handicapped child. So that's what we're looking at now in the area of educating handicapped children — we look at the needs of each individual child. What does that child need in order to receive an appropriate education? It may include classroom instruction, physical education, home instruction, or instruction in hospitals and institutions. Let's examine a few important aspects of special education and of related services. Related services are defined as developmental, corrective, and other supportive services required to assist the handicapped child to benefit from special education. A handicapped child must receive special education and those related services needed to assist him to benefit from that education.

There is a process for identifying the handicapped child. The parent may bring the child in and say, "My child is handicapped and we need special services." The regular education teacher may see a child in the classroom who needs to be evaluated. A very important point: Once the child is identified as possibly needing special education, before any evaluations are conducted, notice must go out to the parents. Written notice must be sent to the parents about all the steps that the school will take in order to determine whether or not the child needs special education, and if so, what services will be provided. Before the child can be evaluated, the parents must give written, informed consent. Then, throughout the process, if the school wants to change placement or change the services in any way, notice must again go out to the parents about the proposal for change, the reason for that change. And the parents must again give written consent. If the change was based on evaluations or test results, it must say what those tests were, and why the school district proposes to change the child's placement. If the parents refuse to give their consent, the school district can ask for a hearing. If the hearing officer determines that the child should be evaluated without parental consent, then the school can evaluate the handicapped child.
individual assessment in school policy. The important thing to remember is that this assessment must be done by a team. No longer can one person determine what a handicapped child's needs are and what kind of services will be provided. Special education policy describes who must serve on that team, the Admission, Review, and Dismissal (ARD) Committee. Based on the results of this evaluation, and the test results, the committee meets with the parents to write the individualized education plan (IEP). This plan is a statement of the special education and related services that the school will provide to the handicapped child. In Texas, it includes a statement of the services, the nature of those services, who will be providing the services, when they will start, what are the evaluation criteria, and timelines for the delivery of services. This IEP must be signed by all the committee members. The school district must document in the child's folder all the attempts that were made to ensure that the parents attend the IEP meeting. The law says the meeting must take place at a time and place mutually convenient to the parents and the school system, and the parents must be given enough notice to ensure that they will be able to attend the meeting.

One of the most important parts written into the IEP is the decision as to the placement of the child. This is where we get into all the confusion about mainstreaming, and least restrictive alternative, and such terms. First, the handicapped child has the right to be educated as much as possible with children who are not handicapped. This is not only in the law; there have already been federal court cases saying, "It is imperative that every child be educated with his/her peers insofar as it is at all possible." Handicapped children need the socialization experiences of being in situations with non-handicapped children.

The law does not say that every handicapped child must be mainstreamed. What it does say is that the handicapped child must be placed in the regular classroom with non-handicapped children if his educational needs can be met there, with or without the use of supplementary aids, equipment, materials, and services. You start with the presumption that every handicapped child can be educated in the regular classroom situation. If, however, that child's needs are so great or he is so disruptive to the classroom situation as to interfere with the education of the other children in that class, then that is not an appropriate placement for him. So it is not a mandate that every handicapped child must be educated in the regular classroom. It is a mandate that you look at the individual needs of each handicapped child.
Responsibility for the cost of alternate placement is an area of great controversy. The law says that, in writing the IEP, the ARD committee will make the determinations, will make the decisions about the IEP, including placement. If the ARD committee decides that the independent school district cannot provide an appropriate education to that handicapped child, and that the child needs to be placed in a residential program, then the school district is responsible for the cost of that residential program, including non-medical care and room and board. Now, if the ARD committee determines that the school district can provide an appropriate education within the system and writes that into the IEP, and the parents decide that this is not what their child needs, or the parents decide they want to place the child in a public or private residential program, then the school district is not responsible for the cost of that placement. The key question here is, "Can the school district provide an appropriate education for the handicapped child within the system?"

Regardless of where the handicapped child is placed, he has a right to participate in extracurricular activities. They have a right to be in school clubs or other school activities, musical groups, cafeteria, recess, etc., on the same basis as non-handicapped children. This means that the school cannot have a policy, for example, that no handicapped child can be in the marching band. We feel that the appropriate policy would be, "If the child can march, and meet the other eligibility criteria that every other child must meet to be in the marching band, that child should be given the opportunity to be in the band."

As I've already mentioned, parents must give written consent to whatever placement is offered the child. In a number of situations, the parents will disagree with the ARD committee and refuse to sign the IEP. So the statute says that the parents can ask for an impartial due-process hearing at a number of stages along the way, if they do not believe that their child is receiving appropriate education. Hearings are conducted at the local school board level; when the parents ask for one, the Commissioner of the Texas Education Agency sends a hearing officer to the school district. The hearing officer conducts the hearing and submits a proposal for a decision to the school board. The school board can agree with that decision or disagree and issue their own decision. If the parents disagree at that level, they can appeal to the Commissioner. Also, the parties can appeal from the Commissioner to the State Board of Education.

There are a number of parent groups and advocacy groups.
that believe that the Texas Hearing and Appeals Procedures are not in compliance with 94-142. P.L. 94-142 says that the hearing will be conducted by an impartial hearing officer. It's not our position that allowing the school board to make the final decision is allowing the school board to be the hearing officer. All the hearing officer does in Texas is listen to the evidence and submit a proposal for decision. There have been a couple of federal court cases already, and an interpretation by the Office for Civil Rights that says the local school boards cannot be the impartial hearing officer.

Now, let's discuss Section 504 of the Vocational Rehabilitation Act of 1973. As I mentioned earlier, this is a civil rights legislation. This is not a funding statute; it has no money along with it. It says, in part, "No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." This is a "you shall not discriminate against a handicapped person solely on the basis of the handicapping condition" statute. Today, we're just talking about the Section 504 regulations as they relate to education. A number of other areas are covered, such as employment discrimination and program accessibility, but today we'll just focus on the right to education. Section 504 and P.L. 94-142 are very closely related. Section 504 says, in many situations, that by complying with 94-142 the recipient of federal funds may also be in compliance with Section 504.

We've discussed some of the related areas, such as the fact that handicapped children must be educated with non-handicapped children, to the maximum extent appropriate to their needs; that handicapped children, regardless of the nature or severity of their handicap, must be provided a free, appropriate education. There are also a couple of major differences between Section 504 and P.L. 94-142, and this is the one I want to emphasize. You will remember 94-142 says the child is entitled to special education and related services to enable that child to benefit from special education. Section 504 has a different standard; it says each school district must provide appropriate educational services designed to meet that child's individual educational needs as adequately as the needs of non-handicapped children are met. The standard here is that the educational needs of handicapped children must be met as adequately as the needs of non-handicapped children are met. Section 504 does not tie the need for related services to special education. It does not say that the child must be receiving special education in order to get
the related services. Let me give you an example. You may have an orthopedically impaired student in regular math, reading, and spelling, who needs adaptive PE or some type of physical therapy. Section 504 would say that, whether or not that handicapped child is in special education, he must receive those related services, if that would meet his educational needs as adequately as the needs of a non-handicapped child are met.

I also call your attention to the fact that Section 504 covers a broader range of handicapping conditions. It protects that handicapped child as long as he or she has the handicap, or has a record of the handicap, or is regarded as having the handicap, regardless of whether or not he needs or receives special education or related services. For example, in one situation we dealt with a young man who was allergic to bee stings. The school district said, "We cannot educate this young man, because if he gets stung by a bee he must have a shot within five minutes, and we cannot provide those services, so the mother has to come to the school and sit there all day long, just to be ready to give him the shot if he does get stung. We make the argument that the school district is treating that young man as though he were handicapped. He really does not have a handicapping condition as defined under the law, but he's being treated by the school district as though he did have one, and he is being effectively excluded from educational services. That raises another point: the school district cannot condition the delivery of services on whether or not the parent can be there, or whether or not the parent can provide transportation services. P.L. 94-142 and Section 504 both make it clear that this is special education to be provided at no cost to the parents.

There has been a major case that I think all of you need to be aware of in the area of expulsion of handicapped children. Very basically, the Stewart B. Nappy case held that the ARD committee process, which determines the IEP and the placement of the child, is the only method now by which placement of handicapped children can be changed. Therefore expelling a handicapped child is an inappropriate change in their placement. What it says is the child, if he's a danger to himself or others, can be suspended for a very short time, probably no more than ten days. During that suspension, the ARD committee must meet and look at the IEP and at the placement of that child, to determine whether or not that placement needs to be changed.

If you have further questions about how the laws relating to the handicapped work, what they mean, and how you need to respond to them, please contact me at Advocacy, Inc.
"Many of our students have decided that they are limited human beings. What we have to do first of all is let them appreciate that they are not limited; to let them expand and see all their opportunities."

Let me just share with you on a personal level what I have encountered with the student who has visual problems or hearing problems. Our average age in the community college is 28. In my classrooms they will range anywhere from 18 to 60. In other words, I deal with mature adults. I have found that many handicapped students have led deprived childhoods, probably because their parents have been over-protective. Some of the older adults especially did not have the opportunity to be in with the mainstream. They were put in separate schools or kept at home. They were forced to lead very limited childhoods, particularly in their social relationships.

So I find that in Child Development we do a lot of work on life skills, how we can live together, how I can feel the strengths that I have and also appreciate the strengths in other people, we can blend our talents. Many of our students have decided that they are limited human beings. What we have to do first of all is let them appreciate that they are not limited, to let them expand and see all their opportunities.

My students learn that all the children have special needs. I guess that's the advantage that people in early childhood have. We have always looked at people's individual needs. We haven't put people in groups and said everybody can do the same thing. We have
always individualized. It's been part of our philosophy to reach out to those individual needs rather than saying, "You are different," or "you can't fit in there."

In the past there have been some limits put on people who work with young children. We have said if you can't hear or see or walk or move your arms right, then I don't think you can work with children. Yet we are looking now at a wide range of children and we are also looking at a wide range of careers related to children. We are seeing that children have many needs, and that if you really want to work with children, there is an appropriate slot for you. You just have to develop the skills, so that you are qualified for that job, and if you have the drive to do it, you can. At the community college we have an open door policy. Anybody can come. The people who choose to stay are the ones who are really excited about learning.

I'd like to share a little bit about the community college I teach in. Eastfield is one of seven community colleges in the Dallas district. Only two have Child Development programs. We have had this program for nine years now. We have one or two handicapped students in each class. Many of the wheelchair students come in vans.

You might remember from your education courses that this is how we learn: 1% through taste; 1 1/2% through touch; 2 1/2% through smell; 11% through hearing; 83% through sight. As a facilitator working with adults, I need to be aware of this, so I will mix my instructional techniques. I need to have enough variety so that the student who is learning strictly by touch has something to work with. I need to look at other ways for a student who has a hearing problem.

As for retention, we know that students retain 10% by reading and 20% by what they hear. Sometimes I think we overwhelm children with all of our talk before we stop and realize that they really learn very little or retain very little. Students retain 30% of what they see demonstrated and 50% of what they see demonstrated and hear discussed simultaneously. They retain 70% of what they, themselves, say. If students can talk about what they are learning, and talk about what they are doing, then this increases their capacity for retaining. Finally, students retain 90% of what they say about something as they demonstrate it themselves. This is why hands-on activities are so important for slow learners. This goes back to the students actually working with the children. I think that any time they can be actively involved with the children it will increase their learning.
When you have a variety of adult learners, you need to design a variety of learning experiences, and those experiences need to have a wide range of perceptual experiences. Let's face it, adults still learn best by doing. If you have a group of adults who can only listen all day, they go out holding onto very little of what was said.

Here are two examples of how you can help adults be actively involved in their learning. One of my favorites is to have students look in their pocket or purse and actually design a learning experience for children. This is a carry-over from World War II, when teachers in England had to take the children down in the bomb shelters on short notice. Sometimes they would be in there two or three hours, so to keep children occupied and be sure that they were actively keeping up with their studies, they depended on ordinary things that you have in your purse. And you'd be surprised. Another activity deals with choices, and I haven't found an adult yet who doesn't love this. Take peanut butter and jelly and pineapple, cheese and marshmallow, whipped cream and graham crackers and have them decide what they are going to put on their cracker. From this, students can learn how important it is for children to be involved in making choices. These are some lessons that allow Child Development students to learn through doing.

It is important that adults who are going to work with children have three skills. First of all, they need an understanding of themselves. They need a good self-concept. The second ability is the skill of working with children. How am I going to effectively work with children with all the skills that go along with that? I've always said that if you knew two or three finger-plays and a couple of songs, and you knew what to do with paper, you could probably teach all day long. You could be responding to individual needs. Third is that extremely important skill, being able to relate to other adults. I find that many young people who think they want to work with children forget that they also will frequently be relating to adults—parents, other teachers, and administrative staff. To work with children you need skills in understanding yourself, working with children and in working with other adults, and these are the most important skills you can pass on to your handicapped students.
"As you move down the management systems, you can see the differences. You'll learn content as well as experience how a student might feel in that kind of classroom organization."

My materials have been developed over the past eight or nine years, with their main purpose being to create an awareness of a need for change in educational policies. While working with teachers, we have learned that many teachers just wouldn't deal with the handicapped children in the mainstream. Teachers didn't want to change their practices in the classroom; they preferred to push the students away into the special class. So one of the main purposes of the program that you'll be going through today is to create an awareness in teachers of the need to change. That's what I think makes this program a little different from others. Another aspect of this course is the content, mostly how to manage behavior, how to individualize programs, and how to accommodate children in the classroom.

First of all, let me focus on management system. Creating awareness is accomplished by taking teachers through a series of management systems. As they go through each one, the management varies. The first management system is more directive. We'll be doing this one for the first thirty minutes, just to orient you to the process. The tasks are the same for everyone, and you will all be learning the same skill. Then, as you move down the management systems, going to the most individualized and most accommodative, you can see the
differences. You'll be learning content as well as experiencing how a student might feel in that kind of classroom organization. That's really what it's all about. The curriculum in this program has been developed in such a way that it can be delivered in a variety of different ways to each school system.

Now, the first management system that the teachers go through is a three-hour direct instruction presentation. Since you've been sitting in chairs all day long, you know what that's like. We introduce the content, then the teachers and administrators are asked how they felt during that time. Teachers will say things like, "Well, I was bored, I'd already heard that before," or "It was new. I really enjoyed it." Some of them will say, "Well, boy, this is terrific." During this first system I pick out somebody in the group whom I will reinforce, and somebody in the group that I will punish — I'll ignore their questions, sort of shuffle them off to the side, rebuff them.

In the second management system, the teachers get a card with a time schedule on it. Then they're divided into groups and they cycle through the various centers. Some of you may have been in classrooms where the teacher has a fixed time schedule and the kids rotate through it. In this particular instance, they would be going to the heart center, the direct instruction area. Then they would go to the game center, which would be the game area, and then to the reading center, then to the problem solving center. And they would move every time the bells ring, about every five or ten minutes. Then at the end of that particular three-hour rotation, we would evaluate that system. One teacher said that she ended up hating the reading center, because every time she got interested in something, she had to stop reading and rotate to the next thing. That happens to kids sometimes in school. This afternoon, we'll experience this management system, because it's an easy way for you to look at all new materials.

At the end of this particular management system, the teachers are given a placement test, I say to them something like, "This is just a test to figure out how much you know and how much you don't know, so that when you come back we'll be able to place you accordingly." I don't analyze the results very carefully. Sometimes I put the ones that filled in all of the answers in the top group, but it depends upon what effect I want. Often in the schools, minority students and boys or men get placed
in special education classes, so when using this program with school personnel, I deliberately place minority students and men in the lower groups. The next day when they come back, I give them a form that reflects their work. They are allowed to skip any area that has an "X" next to it on this form. Any area that has a check they are required to do. When they go through all of the centers, they will take a posttest, and if all of their groups pass the test, then they get to go on to the next lot. Everyone has to pass the test, because we so often do that in school. We have everybody pass something before we allow anyone to go on to the next thing.

I choose three groups. The top group I call the "Star Group." The middle group have a few more centers to visit than the Star Group. Now the low group I schedule for direct instruction, since I've heard low groups always have more time with teachers. Of course everybody looks around to see who has what on their folders. Even if you call them yellow, blue, and silver teams, they know what level they're in and, believe me, they get pretty excited about being in the low group. Sometimes when I'm rotating them through the centers on the previous management system, I pull somebody out and put them in special education. I just put them over here at the side of the room coloring or working a puzzle. When it comes time for grouping I put that person into the low group. It's amazing what happens! The whole group shuns that person, because they know that person must have been doing something wrong, and they are already feeling badly enough about being in the low group. One teacher was really upset about it. Several teachers had to go to her house after class that day to convince her that she should come back. After we went through this particular management system, she said she would never again put a child in special education after having had the experience of being isolated from the group.

And then there's always the anxiety that goes along with just having to take a test. Usually it takes about an hour to convince the group to take the test. They don't really even know what they're supposed to be learning. They don't know what it is they're supposed to be finding in all of these centers. They end up working like crazy on the test. This just shows how tough we make it on kids when we don't let them know what is expected of them. This management system, I think, is the strongest in terms of duplicating the feelings children have in school. At the end of it, you've usually changed some. I've had teachers spend the whole afternoon in the bathroom, just to get away from a low group. Sometimes the low group
really works hard to catch up, while the high group feels so confident that they don't do very much.

After this management system, teachers are allowed to take out a pretest card for the individualized system, and check to see if they understand the concepts at each center. Then they enter the program where they feel they should be placed. Generally the pretest has statements of the concept and the test itself. The answers are on the back of the card so they can enter where they want to. I have them select at least two resources to go to, but just being able to choose is a change. Until now, they have had to do the activities that I wanted them to do. After they take their posttest, they have to come to me and get it checked.

There's almost always a long line of people waiting to be checked. I don't know if you've ever been in classrooms where that has occurred, but that seems to be the common problem. At the end of this system, we discuss the problems in beginning an individualized system, and what sorts of options teachers have so they aren't always checking the kids' progress. Usually we institute a peer tutoring or cross check system in which they're still marking off on their old growth chart. Now the checks just say to them what areas that they can use to learn a particular concept. This would be in the fifth management system.

This management system really runs pretty smoothly; everybody's doing their own thing. Direct instruction groups are called up occasionally for certain centers. The only problem with this system is that it's not very specific. If you want to learn about rate differences, you don't really know where to go. So, we added another resource card so it tells you a little bit more specifically where to go to get the information that you need on a particular concept. If I just wanted to focus on rate, I would know exactly where to go to get the problems 1-5. This more specific system is number six.

Those are the management systems that we take the teachers through. Frequently, at the end of the sixth management system, teachers are really excited about doing something different, and that's the intention of the whole program.

Teachers often try to do too much when they first begin teaching, then burn themselves out about a month later. So we developed a package where teachers can
assess what they are currently doing in their classrooms. It's all set up in incremental steps. If teachers want to focus on a certain area, then they can. That's the strength in the program, I think, having and providing individual choice for the teachers. That gives them a starting point and the steps to follow.

You may be surprised at some of the other problems. For one thing, when you start moving out those desks, and those nice straight rows, the custodians don't have any way to sweep. So you have to let them know why you're doing it and, of course, once you start having rate differences, you start getting different report cards. You're not looking at a bell shaped curve anymore; there's just not so many A's and F's. Then what will mother and daddy think? So you have to show the need for many kinds of grading systems. So, in working with teachers, I often consider where they are going back to, what resources they have, and what support they will get, what kind of follow-up I can provide. After all, it's better not to initiate anything at all, than to initiate something and then have them punished for trying it.

The master learning model provides, then, for a lot of differences. First of all, there are a set of concepts identified, some sequence, then a pretest is given. If the student passes the pretest, then they can take the posttest. If they don't pass the pretest, there are multiple resources that can be used before taking the posttest and before going on to the second concept. You can accommodate for content differences, different concept sequences, and style differences. It's an individualized system that works very well. Ideally, the place to start is to get your administration really behind you. Then they can divide the material support that you need for the teachers. However, that's not always true. I guess what I'm saying is I think that most people would say the middle management group is your key group.
"The main ingredient of good teaching is a concern for the students whether they're average, above average, or below average, mentally or physically."

Distributive education (DE) is working with students in the field of marketing distribution. My experience has been with the minimally handicapped. I would briefly like to tell you about three techniques which I have found to be important. The main ingredient of good teaching is a concern for the students whether they're average, above average, mentally, or physically.

The first handicapped student I had was a young lady with severe epilepsy. The parents did not really want to recognize the situation and tried to cover it up. The young lady had an excellent average. Most of her grades were A's. She'd wanted to sell on the floor and go into the fashion business someday. When I talked with her to find out where she wanted to go, her biggest problem was deciding where to work. That seemed very natural. I knew nothing about her epilepsy. She was a very attractive young lady, very sweet, and would really bend over backwards to help, so I was extremely surprised that within four days her employer called to say he had fired her. I absolutely could not imagine why he would fire her from the store. The parents quickly got in on the situation, had more or less threatened the manager for firing this young lady without talking to them.
But, you see, the young lady couldn't handle the pressure. It wasn't that she had a seizure. She would just block out everything when she got under any pressure. Some customer had been screaming at her, hollering to get waited on, and the little young lady had rolled the cash register tape all over the floor. She just couldn't cope. And when she would start blocking everything out, the customers and the manager would get even angrier, because they thought she was just turning them off. My biggest regret is that she had to go through all that. After that, we placed her in a very low-key situation, where she never had to wait on more than one person at a time and she did very well.

Unfortunately, she still saw the first job as a failure. Many handicapped students have low self-concepts. You can probably all remember your first job - it was a very important step. Well, we're the ones who place students. We have to be doubly careful to place the handicapped where they will succeed. This student should not have had to go through that failure.

Another case is exactly like that, where the parent did not tell me about the handicap until it was too late. This is a good example of the information we need from special education. The student had severe dyslexia. The young man was a very attractive person who seemed extremely confident. It wasn't until later that I found out he was overcompensating for his problem. Originally, I placed him in a formal men's wear shop. Tuxedo, weddings, everything. Since I did this in the first two weeks of school, I didn't have much time to find out about writing ability. This young man impressed the employers so much that they hired him as a salesman, but also planned to put him in some fashion shows modeling their tuxedos. They planned to take him all through their training so that eventually he could move to a more responsible position in another store. So, you see, he really was impressive.

Well, it all lasted two weeks. The manager called me in to see him. He was furious. He threw a piece of paper at me, and said, "What do I have here, an L/ LD student?" He happened to be an ex-guidance counselor from the East so he knew more about the handicap than I did. He showed me a basic time schedule for the young man signing in and out. It was written at probably the second or third level. A few days earlier, the student had totally messed up a wedding order. He couldn't write down measurements or dates or sizes or anything. And yet he was extremely confident, very personable.
Finally we decided to put him in food marketing, because that requires very little writing ability. So far he's doing great, yet the whole problem could have been alleviated if I had known about the dyslexia. It certainly taught me to have them fill out applications before I placed them.

I'm very proud of another young lady I have this year. She can serve as a good example of how special education can help us. She has a very low I.Q. I think her mental age is 11 years old. My VAC (Vocational Adjustment Coordinator) and I worked very carefully with her when she first joined my class. She's in my class because it was felt she needed a regular environment. She fits in beautifully. The students have no idea that she has any learning problems at all. Her papers show it, very much so, but when she does poorly I work with her alone. She comes to class early every day to work in the school store. When I see her in there, and I know that there's something that she absolutely didn't catch in class, we go over it very quickly, so I don't have to call her out individually in the classroom. The rest of the students accept her.

Even though she is partially blind, she refuses to sit in front of the room. Even though it makes things a little harder for her, she's more comfortable and I think that's important. So I leave her alone. I have placed her in a bakery. In order to be sure that she's okay I've placed two other students with her so that she doesn't have to ring the register. All she has to do is package the goods, put a price on the bag, and then it goes to the front register to check. I have trouble with other students because of their attitudes, but not with this little girl. The fact that she wants to please her manager so much and gets along with the other workers has helped her a lot. She was very worried when another girl from my class was laid off, but I think it was good for her to learn that she had succeeded in something when another young lady had not.

Of course, her manager knows about her problems. This manager happens to have a son who was a slow learner, so the manager probably gave her a little bit of extra care. She put up a special list of prices for my student and is very patient with her. Look for employers like that, when you have a slow student.

I would like to share some materials. World of Work is a book I know I could use. It has some very basic things like social security problems, teaching them some...
very simple chapters that Distributive Education (DE) materials don't always clarify. This particular book is for special needs students. It's going to be excellent. It will really help me individualize, so that the special education student could be working on some specific assignment that they missed.

Audience: Bobbie, would you have any suggestions for getting teachers to accept handicapped students?

Douglas: In DE, we're especially bad about that. We say we have to have students with "C" or above, and that's just not right. Our job is to place them in marketing and distribution and hope that they succeed. If they're special, does that mean they can't succeed? NO! They can succeed and I've seen it myself. Perhaps some of you have some suggestions for encouraging teachers.

Audience: We had one boy who was born without a part of his hands. He had plastic surgery and repaired it, but his motor skills were affected. Even though he has no trouble thinking and doing his work, they didn't want to take him on the job. Fortunately we were able to put him in a lumber company, inside the store for just keeping the stock in order, and it gave him confidence in himself. I think your secret there is the employer. We had a very obese girl six years ago and I really had no confidence in trying to place her. But even though I sent two girls to apply at a store, this one was hired and she's still there. So a lot depends on the employer.

Audience: There is a niche for everyone. You find that out very quickly. And even when you think an interview is going to be a total disaster, you're often surprised. It might just be the right student for the job and he stays two or three years. I guess we just need to think positive and hope for the best. Being a VOE counselor, you know what I mean when I say, we're in it with the students. If we can build their confidence and teach them to look beyond their defect, then they feel like they succeed and they do.

Audience: Our auto mechanics department also has a handicapped student. His specialty is in the tool room. That's where he wants to be. He organizes the tools, he checks them out to the kids, and he goes out and supervises, or helps them. He thinks he's not going to be able to get into the car business, but there will always be a place for him in the tool room.
Douglas: When you talk about the kids having a problem with handicapped students, it just isn't often the case. More often, it's the parents worried about having their children in with the handicapped. Kids just don't feel like that; that's a fallacy from somewhere way back.

Audience: About three years ago, we had a special education student who was recommended for one of our auto mechanics programs. He was not able to accomplish the book work, tests, and the other classroom work as well as the teacher would have liked. But the teacher knew the capabilities of the student. The boy was in the program two years. During his second year, he was still in a self-contained program part of the day. Then he worked the other half. They placed him with a car dealer and the dealer was so pleased he said, "I'll take all of the handicapped kids that you can send me." The same auto mechanics teacher has had special education students for the past three years. We had a new teacher that started this year who wouldn't take a handicapped student, so this teacher who has had special education students in the past said, "Well, if you won't take him, I'll take him, but let me tell you what you could have done with him." So now this new teacher has been convinced to work with students from special education.

Douglas: It's so easy to place an average student. There's no challenge to that. If you can find something for someone who has a weakness or a handicap, then you've met the challenge. You've done something special. Maybe that's the approach to take.
"We can no longer use the same teaching methods or procedures. One method, one technique, one procedure is not going to get the job done if we have to work with children who have different levels of competencies and different learning styles."

We are going to try to look at some ways to work with handicapped children in vocational education classes or programs. I want to make this a participatory session.

I'll present nine special techniques, nine ways of looking at teaching. Then we'll come up with an example from your own vocational background and apply it to the techniques.

Once we have all that straight, we'll put it in a grid. One axis is knowledge and this represents how much additional knowledge this technique requires. If teachers use the technique all the time, know all about it, we'd plot it to the far left on the horizontal. If teachers don't know anything about the technique, we'd put it over to the right. The other axis shows how much extra money the technique requires.
REQUIRED ADDITIONAL KNOWLEDGE

Then we can begin to come up with some kind of graphic illustration of these techniques and how they relate. I could probably draw a third axis representing time but that might become a little complicated for our purposes. Instead, we'll just say that if we had the money we could buy the time.

So let me briefly go through these nine techniques that can be used in vocational education programs to help accommodate the handicapped.

Utilize a variety of teaching methods and procedures. Vocational educators, in general, tend to teach a particular skill or concept using one method that they are familiar with, one method that they feel is successful. But we can no longer think of the class as a homogeneous group, with all the same characteristics. We can no longer use the same teaching methods or procedures. One method, one technique, one procedure is not going to get the job done if we have to work with children who have different levels of competences and different learning styles.
Modify the occupational objective. As we begin to work with handicapped students, we have to change our minds about what they will be. We may only be able to train this individual to become competent in a particular aspect of an occupation, to change tires rather than to do a complete motor job.

Develop flexible time limits. Some rules and regulations restrict the amount of time a student must be in a program in order to get credit. Others restrict the length of time a student can take to finish a program. This inflexibility needs to change. Some students may only need to be in a program for a week before they find out a program is not for them. And some students need a year and a half or two years to complete a one-year program. So we need flexible schedules.

Analyze the task in accordance with the student's skills. For a long time, vocational education has been taking a particular skill and breaking it down into its component skills. But for handicapped students, we need to think about the component skills in relation to the student, not component skills in relation to the actual task itself. We have to look for teachable components. To teach the child how to jack the car up, for instance, may take 20 different tasks within itself.

Translate statements describing physical and sensory limitations into statements of instructional significance. Too often when we begin to talk about working with handicapped children, we try to classify them according to disability categories. Those classifications are much too global to apply to instruction. What we need is evaluation, information on the specific characteristics of that child, characteristics related to the task that we are helping that child develop. Then we need to look at those characteristics, those limitations, and ask how we analyze that in relation to instruction. It's tough but we have to be more specific than simply talking about categories, like mental retardation and emotional disturbance.

Select, adapt or develop instructional materials. This is an important component in the educational process. Of course, there is no way that you are going to adapt your curriculum for all handicapped students. One visually handicapped student needs something different from another visually handicapped student. Nevertheless, instructional materials are an important part of the instructional process.
Emphasize job-seeking, job-getting and job-keeping skills. It has been demonstrated that handicapped students have difficulty with the personal, social skills necessary for job seeking, getting and keeping: how to find a job, maintain a job, be productive, and stay on task. These skills have to be a part of any realistic educational program for handicapped students.

Utilize basic principles of learning. I mean here, things like reward and conditioning and punishment and baiting -- all of the things that can be done to better motivate students. They must become much more explicit for students with learning problems.

Secure related services. As occupational educators we cannot do the job ourselves. In some situations students may need some related services, such as outside tutoring, a reader, an interpreter, occupational therapy, or medical treatment. While we, the vocational educators, do not necessarily deliver the services, we are at least in some sense responsible for identifying that the service is needed. This includes coordinating academic work with occupational work.

Those are nine techniques I think are important. Now I want us to go back over them to make them a little more real. Let's identify a situation in which we might apply one or more of these techniques. Then let's identify what each would cost in terms of additional dollars, or in excess cost (anything over what it costs to educate a non-handicapped student). I'm not looking for dollar amounts; I'm talking about relative costs. After we get it plotted we can readjust. Finally, let's think about whether or not the majority of vocational educators have the knowledge needed to use the technique.

Let me give you an example: vocational assessment. People say if we had better vocational assessment we wouldn't have these problems in determining what is appropriate for a child. Unfortunately, we don't know enough about assessment of individual children. We don't have the instruments to tell us what jobs a student will do well or how a student will learn. So it will require a lot of investment and not many people have the knowledge so we plot it like this.
Let's try to develop an example around another technique.

Audience: What if some students have grasped a competency and others haven't? We could let the first ones go over it again.

Fair: Let's be even more concrete. Give me an occupational area such as electrical trades. What might be an objective that you would teach in electrical trades?

Audience: Wiring for a room.

Fair: Okay, room wiring. We are working in the general area of electrical trades and the objective is room wiring. Some students accomplished the basic skills and principles within the first week. Another smaller group of students didn't. So we are going to let some of the students that had accomplished the task work with the other students, peer tutoring.

Let's plot that example on our ability to implement. Because we are not going to pay the peer tutors the cost is practically nil. But how about knowledge? Do we need a lot of additional knowledge to be able to do that?

Audience: Let me tell you what I've found out along this same line. Students learn more from each other than
you or I will ever teach them. They all want to help each other succeed. If you are careful with your pairing, peer tutoring will work.

Fair: Do you think that the majority of vocational educators have the knowledge to do that?

Audience: Many educators feel so responsible that they wouldn't want to delegate teaching duties.

Audience: But think of it this way. There are three levels of learning: (1) being able to understand something, (2) being able to perform it and (3) being able to teach someone else how to do it. With this technique students who didn't learn it the first time can get reinforcement from others. What is taught once is retaught many, many times, each time a little bit differently, and each time from a student's viewpoint.

Audience: We're talking about a peer group situation, not formal teaching. Anyone who's been in a graduate course knows you learn as much from your fellow students as you do from the teacher, usually far more.

Audience: Anyone who has been in the field is familiar with learning from other workers. We do that in our homes and everything else. It is not a special technique that needs to be learned.

Fair: I agree that we use it — no question. But do teachers recognize it as an instructional technique and then set up situations so that it can be implemented?

Audience: If the instructor doesn't, the student will. They will develop their own.

Fair: Okay, we will put it low on the money axis, but it will require a little knowledge. Now we've talked about one teaching method or procedure that we might be using in addition to our standard ones. Let's take another one.

Audience: Let me toss one out. You've got a man in a wheelchair with average use of hands and arms. He wants to be in auto mechanics and specialize in carburetors, generators, and that kind of thing. Normally he couldn't be an auto mechanic because he can't get down under the vehicle, but if he specialized he could work alongside team members.

Fair: I think the technique he is referring to here is modifying an occupational objective. This person is confined
to a wheelchair, has some use of lower extremities, but has pretty good upper extremity use and a normal amount of cognitive ability. That would be a good example of how we might modify occupational objectives.

Audience: Even though he can't put an alternator on or off he could rebuild it.

Fair: Okay, we will train this boy to be a generator/alternator specialist.

Audience: I agree with the gentleman but why make him a generator/alternator specialist? Let's teach him a lot. He might be able to handle transmissions, carburetors or other jobs.

Audience: Train him for a bench job.

Fair: This is another term, bench repairs, meaning that he will be especially proficient in tasks that can be done at the bench level.

Audience: Couldn't a person get out of a wheelchair onto those dollies?

Audience: Again, it would depend on his ability, upon the individual. But I think you brought up a good point. As vocational educators we need to be sure we are not limiting these students by our own artificial measures like saying just because you are in a wheelchair you are required to do bench work and nothing else. We need to let the student do anything he is capable of doing.

Fair: That's a point I want to reinforce. I think we've seen that modifying occupational objectives requires some real expertise, some analysis of the occupation and of the individual to get a proper fit between them. Otherwise, as we've just shown, we might modify the objective too much.

Audience: Isn't the purpose of the individualized education plan to plan objectives?

Fair: Yes it is. The purpose of the IEP is to have an interdisciplinary team of knowledgeable people sit down and decide what the educational objectives for a person would be. I think, however, that we aren't doing the IEP as expertly as we would want.
Audience: No one knows what objectives will work. Only after a person gets in a classroom will anyone know.

Fair: Maybe students need a trial period to see what they can do. There really is no assessment that will show what a person can do in any particular occupation. So we've decided this student will become extremely competent in bench repair and other related activities. Can we implement this modified occupational objective? Would this objective inhibit the instruction that goes on in a class?

Audience: You would have to make sure you have repairs available which the student can help on. The student needs to work with the others even if just to observe. Otherwise, they will just sit over in the corner.

Audience: You will probably have to design a work station that the wheelchair would move under, where tools are within reach. You may need several work stations. So it's going to cost a little extra money.

Audience: Let's go back to modifying the objective. That doesn't take any money.

Fair: Okay, let's just evaluate setting the objective. We decided this student would have instruction on bench repairs. Would the majority of auto mechanics have the competence or the knowledge to be able to do that?

Audience: Maybe the knowledge but not the attitude.

Audience: Even with the knowledge it would require additional thought and attention.

Fair: Okay, they wouldn't have to learn how to do the technique. Would the technique require a lot of additional time? Remember we're just talking about modifying the objective, not putting in a whole new system. This member of our group said yes, they have the knowledge, but they would probably need additional time to modify the technique. If we're going to buy time with money, this technique will require a little extra money.

Let's use this same situation and jump down to number six, selecting, adapting or developing instructional materials for this individual.

Audience: It needs to go in the far right hand corner because it takes a lot of time and a lot of money and a lot of knowledge.
Fair: Does everyone agree with that?

Audience: I disagree. If you wanted to spend, you could. But you could build a station that hooks onto the wheelchair without spending a lot of money.

Fair: All right. Now, we're talking about selecting, adapting and developing instructional materials. Does that require a lot of knowledge? Would there be things that would need a high level of knowledge to be adapted?

Audience: Why would it take any more knowledge to teach a person in a wheelchair how to repair an alternator than it would the normal student? What you are talking about adapting is the facility.

Audience: But you could be talking about developing job sheets, task sheets, self-instructional materials, possibly some audio-visuals, maybe even a video tape. So depending on the situation it could require adapting your teaching as well.

Audience: Now, wait. He can move around in his wheelchair. He will be taught in the classroom with the other students, so all you need is some place for him to work.

Audience: Even innovating requires time and money. Let me give you some examples. When I was teaching machine tool technology I had some students who couldn't reach the on/off switch so I designed extensions. Then when I had new classes with students who didn't need the extensions, they were a hindrance so I had to remove them. Designing and making them took hours. Adapting usually does. And usually it's the instructor who has to do the job because everyone else is too busy. It would be nice to have someone in the school system who does the work after teachers determined what is needed and designed it.

Audience: Isn't there a resource at the University of Texas that will do this for a student?

Fair: They call it bio-engineering, but I don't think they will do it for nothing.

Audience: They'll give you assistance, though, and that's what you need.
Audience: I would question any severe modification of the equipment or materials within the training situation. An employer is not likely to spend that kind of money adapting their shop for this individual.

Audience: It depends on the student. I know some employers who would build a new shop if they could get a trained worker.

Audience: Legally, the employer can be asked to make a reasonable modification under Section 504. They are being asked how to do it.

Audience: Do they get any tax credit for that?

Audience: They do.

Fair: Now, let's get back to this knowledge question. We've agreed it's going to take some additional time, so it will cost a little additional money. Probably no more than we could obtain. But how about knowledge? Do you think the majority of vocational educators or occupational educators would know how to design these modifications so the student could get underway?

Audience: I think it would be unfair to ask them to. You need to bring in a resource person who has worked with this kind of youngster in the past.

Fair: How many people have this kind of experience?

Audience: Not many.

Audience: This student has no intellectual disabilities, no learning disabilities. That's what's expensive, having a student who can't read and trying to teach from technical manuals. For this, I think it's fair to request a consultant, even if special education has to go to Dr. Fair.

Fair: Yes, intellectual problems are a big part of this. Yet there are many students without any intellectual problems who have been unable to take advantage of regular vocational education classes. Before we move on, however, let's plot this situation. It will require a little bit of additional knowledge and some money. Now let's get into a new situation.

Audience: Perhaps we could see what would be required in modifying instruction for another situation.
 Audience: Okay, let's take a girl who has no physical disabilities but only a 4.5 reading level. Cosmetology people won't even look at anything below an 8.0 because of State Boards. Let me tell you what it's going to take just to get her through that course, forgetting about State Boards. A special education teacher or aide will have to spend at least 3 to 4 hours a week either recording that awful text book, rewriting it on a lower level, or reading it to the student. And that's not counting the time her family will have to spend so she can learn the anatomy of the facial structure. Why can't vocational education find textbooks or materials that aren't so difficult or put the information on tapes? Then special education could work with the student more efficiently.

 Audience: They should do something about that at the state level.

 Audience: I have a cosmetology teacher now who has a blind student. She has tapes available and is doing beautifully. She will be limited to doing shampoo work but she knows this. I work at a commercial school but we're contracting with the public school district for around 150 hours.

 Fair: Using tapes is a good suggestion but I don't think that's the only modification we could make. The book could be rewritten on a fourth grade reading level.

 Audience: But what about employability? When we suggested cosmetology the teacher said, "I can't project any employability for this student because no one will read the State Boards to her." Should we put her through two years and 1500 practical hours and then have her unable to pass the State Boards?

 Audience: The teacher has no right to make that decision. How does she know that the student couldn't pass State Boards after 1500 hours?

 Audience: Past experience with other students who had a low reading level.

 Fair: There's something illegal about this situation. Section 504 says that no one can discriminate against an individual based solely on handicap. So she should not fail the state board because she has a low reading level. She
should fail because she doesn't know the information or have
the competencies to pass the exam. The state board has an
obligation to modify the examination.

Audience: The teacher is objecting because cosmetology
teachers have to have a pretty high percentage of students
pass the state board.

Audience: That's one of those built-in accountability
requirements that cause so many problems.

Audience: I took a student to State Boards but they
would not give the test orally. They give all the time the
students need to read any question students have trouble
with. That's how they accommodate the handicapped. So
they are not discriminating.

Fair: We're running out of time. One reason I did this
was to show that when we really get down and evaluate
specific cases they are not as overwhelming as we might
think. We need to look at things individually. Some
techniques are not all that complicated, but will enable
more special education children to take advantage of
vocational education programs. That's what it's all about.
"Getting teachers involved in planning can strengthen their motivation to attend inservice programs and participate."

I have some choices about what to do in this session. I could tell you all the things we've done, and all the things we've seen other people do; or I could call in someone else and have them do this presentation; or I could let you do the presentation yourselves through activities. When you get out there working on inservice, you have the same three choices that I have here. You can do it yourself, relying on the wisdom of your years, your experience and your staff; or you can bring in outside consultants, outside help; or you can go to your teachers, ask them to pool their wisdom, to take what they know and to implement that. I think that the latter is probably the best avenue to take, but I wouldn't want to ignore the other two.

I want you especially to be aware of the resources available through handicapped individuals and employers. Donna Williams, for example, has cerebral palsy; she is one of our most valuable assets in inservice workshops. No matter what we try in our presentations — activities, games, simulation, role playing — she always receives the highest praise on the evaluations. She comes across with something that really makes people listen, understand, feel, and change their attitudes. She communicates the knowledge necessary to include social features in a good, comprehensive vocational program so that the handicapped individual is not isolated according to the prejudices of the teachers or other students. Use these handicapped...
If you have a university in the school area, call on them. They might have faculty willing to come out for an afternoon without a consultant's fee, or supported by a project such as ours. Contact the state vocational research coordinating unit for other projects or for a list of the people who have money for inservice and preservice teacher preparation.

Now, I would like to use the third technique — group participation — to give you an opportunity to pool your knowledge and skill. You can take this model to work with your classroom teachers. It takes thirty minutes.

I'd like you to form groups, about seven people in each group. Now write down some problems, needs, barriers that prevent your conducting a good inservice program at your location. What prevents inservice from occurring or from working smoothly? What are some of the problems you see?

With these, develop a summary statement for each resulting group of problems. What do we see here that goes together? What are some patterns? This first pattern includes:

1. Diversity of programmatic areas
2. Good consultants, unbiased
3. Language confusion between Vocational Educators and Special Educators

Audience: Looks to me like the problem here is coordination of the two different programs.

Foley: Okay. On the second grouping of problems we came up with this pattern:

1. Lack of interest
2. Teacher attitudes
3. Identifying entry level of participants and their needs
4. Preconceived ideas
5. Lack of teacher participation in planning

Can we just call that motivation? We need something to motivate these people to come, to attend and learn, and to change their behavior.

A third group of problems includes:

1. Time
2. Priority of planners
3. Release time
4. Getting vocational and special educators together at the same time

Shall we just call these mechanics? A fourth pattern of problems that we have come up with is:

1. Red tape
2. Funds

In step three we want to decide what barriers are preventing the achievement of each of these goals.

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<th>PROBLEM</th>
<th>BARRIER</th>
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<td>Motivation</td>
<td>People have other things to do and don't have time for inservice.</td>
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<tr>
<td>Mechanics</td>
<td>It takes time to set this up.</td>
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<td>Coordination of</td>
<td>If we're vocational education people, we don't understand all there is</td>
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<td>Contents</td>
<td>to know about the handicapped student.</td>
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<td>If we're special educators, we don't know the vocational content area.</td>
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<td>Red Tape and</td>
<td>Too much red tape is required and not enough money is available.</td>
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Let's take the first problem — motivation — and find some solutions. What are some things we can do to motivate? What motivates you?

Audience: Find a subject area I'm interested in, that I want to learn more about, and I'll pay attention.

Audience: I think to create interest with the teacher, you could demonstrate not only a process but also the end result.

Foley: Just like the Agricultural Extension people do. They go out and rent a field from the farmer and put out their hybrids or fertilizer. Then the next-door neighbor looks at the product and says, "Hey, that's working." What are other suggestions for raising interest?

Audience: Time off for spending so much time.

Audience: For years, I never had a choice on inservice. If we would let teachers choose the inservice they want to attend, the season to attend it, and then give them credit for going, it would work. If they go in the summer to a
week's workshop where they feel they can benefit, then give
them a week off during the year.

Audience: I'd like to get one more up there. I think
recognition of achievement is something that motivates a lot
of people.

Foley: How many of you want me to send a press release
to your hometown newspaper saying that you attended a con-
ference at Texas A&M on vocational special needs? Is that
the kind of thing you like? That would be an example.

Audience: I'm not asking for that, but I think your
point is well made. If a press release were made and just
one person walked up and said, "Hey, I saw where you went
to A&M," then you'd stand about two feet taller.

Foley: So, if we can get a teacher motivated enough
to go out and do the things they need to do to be a more
effective teacher, then we've got the problem licked.

All right, let's just take this one area, raising
motivation, and decide who, where, when, how, and what can
achieve it -- the tactical steps for each goal statement.
Which suggestion should we analyze?

Audience: Subject area.

Foley: Okay, subject area of interest. Who would you
have do this? Would you call in an outside consultant or
would you train someone from your school?

Audience: In terms of vocational education for the
handicapped, we have no program, so no one could really
be recognized in our district; but a neighboring
district could demonstrate their program, or our teachers
could visit the program.

Foley: Right. You could also trade off. While some-
one is coming to your school district, doing a demonstration,
one of your people could go over there. The classes would
still be covered for the other school, and you wouldn't
have any expenses involved. And people would get recog-
nition.

Where. This is a tactical detail you have to solve.

When. This is one of our most difficult problems.

How. For this you have to tie in some of the other
things -- the mechanisms. Your organizer person can brain-
storm that with elements of your staff.
What. Now here's where we come into content area. What do we want to teach? You can go through the same brainstorming process for that.

Let me wrap this up by reinforcing how important local program planning is for successful inservice. Getting teachers involved in planning can strengthen their motivation to attend and participate. Involve your teachers using this technique to help you:

1. List problems regarding inservice.
2. Group the problems according to similarities.
3. Develop a summary statement for each resulting group or pattern of problems.
4. Describe a goal for solving each problem.
5. Decide what barriers are preventing the achievement of these goals.
6. Outline tactical steps for achieving each goal and overcoming the barriers — who, what, where, when, and how.
"This panel discussion was designed to allow you an opportunity to ask questions that might pin-point a single answer from different areas — curriculum, teacher training, community colleges, and special services."

Foley: On our panel we have four individuals from the Texas Education Agency: James Cogdell, chief consultant for industrial education; Eleanor Mikulin, chief consultant for special education; Carol Parker, chief consultant for the post-secondary programs; and Leo Schreiner, coordinator for vocational personnel development at Texas Education Agency. The panel discussion was designed to allow you an opportunity to ask questions that might pin-point a single answer from these four different areas — curriculum, teacher training, continuation into community colleges, and special services. Often we find that the design of a vocational program, for example, is different from the design that has been implemented for special education. I have a stack of questions I want to ask these people, but let me first give them an opportunity to say a few words of introduction to where they feel vocational education for handicapped individuals is going in Texas. Eleanor, would you like to start?

Mikulin: I am positive that someday soon all handicapped students will have benefit of access to vocational education.

Cogdell: There is a coordination between vocational education and special education. I hear rumors quite often...
that there is none, but I can assure you that we certainly have been working together. We think that vocational education for the handicapped is vital. Mainstreaming is on us now, and I am certainly pleased to see workshops like this being held.

Schreiner: I would reiterate what has been said. I think there is more coordination going on within the various divisions of the agency. This is a very difficult task, for the simple reason that we're split apart by funding factors. This is one of the big problems. I think the only way public schools are going to win is through the individualized programs and taking these students into "regular" programs as they can succeed. I do not see a blanket putting all types of handicapped students into all types of regular programs. It's going to be through individual assessment that you are going to be able to take these students and do something with them. I like to use this example: If I were an elementary teacher and you put three students in my classroom who cannot speak any English, I will be in a heap of trouble real quick. By the same token, if you put three handicapped students with varying degrees of handicaps in my program, I will be in a lot of trouble. Fine, we'll take those students, but where is the support they need? Where are the resource people? Where are the aids? Where are the materials? Where is the backup for these programs? Then I think handicapped students can succeed in vocational education.

Parker: You that were in the session just previous to this heard Dr. Grusy say that, at the post-secondary level, we are getting into funding for programs or excess cost for mainstreaming handicapped. In the past we have had only a very small amount of money that would go out to our community colleges. We had actually only four programs; two of those were for special groups and two of them were for mainstreaming. We have seven now that have been funded this year, and we hope that next year we will be able to get more funds out to the different schools. I am very hopeful that we will see a great increase in the number of colleges that are going to apply for these funds.

Audience: What kind of programs are we talking about?

Parker: We have seven projects that have been funded. In the past, Lee College had interpreters for the deaf; San Antonio College had a piano tuning program for the blind, then Dallas Community College District has a mainstreaming type of program, the largest program that we have funded.
We had a little money left over, so McLennan Community College came in with the same type of mainstreaming. Then during this year, Melinda McKee from TSTI had a proposal funded for a facilitator to work between the vocational instructor and the interpreter. Then we had Lamar University, which has a technical section that grants baccalaureate degrees. They requested money for equipment. Then the other program was Houston Community College with the Lighthouse for the Blind.

Foley: What rights does the classroom teacher have to appeal the placement of a student in his class, if the teacher feels that the student placement was not appropriate but the ARD/IEP committee has out voted him?

Mikulin: I would say that if an ARD committee met with a teacher and is going to put that student in her class, and the teacher says, "No, I cannot work with that student," I think that the ARD committee would be at fault in placing the student in that class. As far as appeal, I don't know that there would be a system, but I think it should go back to the original ARD committee.

Foley: This is one of the issues that I have seen coming out of the National Education Association, talking about the parents' right to appeal, the student's right to appeal, the school board's right. Where does this leave the individual teacher? What do the vocational people feel? What recourse do you think should be available?

Cogdell: It would be just the normal recourse, Tico. First you would have to appeal to the superintendent, the school board, and on down the line. Unless the local district has established some procedure for this, I know of no other course to go. The ARD committee would certainly have a problem if they placed a student over strenuous objections.

Foley: Classroom teachers need to know both the TEA regulations such as the special education guidelines, and vocational education guidelines, policies and procedures, but they also need to know the rationale. Why are these regulations being implemented? What is being done for the classroom teacher? The administrators generally come to conferences like this one, but how can TEA help insure that the classroom teacher is aware of what is going on and why it is happening? What is the thinking going on behind the regulations?
Schreiner: We are hoping they will find out through the consultants that we have in the field, the chief consultants and the staff that we have at the agency, and through inservice education.

Cogdell: Let me comment just a little bit further. We at the industrial workshop have sessions on improving relations and coordination with the academic instructor. This is the only means that we as vocational people have for getting to the academic.

Foley: Although the guidelines have encouraged the involvement of vocational education personnel in the placement of special education students in regular vocational education programs, in many schools vocational personnel have little or nothing to say concerning that student's withdrawal and placement in a job. In other words the student might be placed in a regular vocational program and be trained for a year or a year and a half. Then he gets pulled out again, without completing his training, and gets put on a workstudy position, which is often not concurrent with the training that he has received. What do the guidelines say about this fragmentation of effort?

Cogdell: I understand that this is a widespread problem, and I object to a student being placed in something that is totally unrelated to what he has been trained for. I think this is something that we all need to work toward, in assuring that the student is placed in something that they've at least had some training in. I don't know whether this would be through education of our VAC's or a full fledge co-op or what have you, but we do need to work in that area.

Mikulin: We have no written guidelines for VAC's on placement, but I believe the subject is addressed in the VEH handbook; the student should be placed in the job in the area in which he is trained. I know that in every workshop we try to stress the fact that students who have vocational training, either in regular vocational education or in VEH classes, should be placed by the VAC in a job in the area for which he has been trained. Again, we have no control over that, because there are about 550 VAC's.

Audience: What is the possibility of having a VEH coordinator funded?

Schreiner: Very good, at the state level.
Audience: What would be the possibility of someday having the VAC coordinator placed within the vocational programs?

Mikulin: The VAC's are required to be certified in special education. At this point and time there is no other requirement. We have discussed whether a VAC be required to be a secondary teacher. Our guidelines say that any special education teacher needs special education certification. There is no requirement as to what level. So we can't do that. More or less all we can say is that they are certified in special education. There has been discussion as to whether it is more appropriate for the VAC to be placed with vocational education. There have been discussions about just letting vocational education fund and handle the whole situation concerning the VAC. But you get to certification again. This is a vocationally certified teacher, and then you have the question, is it more appropriate that a VAC be special education, or vocational education certified? We need a combination but at this time we have no combination. It has been discussed, but no answer has been given.

Cogdell: You can't teach it unless you've been there. I don't think that vocational education would be receptive to taking within the umbrella persons who do not have that work experience. If this could be worked out some way or another, then perhaps this could come about.

Foley: In terms of certification for the VAC or the generic certification for the special education teachers, is there an inclusion or a monitoring to make sure that secondary special education concepts and skills are included?

Mikulin: To the best of my knowledge there is none.

Foley: Okay, so the schools set up a program for the special education certification and are just including elementary concepts and not really giving the potential VAC's the competencies and skills that they need. Is that correct?

Mikulin: That's correct. Some of you may be familiar with CPPH, Council for the Personnel Preparation for the Handicapped. The council has said that as soon as the plan for secondary programming for handicapped students gets more or less in place, they would like to be included so that they can provide training at the college level for teachers.
to work in this area. As we look at this plan we hope it will not only include career oriented instruction at the secondary level, but also at junior high school and elementary. But that's in the future.

Foley: In the fall of 1979 all Texas teacher education institutions are required to infuse information on the handicapped in teacher education courses. What basis will be used to evaluate the success of this infusion?

Schreiner: That's a tough question at this point in time. We think we have a handle on it as far as vocational is concerned, in that the state board of examiners have some things on the drawing board right now in the generic certification. I'm not sure I believe that this will not affect the vocational program.

Cogdell: I'm going to ask Bob Wagner to give a response.

Wagner: We've been doing teacher education for the handicapped and the disadvantaged instructors for a number of years now, and there has been quite a bit of mail on this. We're quite happy with what has been happening.

Foley: The question was directed at the regular vocational teacher — the regular classroom teachers will be receiving handicapped students in the least restrictive environment concept.

Audience: We have infused into our teacher certification courses how to work with the ARD Committee, what IEP is, and modifications that could be made to shop facilities to accommodate handicapped people. So we are working in that direction.

Schreiner: Tico, a little further response to that. I think there are some exciting things going on in vocational teacher education, as far as the handicapped are concerned. But that is not really the question you asked. I have no earthly idea at this point what the certification total package is going to look like.

Foley: Part of the question comes from my understanding that, if you infuse say 10 or 15% of the content of the course and have it dealt with the handicapped, the student can zip out on that and still get an A and become certified and not have any of the knowledge, skills, or competencies related to the handicapped.
Audience: Tico, I would like to say this also. About yearly we get together with the approved teacher education institutions and go over the curriculum and talk about changes that need to be made and things we need to update. I suspect that this will be one of the major issues for this next go around.

Foley: Have there been any attempts to regulate the class size with the introduction of handicapped students or to introduce aides? How can I get an aide to help the handicapped students in my regular vocational class?

Cogdell: At this point in a regular VEH class I believe 16 students make an acceptable class load for requests for teacher aides. For students being mainstreamed with the regular program, there has been no limitations as far as total class size is concerned. We still maintain in our particular field that you shouldn't have more students than you have training stations, and I think that there is going to have to be quite a lot of discretion used in the placement of handicapped students in a regular vocational education program. I fail to see how a program could productively operate with 50% handicapped and 50% regular. At this point we don't have the facilities, the materials, the instructors, the aides, to handle all of this type of situation.

Foley: What has been done in vocational counseling for the handicapped? What do you see being done in the future to assess the needs for materials and staff for vocational counseling?

Schreiner: A very important part of the summer inservice program for the guidance division has been dedicated to the handicapped. In fact I think Tico was on a couple of these programs. So other than infusing these types of activities into that inservice I see very little being done on the inservice basis at this point and time.

Foley: What is the future of CVAE programs in Texas?

Schreiner and Cogdell: It's great.

Foley: So you say it will continue and that handicapped students who are also disadvantaged will be able to enter those classes. They have in some places.

Audience: This is a specific sort of question, but I don't know where the buck finally ends up in a situation
like this. What do you do in a situation where CVAE is offered in the eighth and ninth grade, but not at the high school level? The reason it's not there is that the local administrator doesn't want to do the work or take on the responsibility involved with implementing CVAE at that level. It makes it very difficult for any kind of continuum for students that enter CVAE when they are 14. When they go to the high school, they don't have any program there. I have another question related to this. What do you do when a special educator can't convince regular educators that they should open regular classes to handicapped students, particularly vocational classes? And the vocational educators are not willing to make adaptations and the regular administrators are backing the vocational educators and saying that they shouldn't have to make it because special education gets all the money anyway. I hear this all the time. I know that in a typical situation like that, a parent might want to make an appeal, but what if you are dealing with students whose parents don't know where they are most of the time? What if you are dealing with students whose parents are not interested in their kids?

Cogdell: Let's back up the first question now. It was related to CVAE in the seventh and eighth grades and nothing above. My opinion is that the administration wanted to solve an immediate problem where they had the greatest pinch at that time, but my opinion is also that they started at the wrong end. Start up at the top and come back down, because nine times out of ten this program is put in at the seventh and eighth grade level and they don't have anywhere to go. Provisions are not made to continue this program on into the higher grades; therefore, I think they should start at grades 11 and 12 one year and the next year pull it back down to another level until you get back down. It takes about three or four years to do that but that is the logical sequence in which to put in a disadvantaged program. It's much more successful that way, much more successful.

Schreiner: Let me respond to what you have said. Really if you look at the history of CVAE, the original intent was to help solve that drop-out rate, because you had over-aged students in some grade levels. If you could get them in a program at 14 and keep them in for two years, they were gone when they were 16. If you could put them in a skills situation where they could at least get some entry level employment at the end of that, then you won. But a very interesting thing happened about that time. We found out that by offering these students some different types of academics that applied to what they were really doing, then
they go a little more turned on in school and they started staying in school. Then we had a problem. What were we going to do with them? But I think James is right — some people started on the wrong end. They wanted to solve an immediate problem, but once they got it solved, they didn't go on. Now about your other problem, about one more law suit up in that area is going to solve that problem for you. That's going to get the attention of some administrators and teachers real quick. I happen to know where you are coming from.

Audience: I don't know that there is anything anyone can do to solve. I'm talking about an attitude that is widespread among regular educators. I don't know if it is just the area that I come from or not but I really don't know what the roots of the whole problem are.

Schreiner: As I indicated in my opening remarks, the way you are going to win is to get the special educators and the vocational educators together and let them figure out what they can do and what support they need to do something for this individual. You are not going to win with groups, you are going to win with individuals. Don't try to take on the whole world.

Mikulin: It's known that the principal is going to carry the key for the whole school district. If the principal has the idea that teachers will educate the handicapped students, a teacher will not say, "I will not have that student because he is handicapped." If your principal can convince the special educator and the regular educator that they are going to work together, then if special education bends over backwards vocational education might come along. But it's going to take a long time to change the attitudes.

Audience: If you have a CVAE vocational program, you are going to limit that vocational program to thirty students. If you have forty students signed up for that program, and ten students have to be eliminated from it, if one of those forty students that made application is a special education student, is there any priority or any law that says that those students have to be given priority or are they just put in the hopper with the other students, and selected on their ability?

Mikulin: Section 504 mandates equal access to the program; it doesn't say priority. But just collecting the...
best students and making the program available only to them — that's discrimination.

Foley: Some vocational programs have time lines prescribed by TEA guidelines, certain time frames within which course requirements must be completed. In light of these requirements how can the open-entry/open-exit concept be encouraged for special education students in regular vocational programs? Basically, how can students move from a CVAE program, into a VEH or a regular program?

Cogdell: Tico, first I would say that's not a logical sequence really to begin with. If the school has the facilities for the disadvantaged, the regular, and the handicapped, they should be placed in the handicapped first rather than a sequential type activity.

Foley: Basically it's the question of open-entry/open-exit. I didn't mean to imply the CVAE had to be first.

Cogdell: I think that that student needs and must attend that course long enough to have been exposed to skills or training that would be of benefit to him. If the student is in there a couple of weeks and hasn't had time to experience the skills necessary to do what is going to be required of him, he'll have to be there a year.

Mikulin: Tico, are you referring to open-entry/open-exit in time line or in the ability?

Foley: In the ability. I think that, not only might a student be considered for placement for less than a full year, but also for more than a full year, in order to achieve the competencies that the student might want before exiting the program.

Schreiner: I think that based on the assessment of the student and on the design of the program involved, then that becomes an ARD situation. I think we are talking about coordination and what is best for that individual.

Audience: Are you talking about a single competency, a single skill, or a cluster of skills? It seems that the competency is a certain amount, but also the attitude that goes with it where a student can cooperate with other students and be able to work in a working environment.

Foley: The concern is not only for the shorter period of time, but also for the longer period of time, because we
look at a student and say, "This student is handicapped"—and the logical inclination is that it just might take the student longer to pick up the skills. So rather than place the student for three quarters, maybe it will take him four or five quarters to get that same content and then move to the next year's curriculum. We don't limit this student to a rigid four-year graduation contract; we have until the student is 21, and let's make full use of our educational dollar to put this student out in the job market where he can have entry level skills and also have the potential for advancement.

Audience: I have a question that bothers me quite a bit: In a 101-year-old institution such as Prairie View we are mandated by the agencies, legislated by the federal government, to serve the handicapped. Now how do we take these 100-year-old buildings and convert them into accessible buildings? What do we do? Where are the funds available? Are there funds available to make our facilities livable for the handicapped? Right now, I'm sorry to say, we have updated only 1/10 of 1% of the buildings to handle the handicapped. And this bothers me.

Mikulin: I don't believe the law says that you have to restore every building. It says you have to make programs accessible to the handicapped. If it takes moving classes to those buildings where the students can have access, then I think you can work on some of those.

Audience: I doubt that we have enough buildings to be accessible to them, just to take math, English, and what have you.

Mikulin: I've been in an institution where they moved an English class to another building for a student who was scheduled for this class and couldn't get to the third floor. They moved the whole class. It can be done.

Audience: So what you are suggesting at this point is that we reschedule classes to other buildings?

Foley: I think that if I were faced with this problem, I would talk to the people in rehabilitation agencies and perhaps see if they have funds for community colleges. Another thing, I think in the older federal architectural barrier acts, there were some appropriations made available then. I don't know if you've missed the boat and not done it when the money was available, but there should be technical assistance at the federal level, perhaps for
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studying that kind of thing. And we do have some resources here at our library on campus for some of the physical barriers. We don't have money but we have ideas.

Thank you, panel, for being here today and for fielding these very difficult questions. And thank you, group, for being here.
If you don't know where they are, you can't plan for where they're going.

Jane Francis

"In order for us to be accountable (and at the secondary level that's primarily what our obligation is), we must be accountable for what happens to students."

There are not many criteria for selecting students for vocational courses. Over the years I have seen students being placed arbitrarily in vocational education programs, and I feel like that sometimes this is not in their best interest, or the teachers'. Certainly it's not preparing them for a skill that they intend to continue, so I think there must be a better way. In order for us to be accountable (and at the secondary level that's primarily what our obligation is), we must be accountable for what happens to students. This is the last big stand, so to speak, before they leave the structure situation of a secondary school and go out in the cruel world of work.

As a secondary teacher, I was told by the Texas Education Agency to take my children out of the vocational programs because they were not eligible because of double funding (this was prior to the Vocational Education Amendments of 1968). I told the group at that time, "It's difficult enough for regular students to make the transition from school to the world of work. You wouldn't expect handicapped students to make it from self-contained classrooms where we teach just academic things." The Vocational Adjustment Coordinator (VAC) picked them up.
and placed them in the world of work, and they had no opportunity for training, no opportunity for experience, and that's tough.

Many doors have opened for handicapped students then, but even now, is choosing a career getting a chance? Perhaps, for a lot of normal people there was some element of chance involved. Being in the right place at the right time has afforded us jobs opportunities. Many of us have accepted jobs for which we were not fully qualified at that time, because we knew that we had the capability, we knew that we had the academic and cognitive skills to acquire qualifications for that particular job. We could take it with some degree of self-confidence, saying, "I may not be fully qualified on paper, I may not have it all right now, but I can get it. I have the capabilities."

This is not always true of handicapped individuals. Many times the employers have higher expectations for handicapped individuals; they want them to come to the job with skills already developed. They don't have time, really, to take a handicapped student and do a lot of training on the job. It therefore behooves us in the public schools to provide some major training.

Recently we have seen laws come into being. This is just a brief review of these laws: P. L. 94-142, passed in 1975, insures development and implementation of the IEP for every handicapped student. They must be placed in a regular educational environment. They must have an equal opportunity. P. L. 94-482 includes in the Vocational Education Act Amendments, that handicapped students must be prepared for jobs in the least restrictive environment, and the vocational programs must conform to the student's IEP's. This must be jointly developed, under the Texas guidelines, Bulletin 871-01. P. L. 93-112, the Rehabilitation Act of 1973, is civil rights legislation. It is monitored by the Office for Civil Rights, and requires that handicapped students must be educated with non-handicapped students to the maximum extent possible. I'm not advocating, and none of these laws advocate that every handicapped student be placed in a vocational class. Certainly every regular student is not placed in a vocational class. It would be nice if they had some vocational training, but this may not be the case. I think that there are appropriate programs for handicapped students to be placed in, but we need to start with some kind of appraisal. If you don't know where the student is and where he's going...
How do you determine the present level of performance that's required on the IEP? There are any number of ways to do this. A handicapped student is an individual, different from other students with handicaps, just like we're all individuals in this room and we have differences. We have a sum total of traits, characteristics, habits, beliefs, interests, experiences, strengths, and weaknesses; and all of these things have a direct bearing on how well we do our job. The same thing is true with handicapped. We need to find out more about the student, to understand him, so we need to start with some appraisal, some assessment. I don't think that any one person has primary responsibility for this assessment, because there are a lot of people who interact with this child. Certainly through a period of time and observation or even during the instruction that goes on in the classroom, the teacher can prepare this student vocationally, or prevocationally, if you please, and bring information to the development of the IEP on where he is right now. These are the kinds of things that we want to know.

We're not talking about just training for a specific skill; at most, any job requires these vocational abilities. There is an awful lot of information on a handicapped student. If he has been in special education since he has been in school (and many have been), he has tests running out his ears. He has been given all kinds of tests, but a lot of the information that's contained from the psychometric instruments he's been given does not really convey what this student can do. There's not a lot of correlation between tests and what he is going to be able to do in a vocational shop. Yet there are pieces of all of this information in the student's record that are going to be a part of the total vocational assessment, so all of this needs to be scrutinized very carefully.

The vocational interest assessment can be a valuable tool, not only for vocational training, but to coordinate the instructional program. How better can you individualize a program or meet a student's needs than by having instructional materials about the kinds of things he wants to read? This could be written into the IEP as part of his reading assignment, on the basis of his vocational interest inventory. There are many vocational interest assessment devices now that have been normed on handicapped populations. There are many picture interest inventories. The PIES, the Picture Interest Exploration Survey, is a carousel of slides that shows just hands. The occupations of the VPPI, the Vocational Picture Interest Inventory, have been normed on
the retarded population. These are realistic, because they give the options retarded students can achieve in. The GEIST gives very highly technical jobs that perhaps a retarded child would not have the capabilities of going into, but the pictures require no reading. Those could be used with LD students. Using this information, incorporating it into the IEP and using it in the instructional program, could make that program relevant, and the child would see some reason for reading about these things. There are many things now to measure work tolerance. The VIEWS was one of the vocational evaluation systems that we selected and purchased at Region XX to use for training. This was developed by the JEVS* in Philadelphia, and has been normed on a 26 to 70 IQ. It is correlated to the DOT**, and is broad-based in giving worker-trade factors clusters of occupations.

There are a lot of systems now to measure the work tolerance assessment. In performance, there are many kinds of evaluation instruments, some of which are not normed on handicapped populations, but can be used to give some major manual dexterity, motor coordination, finger dexterity, etc. We've purchased Project Discovery, a situational assessment that measures hands-on things like auto paint and body, where you really work on a fender. They have masonry construction, horticulture, waiter-waitress, and many other things. This gives students an opportunity to perform and explore and gives the people working with them the opportunity to assess their present level of performance.

All these people ought to be involved. We've heard a lot about coordination, communication, cooperation. It's going to have to come; people are going to have to talk to one another. At best, developing an IEP is a very laborious process. When we come to the IEP, people have talked back and forth to one another. They all have different pieces, different kinds of information.

When I put my students out into vocational education, I put them out there for that vocational teacher to evaluate for me. It was very difficult for me to make that judgment as a classroom teacher. If you give a student a mimeographed piece of paper, or a workbook, and if you set him down and say, "Do this exercise," he's going to do it.

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*Jewish Employment and Vocational Service.

**Dictionary of Occupational Titles.
because I am the teacher and he is the student. In the vocational shops it's a little different. Those vocational shops are set up like businesses, with everybody doing their own thing. They're over here working on generators, over there working on carburetors, or other things. Can this student perform without somebody standing over him?

We've done a lot of talking about putting kids into vocational education programs. I've got more hours in vocational education than I do in special education, and I realize there are certain criteria, there are certain program standards, there are certain guidelines. Let's take a "for instance." If you put a kid in auto mechanics, my contention is that he may not be able to be a shade tree mechanic. We don't have much demand for those any more anyway. Once they go out into the world of work, they specialize, so there's a great deal of flexibility and specialization within the field. A lot of vocational teachers say EMR's are hazardous, dangerous. They're really not. We put a lot of EMR's in the vocational programs in the high school where I taught. They can learn brakes, which are relatively simple and very repetitive. And there's not that much difference between Pontiacs and Chevrolets. I did some surveying and found that there are 127 places of business in San Antonio that deal specifically in brakes only. I felt like if a student had that skill, the Vocational could take that student and place him and say, "I know he can do this, he has had this training." No, we have not confused this with the whole course. We've not tried to give him the whole course, but we have homed in on a special area where there is a job out there in the job market.

Will he be able to follow directions? I'm not talking about the vocational directions. Many times they are given verbally, "Go. Do."

Will he be able to interact with others? This is so important to me as a classroom teacher, because what we did in the classroom was a little different from what went on in the vocational shop. The vocational teacher many times used vocabulary that I did not use in the classroom. I felt like it sometimes, but I didn't use it. He talked to the kids man-to-man. They learned to interact, not only with the boys who were in that course, but with the man, with the teacher, and they needed that. They needed that opportunity to hear somebody really blow their stack, really say, "That was the most stupid thing I have ever seen anybody do." They learn through this experience; they have the opportunity to grow. It was different from being put out on a job and
having a boss blow up. Then they would quit, they would walk off the job, and never go back; and nobody would have ever really known why, because they won't tell you why.

All of these things are brought together and the ARD committee evaluates all the data. We review those IEP's every three months, and then have an annual update.

So after assessment, you're making an intelligent guess based on sufficient data, based on the present level of performance and all of the things that you're tried to get. Now you get to the point of developing an IEP. The first thing we have to do is to write a goal, and a goal is a pretty broad statement. It's not something that somebody's going to hold you to and say you have to accomplish this or else we're going to fire you, but it should be realistic and obtainable. It should reflect the student's strengths and needs within a balance between them.

We spend a lot of time in special education working on the needs, on the disability. At the secondary level, many times, we might as well forget about what the disability is. We need to home in on what the student's strengths are. He needs to learn how to cope with the disability, to circumvent it, and he needs to know how to use what he's strong in and not worry about that stuff too much. We need to be out and about the business, then we're preparing him for the world of work. All of us in this room have certain disabilities. We have deficits, but we've learned to cope with them; we don't let them stand in our way, and that's what we need to do to help the special education student.

The IEP should be written in positive terms, then, within a developmental sequence. You start with the present level of performance, and you work developmentally. If we start in the 9th grade, then we can move the student through the process. He's not ready for vocational education training yet; we're looking for that around the 11th or 12th grade. But we can work through a four-year program within a developmental sequence.

The parents need to be a part of it. One thing we're finding through vocational assessment is that many parents of secondary students have very unrealistic expectations. I think they can understand vocational assessment better than they can psychometrics. An IQ score doesn't really mean a thing to a parent; it doesn't mean a thing to me. Vocational assessment shows us a lot of things that the psychometrics don't, so we can select those goals which are suitable for an IEP and rewrite the unsuitable goals.
1. Keep the student from breaking things,
2. Teach proper interview behavior,
3. Eliminate inappropriate gestures,
4. Teach the student not to curse, or teach how to curse appropriately, and when to curse,
5. Improve ability to manage money,
6. Stop the student from embracing all members of the opposite sex,
7. Teach appropriate dress,
8. Develop employable work skills,
9. Eliminate pouting,
10. Prevent the student from picking on classmates.

Okay, if we look at these, some use negative language, so we should rewrite them in positive terms. We're not going to keep the student from breaking things, but how are we going to rewrite that as a goal we want the student to attain?

If we look at his strengths, the next thing that we do is to set down and develop a strengths list and a needs list. What could a student do? What does he like to do? Who are the people who are willing to help? Just jot all of these things down, and then the needs are what you and the student would like to accomplish. How do you determine strengths and needs? Ask the student. He can tell you a lot about what he can do. Lots of times the student can tell you more than the psychometric tests and all of the things that you've got. If you know what he wants to learn, you know he's motivated to learn. At the secondary level, motivation is probably one of the key factors in learning. Even if the student is nonverbal, he can tell you a lot about himself, simply by his behavior. Ask other people: family and friends, teachers and counselors. They all have important information that you may find far more useful than test scores when you're developing an IEP. Observe the student over a period of time. Your own observation should provide some information about his strengths and needs, but not at one time. Observation should be systematic and longitudinal, with some recording system, so that when you get to an IEP meeting and a parent says, "What makes you think this?" you're not talking in generalities. You can say, "On these occasions I have observed this kind of behavior," and read times, places, dates, circumstances, and descriptions. Behavior checklists are valuable for this kind of thing and are acceptable under the law.

Objectives and goals provide different kinds of guidelines for the teacher and student. The goals just...
state in general terms where you are going. Objectives tell in behavioral terms exactly what you want the student to do when he completes the training. These are discrete observable actions, and you don't need a lot of objectives. An objective is behavioral. It is outcome oriented, and it is time linked. It is one of the eight things required in the IEP under P.L. 94-142.

How long will it take for the student to learn the behavior, and what is the criteria? For a broad goal, for example, the student will be able to adhere to a schedule. That's pretty broad, but if he has no time concept and he could not stay within his schedule, that might be a goal for this year. Then your objective is that within six weeks the student will state the time of day correctly to the minute when asked, because this is beginning in small steps. This is what we're talking about when we talk within a developmental sequence. If he can't adhere to a schedule perhaps telling time might be one of the factors. It might take four years to get him to really operate within a schedule, but you're going to start with an objective that you can measure.

The behavioral approach is useful because it allows us to not just diagnose, but to prescribe. Before we can actually help a person meet his needs we must define his problem. Specifying behavioral aspects of that goal is part of the total plan, breaking it down into parts. Define a discrete behavior and state it in measurable terms. Then frame your objectives and your IEP around this discrete behavior that you have pinpointed.

Goals show the general intent. This is in the affective area and sometimes it's very difficult to state measurably. "The student will show more consideration for others," is a goal. "Within two weeks the student will allow classmates to complete their assigned work each day," means that at this point in time he will be showing consideration by allowing others to do what's expected of them without interrupting and bothering. So, it's written in positive terms. The student will become more independent; he'll be able to ride the bus. This is something we could measure and observe. Objectives are generally different from goals. They describe observable major behaviors. They're outcome oriented; they're time linked. They're like goals in that they emphasize competencies. They reflect sequential and progressive behavior. They are realistic and they are understandable by staff and students.
PROJECT FIT: A UNIQUE APPROACH TO VOCATIONAL LEARNING FOR PUBLIC SCHOOL HANDICAPPED

Harry Fullwood

"We had a dream ... that we could match industrial knowledge, what industry knows about the people they hire, with the public school curriculum."

I'm a teacher trainer and I've been doing that for about 12 years. Today I want to talk to you a little about employing significantly different youths in rural, sparsely populated areas. That's a different lifestyle than you find in urban environments.

Well, here was my problem. How do we break out a philosophy that will do a competent job for retarded people? I think they need a different curriculum. One of my great pet peeves in public school is the curriculum, the content. You take a bunch of good teachers and a good administrator and a good facility and you do kind of a shotgun approach called a little shoe tying, a little form filling out, a little on-the-job training, a little interview techniques, but do we give them what they need on the job? If you don't have an organized, structured management system, then you are in danger of using the shotgun approach.

Now in Rural east Texas where I come from, our workforce includes, among others, college students, regular vocational kids. We have nine industries. Tell me, if you're running a Dairy Queen, which would you prefer: a mentally retarded 16 year old male or a junior in college?

Audience: The junior in college.

Harry Fullwood is a faculty member at East Texas State University.
Fullwood: Okay, so you can see our problems. Number one, no curriculum; number two, employment feasibility in a rural, sparsely populated area without many industries, and an ample work force. But we had a dream. The dream was that we could match industrial knowledge, what industry knows about the people they hire, with public school curriculum. That was our dream. For five years we searched for someone who might believe that. You know, I couldn't find people who would believe that retarded, developmentally disabled individuals could be matched with entry-level skills from industry and be trained to go out in competitive job placement. Is he handicapped? Well, what can I say but yes? So, he was placed on a non-competitive job.

We have a lot of people who fail in jobs, but when you examine those people, what do you find? Is it a skill deficit? In some cases, perhaps, but a lot of times it's a social adjustment phenomenon. How do they get along on the job?

I know a kid who's really sharp. But you know that some people are sharp in their own stuff but might not be in the stuff they need to be sharp in. This boy had never been around a female in his life. We taught him a job competency skill, and we put him out in industry working in a line with about 30 young ladies, and he went, "Oh, boy." He moved right over next to the young lady, and said, "Hi! How are you? My name is Joe." The foreman said, "Get out of here. You can't hustle on the job. You're supposed to do that after work." See, we forgot that skill. We didn't even identify that skill. That was not a relevant process for us. We were doing the academic thing. So we went back and did some evaluation.

Do you understand what we were trying to make happen? We were trying to match kids and jobs. I think our program can make some practical contributions.

Okay, if you wanted to set up a curriculum to train youngsters, would it be right to go to industry and say, "What do you want these folks to do?" Or would it be brighter for the school teacher to guess?

We decided it might be brighter if we asked, so we went out there, hat in hand, and said, "Hey, you're running this show. You're hiring these folks. What do you want them to be able to do?"

They didn't believe us. "Get out of here. No school teacher is interested in what we want. You'll do your thing. When you get through, we'll retrain the kids."
Now they didn't necessarily know that we were talking about handicapped youngsters. They thought we were just talking about youngsters in general. And we really didn't stress the point we were training handicapped individuals. We began by listing all the businesses in our three-county area. We did have some employers say to us, "We appreciate the interest, but this cleaner's belonged to the Coumb for years past and it's gonna belong to the Coumb for years to come. So, we're not going to need anybody." We dropped out these businesses, which left us with something called a cluster, a group of businesses that employ young people, 16 years of age and older.

Then we set up a data bank of related employment information, with identification of entry level skills in five primary areas: health and hygiene, socialization, communication skills, basic fundamental academic skills, and vocationally related hands-on skills.

We found that most employers are perfectly willing to train employees. They have absolutely no false hopes that folks will come to them ready to work for Bell Systems, McDonald's, or LTV in Greenville. They have training manuals. They have people on staff that say, "Hey, you want to work here, lady? You're going to be in sewing. You're going to cuff rubber gloves. You start here at this model. I need about one week to train you, and then we'll put you on the line. Right?" And, surprisingly enough, we found out that most people that work start at the bottom and move up.

Our biggest industry is a medical-surgical rubber glove manufacturer. It manufactures most of the surgical rubber gloves used in the United States. Because of technical difficulties, they've never been able to find a machine that cuffs those gloves. This involves folding back the cuff for each glove. They have to be done by hand. They hire people at about $4.36 an hour to do that. So we said, "What are we looking for? High-interest, low-skill-level jobs. Jobs that don't require a lot of English, math, social studies, science, accounting, The Gettysburg Address, but jobs that pay competitive wages."

They went out and ran our sample and asked industry, "What do people do when they cuff rubber gloves? What do people do when they work at McDonald's?" McDonald's produced a three-volume text demonstrating entry-level skills to be employed at McDonald's.

Then we ran a data bank on worker performance skills. That's just a fancy word for saying, "Okay, let's find out what types of strengths and weaknesses our kids have."
On one hand, we're going to have a data bank that talks about what industry needs; on the other hand, we're going to have a data bank that talks about our youngsters. Some of them are big and strong and burly and can lift; some of them can't. Some of them have good language skills; some do not. Some have good academic skills; some do not. Some have good hygiene skills; some do not. Now we have two distinct sets of data: data demonstrating the child, data demonstrating a set of jobs.

Our purpose in mind is to see if we can match kids and jobs. We've received some criticism for that, because we are not supposed to be making these decisions for kids. You really have to have your act together to do assessment. We did assessment, but they didn't seem to be helping us with employment in rural east Texas. So we decided to do a localized job sampling and find out what each of these businesses that we target to require. Out of that came an assessment battery, formal and informal, and the skills required for modular instruction.

I'm a nut about modules. That's a new word for an old concept; we used to call them units. I think it's a viable way to teach developmentally disabled folks. So we developed some modules.

(The following is taken from a slide/tape presentation)

"Project FIT's approach to training is unique. First, industry, through a cooperative effort, provides the information needed to determine exactly what skills and requirements are needed for each specific job. Second, the student is evaluated, and it is determined what strengths or weaknesses he has, and which job would be most suitable for his skill. Next, he receives pre-vocational training through classroom instruction. This will consist of basic reading and math, and other skills needed to work, but this will be taught in a manner that is relevant to work. He will learn practical application of math and reading as it applies to his job. Students will also learn about proper shopping, budgeting their pay check, and why a portion of their check is withheld for taxes. They will understand the necessity for rules and regulations on the job. They will know the value and importance of being on time and dependable attendance at work. They will learn the social skills necessary for getting along with their bosses and coworkers.

"After the student has demonstrated that he possesses these basic concepts, he receives actual training at simulated work stations called training modules. These will give the student an opportunity to practice for the job he will be applying for. After the student demonstrates the
ability to perform the job adequately, and the technical skills are developed, he is encouraged to seek actual employment.

"After the student is employed, project FIT will remain in contact with the employee, the purpose of the following is to determine if the employee is making satisfactory adjustment to work, or if he is experiencing any specific difficulties or problems at work.

"An overall look at Project FIT again reviews the following goals:

1. Provide an education experience that is valid to the needs of the handicapped student.

2. Enable school districts to assume joint responsibility with industry in providing job training for students.

3. Develop student work-related skills, so that rehabilitation services are not required later.

4. Enable handicapped students to obtain meaningful employment in their home community, instead of routine, non-competitive jobs that have been the traditional opportunity for them.

"These goals cannot begin to be matched without the cooperation and efforts of local businesses. Local industry can contribute to the training by providing the information concerning each job to Project FIT. These businesses do not mind donating their time, because they realize that the program is benefiting them and the community."

That's a brief overview of the general concept, which certainly has been no panacea. We've had lots of problems and lots of interesting issues come up as some of our students have tried to work the modules. The students say they're too hard, so we refine them and change them. The employers have come to us and said, "You're not doing it right; you need to make changes in the modules." But at least we are beginning to communicate with employers.

If you're interested in the program, it's available through Texas Rehabilitation Commission. Write Mr. Milton Lege in Austin. If you demonstrate an interest in using the material, I'm sure the Commission will be happy to help you.
Audience: Was some of this done through the Vocational Department? Were they working through some of the modules that you all developed?

Fullwood: Yes, to some regard. Now we have very limited vocational education in our sparsely populated school districts. That's not a criticism; it's a fact. But the vocational people have worked with us, and then also used some of this information in career education.

Audience: Have you ever had any conflict between a vocational department and special education department on their job placement?

Fullwood: Well, no, not really, because their kids are so much more capable than some of the kids we have. There hasn't really been any direct competition.

Audience: How would you deal with it if it did?

Fullwood: I'd try to sit down and talk about it, see if we couldn't square off and decide which industrial match would be reasonable. Not everyone wants the jobs our students qualify for.

Audience: It's wonderful that you've done this for us. I've been to dozens of conferences, but there is rarely anything directly pointed to the small school district, seldom anything that can be applied to our situation.

Fullwood: We didn't have anything either, so we developed this.
ALTERING ATTITUDES TOWARD THE HANDICAPPED

Lila Harper

"We want to get to the point where you forget we're in a wheelchair, where the wheelchair or the crutches or the speech impediment or the hearing aid or any of these things lose importance. We want you to think of us as people."

Aggie jokes are based on looking down one's nose at someone, thinking one is better than the other one. It's a joke on humanity in a way, but it's not a joke you want to tell on yourself; it's a joke you want to poke fun at someone else. That's why I have chosen an Aggie joke to begin my presentation.

Have you heard the one about the two Aggies in wheelchairs? One Aggie said to the other, "How do you like that new wheelchair you have?"

The other said, "Oh, it's pretty good but the darn thing's about to run me down. See that sign? It said 'elevator for wheelchairs' and so I put the thing on the elevator and punched the button and had to run up the stairs in double time to catch the elevator at the next floor."

Aggie jokes are an attitude towards others, a way of poking fun at ourselves. But attitudes can include looks people give to each other, physical motions such as pulling back from a person, or wincing when you see that person, or even making a face. Those are negative attitudes. Positive attitudes could be coming towards someone, letting someone know they're welcome. Attitudes can be.
expressed overtly or covertly. We who are in wheelchairs
find that overt expressions are so much more acceptable than
covert. Children, for example, run up to you and say, "Why
are you in that wheelchair?" and it's easy to explain.
"Well, I'm in this wheelchair because I had an old bug called
polio years ago. Have you taken your sugar cube with your
polio vaccine?"

Most of the time they recognize what you're talking
about and they say, "Oh, ya." and you say, "Well good, you
won't ever be in a wheelchair because of polio then." These
open attitudes you can accept more readily than the parent
who yanks the child away saying, "Don't bother them."

My husband, Don, and I have been in wheelchairs since
we were teenagers, which is more years than I want to admit
now. We have been married 18 years now. We have raised a
family, we have a home in Denton, Texas, and we think of
ourselves, more or less, as normal people who happen to be
in wheelchairs. We do things that other people do — church
work; housework (now that's not one of my favorites, you
understand, but it does get done), and Don has a regular 8-
to-5 job. We shop for groceries, help with the kids' school
work and scout work, we're den members, band parents for our
older son, and lots of other good old American activities.
It takes a little more effort on our part, but we don't notice
that until someone draws it to our attention.

Last year my mother was up visiting us for a couple of
weeks. She belongs to quite a small church, so she does a
lot of home visitation, trying to get the members out to the
services. One member was saying, "Oh, I just can't get up
on Sunday morning, it takes so much effort to get ready and
get to church on time." My mother (rather sharply) replied
to her, "Effort! You don't know what effort is. I was up
visiting my daughter and son-in-law who happen to be in
wheelchairs. Sunday morning we all got up, her youngest
son has a paper route, so they went on the paper route
starting at 5:30; got through with that, came back home,
fixed breakfast for six of us, and we cleaned the breakfast
dishes up and started doing what we had to for lunch to be
ready when we came back from church. We fried the chicken
and fixed the rest of the lunch and all got off to church by
9:00. We got back home at noon and had 14 people for lunch
and all this was directed and mainly done by a woman in a
wheelchair. Now if she got ready for church on time, you
can too."

But even though my mother might make an example of me,
I don't think of myself as any different from anyone else,
because I've been in a wheelchair 25 years this June. Attitudes that people get about us, I think, are attitudes that are picked up by osmosis—they're just absorbed. If you just meet me or someone else who's handicapped, you don't know how to accept us, because we might make you feel ill at ease. We realize that this is a normal attitude. Most of us who are handicapped want to get over this initial period of not knowing each other just as much as you do. We want to get to the point where you even forget we're in a wheelchair. My friends will often say, "Hey, let's go down to so-and-so restaurant," and I'll say, "Do they have any steps?" They'll say, "I don't know, why?" without even thinking about my wheelchair. That is where we want to get in a relationship, where the wheelchair or the crutches or the speech impediment, or the hearing aid, or any of these things lose importance. We want to get past these to the personal relationship. We want you to think of us as people.

As I said, Don and I have been married 18 years. The ceremony was held in a wheelchair chapel in Gonzales, where we had met four years earlier. In the interim period I lived in Corpus Christi, Texas, and he lived in Sanger, Texas, 439 miles away. We wrote a lot of letters and saw each other periodically during summer vacations and Christmas vacations, but it was a time of getting to know each other and our handicaps. Neither of us had been in wheelchairs for long. Don had had polio a couple of years when I met him, and I had had it only a little bit longer. It takes time to know what you can do, to know what you can accomplish. Having both of us in wheelchairs has been a plus, I think. He showed me things like getting in and out of a car, that I never thought I could do. If one of us had been up walking, the other would have depended on that person more. Even now I tend to depend upon the boys to get my chair in and out a lot more than I should. Don is a lot more independent.

Learning to live with your handicap is an attitude that you project, so that other people can form attitudes about you. I once had a doctor who told me, "You know, Lila, people like winners," and I think this is true in all areas of life, not just dealing with handicaps. People do like winners, and people do like anyone who will try to the utmost of his or her ability. If you succeed, that's a real plus, but I think there's also a plus in the trying. So we need to form positive patterns in our lives about the attitudes that we have, about our physical being and our underlying spiritual beings that keep us going, the attitude that says, "With the help of God, I will succeed." That affects non-handicapped people.
There are many personal contacts in your life where attitudes can almost be the turning point. One example, our son's first grade teacher told us that he should not be kept in the first grade, that he should go on and be promoted to the second grade. The second grade teacher who had him started out with a very negative attitude. She did not want any child in her room who had skipped a grade. I think almost immediately our son picked this attitude up from her. That teacher probably never said in so many words, "I don't want you in my room," but her attitude showed. There were times when we all wondered if the right thing had been done. It wasn't until six weeks later that the teacher finally came to me and said she was sorry for her negative attitude, that in her mind now she knew that this boy needed to go on to second grade. She had shown that he was ready for this grade and he was capable of keeping up. So you see, this was one thing that we need to remember in our relationship. Someone's negative attitude can be changed, but not necessarily immediately.

I think knowing this has helped my husband succeed in the job he has had for the last 19 years. He was told he could have a job, but that he would have to manage to get in and out on his own. There were six steps out front and a wheelchair doesn't go up steps too well, but at the time Don could stand with crutches and braces. The company gave him the challenge, and since it was his only job offer he decided the job was worth the challenge. With his other applications it was always the same story: "Don't call us, we'll call you." And there weren't any return calls. So he took the challenge. Little by little, the company's attitude has changed; we did find a way for him to get in without having to go up the steps and the bathroom facilities in one area have been made accessible. The major bosses think, still have more negative attitudes toward handicapped people, because they haven't associated with him to see that he can accomplish his job just as well as the walking person. But his immediate supervisors have the right attitudes; that handicapped people are people first, and handicapped second.

Even though someone may have been born with a handicap, they are within themselves a person first, and then a handicapped person second. Not having been born with a handicap, I can remember more than sixteen years of living without a handicap, so I can look at this situation from both sides of the fence. I can remember people who had handicaps, and I think this helped me when I had to be in a wheelchair. The people I knew had a positive attitude toward their handicap. They knew who they were and they
knew they could do. My music teacher happened to be blind, but she could do anything. Just getting from one place to another was a hindrance to her because of blindness, but she learned that she could hold onto someone's arm, or she used her cane and in later years she had a dog. Now I'm happy to say that she is married and has a husband who is also blind. Their major problem is keeping their seeing eye dogs apart. So I knew that blindness was not the great handicap that other people think it would be. Many people gain positive attitudes in just the way I did, through personal experiences.

TV shows such as Little House on the Prairie, where Mary has been blind this past season, have helped to dispel the fright that people have towards handicaps and have helped to show that handicapped people are people first. Also such books as Joni Ericson's. She is a quadriplegic, totally paralyzed with only a little use of her arms. She has such a positive attitude toward herself, however, that she can project happiness and encouragement to others who may seem more fortunate than she. Through her handicap, she has worked through and come to the point of realizing that the real person is that entity which exists almost apart from this physical body yet contained in it.

I think there are positive signs that these attitudes are being changed, and by law now, many of the physical barriers are coming down. Believe it or not, attitudes can be changed by law. When physical barriers come down, people will see us handicapped people functioning more as normal people. I won't have to ask for help up a curb, as I must do nearly all the time now, because all the major shopping areas will be ramped. So situations can be changed by law, and eventually the attitudes will also be changed. Now these laws sometimes come into conflict with what people think.

There have been numerous situations in Don's and my life together where a sense of humor has had to play a major part. That sense of humor can be a big plus in stressing that you're a person first, handicapped second. One time I can think of in particular is when our older son was two years old. We decided on a short trip to Colorado, but made a short detour one afternoon to visit an aunt on a ranch in eastern Colorado. I don't think there's anything out in that country except a cactus and maybe a roadrunner and a coyote. On our way back, we had a flat, and wouldn't you know, after hauling everything out of the trunk piece by piece, finally getting that spare tire out, we discovered
that we couldn't get the flat tire off the car. We just decided our best choice was to try and stop a car. Sure enough, as we stationed ourselves by the road, along came a car. Even our little two-year-old began to wave his hands saying, "Stop, stop." I know there were at least 8 or 10 people in that car; as they passed they all stuck their heads out the window and gazed at us and waved.

Now who would do that? You're out in the middle of nowhere, and you pass a car with two wheelchairs and a little baby boy and you can tell they're trying to fix the tire, but yet you pass on by. Now I ask you, what kind of an attitude is that? "Well," I said. "Well," Don said. We went back and tried the wheel again. When, a good while later, a trucker went zooming by us, I began to feel really discouraged, but just as we were giving up we realized by the squeak of his brakes that he was trying to stop. He stopped and backed up to where we were and stuck his head out the door and said, "Looks like ya'll need a little help." What could we say? He started laughing and when he opened his door we could see why. His right leg had a cast on it! As he hobbled across the road, he grinned. "Well, I guess this is a good case of the blind leading the blind."

His attitude was so great and helped us see the humor in the situation. If we take ourselves too seriously, we're going to get down on ourselves and down on everybody else too. This can easily be done when you're in a situation that handicaps you, physically or mentally. I met a girl in Abilene about five years ago, who is what I call totally incapacitated. She is so spastic from her handicap, she has such spasms that she has to be tied into her wheelchair so she doesn't throw herself on the floor, but yet she has taught herself to type with one finger. Very much concentration goes into taking that one finger and making it go to the right key at the right time. And do you know what she does? She writes beautiful poetry.

These are some attitudes that you can encourage handicapped students in your class to have. Because one thing is absolutely for sure. If people's attitudes are going to change toward the handicapped, it's going to be because the handicapped people have caused it. In the words of my favorite poster, their attitude has to be "If life hands you lemons, make lemonade."
"I have chosen an acronym to designate my particular program. I call it the MORE system because you have to give more of yourself to teach this student, and you have to teach this student more to get him to learn."

Most of my presentation is going to deal with some of my methods of instruction and the instructional techniques that I use in my classroom in El Paso. We have the authority to set up the programs for the handicapped so we go out and we grab somebody from industry, throw them in the classroom, give them an emergency teaching certificate, give them a class, and say, "Go to it!" That teacher has little or no experience on how to use his knowledge in the classroom setting, and no experience on how to cope with the handicapped student and the problems that confront this student. VEH teachers need a little more training than that.

We have about twelve VEH programs in El Paso. We have approximately 600-700 students in VEH. In the last year, I've had deaf students; I've also had students with visual problems, and I've had students with mobility problems. When I first get my students in the classroom, I decide whether they are physically handicapped, mentally handicapped, or emotionally handicapped.

For the physically disabled, I have to decide whether I need to make any changes in the physical facilities in my classroom. I've designed my classroom so that I have mostly rounded corners. As a safety factor we have removed all the sharp corners. We do mostly small engine
I have students who are not very strong. They can't pull the starters on these engines. I've designed an electric starter so that all they have to do is attach it to the engine and it will crank it for them. For my mentally handicapped students I have to decide whether to change my curriculum to meet each student's needs. Sometimes I can, sometimes I can't. It depends on the students. The third kind, the emotionally disturbed student, is usually hyperactive or a discipline problem. Once they are out of the classroom setting and I get them working with their hands, we don't seem to have many problems.

I deal primarily with three methods of instruction. One is oral, where you lecture or have a little question/answer session. Another method is demonstration, where you show and tell. You tell the student how to do it. I try to let the students perform the demonstration. If my other students see that one student can do it, then they'll go ahead and try it. The last method of instruction that I use is hands-on instruction, where the student must actually perform. I set up situations where I demonstrate a particular job and then I have the student come up one by one and actually perform the job. Then I know they can do it.

I use the four laws of memory to try to get this student to retain what I have taught him.

1. The law of vividness, which makes something outstanding;

2. The law of frequency, which is nothing but doing it over and over and over again;

3. The law of association, which is associating the task he is trying to do with something he has performed in the past, or something he knows about;

4. The law of primacy, which is remembering the first time he has ever done anything successfully.

One of the first things that we go into is safety. The VEH teacher must be conscious of safety because of the physical restrictions placed on these students. We are so conscious of it that our accident record is better than the regular trades and industry program. When I teach safety, I use the law of vividness, the shock treatment.
I recently acquired a set of slides that were supposedly taken from an emergency room in a hospital, which show the results of industrial accidents. You might see a hand cut half in two with the blood still running out of it, or fingers cut off. You explain to the students what accidents caused these injuries. It really gets across to them. They remember it. Also, when I teach safety, I use a camera. I set up certain hazardous situations that could lead to accidents, and I take pictures of my students. The students will remember them because they're in the picture.

When I get into teaching hand tools, the method of instruction remains the same: demonstration and then a hands-on technique. I may lay a drill out here and some drill bits, a piece of metal, and some nuts and bolts. I'll have a student select a drill bit, place it in the drill, drill a hole, find a nut and bolt, and use the wrenches for tightening it. And then I have everybody in my class do the same thing. You're wondering how I have all the students at the same level of instruction. I find that in about two quarters I'm going to have the faster students working ahead of the slower ones. They'll complete their projects before the slower students. By the end of the second quarter, the faster students go on to other assigned duties and tasks by themselves with little or no supervision, while I stay back with some of the slower learners. I also use peer group tutoring. I might assign one of my faster students to my slower students and let them work together on a particular project. Then, when they are finished, they will both receive recognition for the job.

I think this builds the self-esteem and self-confidence that all of my students need.

Now, educators always seem to need an acronym to designate their programs, so I have chosen an acronym to designate my particular program. I call it the MORE system. And why do I call it MORE? You have to give more of yourself to teach this student and you have to teach this student more to get him to learn.

The "M" is from motivation. Now you can say what you want to about student selection, student placement, but if you cannot motivate this student in your classroom, then your student selection process and all your curriculum development is worthless. This student has to have a desire to learn. You have to show him a need to learn.

What do I do to motivate these students? I use the old monetary system. In my class, I have a bunch of storage...
bins in my room that I use to store old parts, parts that we've taken off old engines. We have them categorized and separated and I tell the student, "If you can go out there and select parts from these bins and make yourself an engine that runs, you can come to it, I'll give it to you." Now you have to take into consideration that we've got two or three hundred full scale models of small engines, so they have to be pretty good to make an engine run. But they know it's theirs if they do it. You also have to show this student some respect, and in return you'll have his respect. You are going to have to show him a little bit of affection. Some of these students just need a pat on the back. You may have to sit down with some of the others and talk to them as equals. Others might need a little bit of discipline. If you show these students that you mean business, you will motivate them and they will perform for you.

We have two other ways to motivate. I said I used the camera. If a student is taking a carburetor off an engine, I'm there taking pictures. And all the time I'm motivating them to work. My last method of motivation involves sports. To explain the situation better, all of our students are bussed from a home high school into our central location. And we have all of our vocational education for the handicapped classrooms in one location. We know that they do not get any sports activities back at their home school so we try to provide it for them at the technical center. We have volleyball, basketball, football, tag, football, ping pong, and other numerical or card games. I think this allows them to get rid of some of the frustration of sitting in a classroom. They look forward to the sports. Knowing that it's coming helps them work.

The "O" in MORE is for organization. Now, I have two phases of organization in my program. First, I organize the physical facilities to handle the handicapped students. My classroom simulates as close as possible an actual working situation. I have all my tools on a shadow board; so that anybody can identify which tool is missing.

And I set up duty boards; we have a shop foreman, a tool man, a safety officer, and a fire marshall. Every day I change these duties. I used to change it once a week, but I found that the job got a little boring for the students. Since I have fifteen students in the afternoon, they rotate quite rapidly, and some will not have anything to do. I also have a progress chart displayed on my wall, so at all times the student can
check his progress against what he should be doing. A lot of them will come up to me and say, "Well, I'm supposed to be over here, how come I'm not there?" This helps motivate the student to do more work, better work.

I have organized my physical facilities so that I can see all the students all the time. I have placed the individual work benches on the outside wall all around my room so that at any one time I can look out and I can see all of my students working. I can see those who might be getting frustrated and I can go help them before they have to call me. That helps me control my class.

The second phase of organization is classroom instruction. You have to be able to modify any textbooks or information you receive from any source to fit the needs of the student. I've been with the school system for ten years, been teaching the same class for ten years, and I've re-written my course of study seven times and am in the process of re-writing it again, because they want new goals and new objectives and new instructional objectives to fit the individual planned instruction set down by Texas Education Agency. I think. You almost have to do it for the individualized educational plan anyway. If we want the federal money, we have to conform to the guidelines. Organize your classroom instruction so that even your slow students can successfully complete the task. I realized that most of these students have a short attention span, so I do not sit them down for over fifteen minutes. As soon as possible I have them up doing the hands-on work. Otherwise students will turn you off. I also have a list of related projects in my desk. Students get bored doing the same job over and over again. So somewhere along the line you pull them off their project and give them something new to do. Leave a student idle for ten minutes and he creates problems in your classroom. My list might include making an ashtray, where the student has to use a soldering gun and the soldering iron. This keeps the student busy, keeps him out of trouble.

Students like to feel secure. Avoid any sudden changes in your program, especially your instructional program. Implement your changes gradually, lead the student in a step-by-step change, so that he becomes accustomed to it and he is secure. That's my "O" for organization.

Now relating to the student is the "R". To me, relating is communicating. If you cannot relate to the student, and the student cannot relate to you, then again the
Instructional part of your program will go down the drain. I've had a student walk up to me and say, "Hey, Mr. Hill, I ain't got no bolts." Now if I stop and correct that student right there on the spot, I turn him off completely. He's not even going to talk to me. So I answer without correcting him. You probably have noticed that my vocabulary is very limited. That's because I've been in a classroom with kids for ten years, six hours a day and you forget all those ten dollar words. But you sure learn to communicate.

One of the big things in relating to the student is being fair with them. You have to treat all of the students the same. You're going to have one slow learner that you might be partial to in your class, but you're going to have to back away from it, because you must treat them all the same in order for them to relate to you. You have to laugh with them, have to play with them. You have to show them that you're not perfect, because perfection will turn the student off. If you make a mistake, so what? Laugh at it, show them that you'll go back and correct it and keep going. That's my relating to the student.

The "E" in MORE is for evaluation. Evaluation to me is not a one time thing; it's a continuing operation. Evaluation is not just checking to see that everyone has learned everything in your program. Evaluation must cover all aspects, not only of teaching, but of learning. It means evaluating that student under all types of working conditions. You will also have to evaluate your program to see if you are meeting the needs of your student. You have to evaluate your curriculum constantly. Make sure that student is learning from you. Be flexible. If you find that the student is not learning, then you must be able to stop, back up and start over again. In El Paso if we have a student for one quarter and that student cannot function properly, then we can transfer him into the VER program. It has worked well. We don't do this in all cases, but we do try it in some. You may have to change your method of teaching to get this student to learn. You're going to have to evaluate your curriculum constantly. Evaluating yourself is one of the hardest things for any instructor to do. Is the student receptive to your teaching? Is he learning anything? Are you keeping your instructions simple enough? In my program, everything is done in a step-by-step method so that I know the student knows that step before we progress. That's evaluation.
Audience: You mentioned you have 15 students in the morning class and 15 in the afternoon. That seems like a lot of students when you have a handicapped. What is your minimum to carry on the program?

Hill: You need ten to have an aide. Because I have fifteen in both classes I have an aide. Every one of our VEH programs carries thirty students. We would prefer less.

Audience: I can understand that. With the wide range of handicaps you're working with, even though you have an aide, with what you are doing you need fewer students.

Hill: We don't have the time to really give them the instruction they need, and we don't have enough space. We think eight in the morning and eight in the afternoon would be a good maximum.

Thank you very much for your attention this afternoon and I wish you all success in teaching the handicapped.
"Who is the handicapped student? Someone unusual in certain areas and certain ways. Generally, they suffer from educational malnutrition. They are underexposed to meaningful and productive learning experiences."

I never will forget the first day that I ever taught. That day I taught them everything I knew in thirty minutes and had to begin wondering what I was going to teach the rest of the year. I hope that you can take some of these tips that I offer you today back with you to your particular situation, in your particular school.

I'd like to talk to you this morning about changing the status quo with students. I have always enjoyed a challenge; I guess that's one reason why I'm teaching. I have tried several things since I've been in Mineral Wells that were more or less pilot programs. The program that I have in Mineral Wells was one of the first in Texas that had females in it, young ladies. I tried it and it worked. I had a hassle like you wouldn't believe from the administration and TEA and what have you, but still we did it. I have tried in times past to bring special education students into the regular automotive program.

Some of you this morning have probably taught vocational education at one time or another. Whenever we look back a few years ago, particularly the years that I was starting in teaching, vocational education was nothing, let's say, but a dumping ground for those who..."
couldn't make it anywhere else. I had students who couldn't read, I had students who could not write, I had students with a language barrier. In the system where I taught, 90% of the students were Spanish-American. I could only speak English, they could only speak Spanish. Needless to say, I learned a lot of Spanish.

We are here to see if we can correlate vocational education with special education. Let's face it, people, we've been doing it for years. I think a lot of the past problems between academic and vocational classes have been communication problems. In Mineral Wells, I've had a unique situation in that the vocational director and the special education director are real close friends of mine, particularly the special education director. I have talked to him about students, and it really has helped.

This year I have three or four handicapped students in the program. I don't have the same many problems with them as with regular students. Most of us have probably heard that Einstein had great difficulty in school. His teacher reported to his father that he was mentally slow, adrift forever in his foolish dreams. His parents put him in a special school where he was taught in accordance with his learning style, and it was there that he began to produce at the level of his potential. In vocational education, I'll take just about every handicapped student or special education student that you will give to me. It's a challenge, and I enjoy it.

Sometimes the question comes up: Who is the handicapped student? To me the handicapped student is someone unusual in certain areas and certain ways. Generally, they suffer from educational malnutrition. They are underexposed to meaningful and productive learning experiences. Most of them actually come to us with a negative image of themselves, and no one has ever given them reason to change that image. They generally lack experience in planning their lives. I have been asked, too: What do they really want out of life? Pitifully, they want nothing. I believe that they want and believe that they deserve dignity, respect, and understanding from every one of us. They want a fair chance, an opportunity to be admitted to the adult world of work, a world to which a social and useful job is a badge of admission.

I want to identify some special areas in which help us understand how to motivate these students. These students are very difficult to motivate, because they have a language problem, they are mentally retarded, or have learning
disabilities. Some of them are emotionally disturbed. I believe by recognizing these problems we can deal with and help the students. I suggest that every vocational education teacher look up the personal files on every student, handicapped or not. Study these files, find out shortcomings and problems. Talk to the English teachers, science teachers and the rest of the academic school system about a particular student.

At the same time avoid becoming prejudiced because of the past failures of certain students. I take a student for what he's worth, what he actually shows me, not necessarily on the word of other teachers. I'm interested in the failures that this particular student has had, I try to motivate him if I can, but I try not to get prejudiced. Looking at these students' behavior patterns, what can we actually see in them? Perhaps it will be excess daydreaming and very short attention span, extreme impulsiveness, inability to tolerate frustration, seeking immediate gratification. You may have a student who is destructive with property, finds it difficult to abide by general rules, adjusts very poorly to new situations, has difficulty in making decisions. Some are chronically fearful, apprehensive, or depressed. I believe that we should not forget that some of these students simply fall behind the others academically and then slip into what we call an undesirable behavior pattern that is more or less a cover-up of their lack of academic skills. With remedial help, negative behavior traits become unnecessary attention getters.

Teaching actually involves student assimilation of attitude as well as vocational and academic skills. It is vital that we emphasize positive rather than negative attitudes in dealing with problems that involve our students. The best way to accomplish this is to develop specific guidelines, clear organizations for each day's activities, and carefully thought-out responses to undesirable student behaviors. Consistency is very necessary in teaching. Specify class rules in a positive way. Rules are made important by providing reinforcement when they are actually followed. Repeat the rules less frequently as students learn to follow them but continue to praise desirable behavior. Be specific about behavior that exemplifies hard work and good conduct. In so doing I believe that you are going to actually focus attention on the desired behavior patterns while helping them realize that undesirable behavior is not successful. I had one particular student who stole some rags off a rag truck. After the truck left, the student
came walking into the classroom with about 250 or 300 rags. Next week, I made him give back to the ragman his 300 rags. From then on we had no problem whatsoever.

We need to set a daily schedule of activities for our students, to assure that everything in the classroom is under control and to provide them with an idea of how much there is to be accomplished. Let the student know exactly what is expected of him, as well as what he is actually permitted to do. Spell out the consequences to unacceptable behavior beforehand but only if you can carry them out. I've heard teachers tell students, "I'm going to punch your head off," or "I'm going to beat you with a board." Sooner or later they are actually going to call your bluff. If you do not follow through, then you have actually lost the class or this student, and you have destroyed your motivational structure. Do not permit the students to do something one time and then forbid it the next time. What I'm saying is, have set rules. Hold students responsible for their behavior. I believe it will build self-respect if you will expect them to do what they are capable of doing.

On the other hand, we must be flexible. Be lenient when the student who is actually trying to make some type of progress. I believe that we should not set standards so high that it is impossible for these students to achieve. It is frustrating and it will only result in a "what's the use" attitude from the students.

Many of the students have heard many times, "You're dumb, you're stupid, you're sorry," and it's not surprising that they begin to live up to those expectations. In my classroom I allow no harassment whatsoever. None. We teachers cannot tolerate it. We need to be positive. When behavior is unacceptable, we must deal with it in a straightforward manner; do not get mad.

Many of these students show low tolerance for frustration. In other words, a too complex task might give a particular student failure instead of success. Help him with simply-stated or written instructions, a job planned for every student. Many times when we make tests, or write letters, we write in such gibberish that nobody can understand. If I talk to you on a one-to-one basis, we can get through; we can talk to each other; but if we put it down on paper, we use such long terminology that we lose our thought.

I read an article several years back about Joe the Plumber. Joe the Plumber bought a chemical compound to clean
some pipes, and he read the label in six-point light-face
-type that had nothing but chemical abbreviations, and
gibberish. Joe was very safety conscious, so he did the
most logical thing that he knew; he wrote the manufacturer
and asked if it was safe to use Chemical BZ to clean out
this particular copper pipe. After several weeks, he
received a neatly typed reply from the company chemist
which read, "Chemical BZ is of high quality, but it will be
a caustic factor in the reduction of life expectancy of
pipes that are non-ferrous in nature, particularly those
which have a cupreous content." Joe studied the letter
carefully, then he decided he would write again, as the
manufacturer apparently did not understand his request on
the safe use of Chemical BZ on copper pipes. After several
weeks more, the reply came from the company's legal office:
"Despite the most carefully controlled manufacturing methods
possible, we have been unable to develop Chemical BZ so that
its intrinsic nature will be non-deleterious to metal of the
nature that you specify." Joe wrote a thank you note to the
company for their time and for giving him permission to use
Chemical BZ to clean out his copper pipe. The next day he
received an urgent telegram from the company public relations
office: "Do not use Chemical BZ. It will eat the hell out
of copper pipe." This is what they ought to have said the
first time!

This is how we often make our tests. I had one
particular student who could not read or write, and he was
progressively making zeros on the tests. I gave him the
test orally, and he made a 100% on the information. So we
need to get down to their terms, to talk on their level.
Authority figures such as parents and teachers have not been
consistent in dealing with these students, and the students
have not been able to predict logically the responses of
authority figures to behavior. We should be consistent with
our students; we should post rules; we should let them know
exactly what we expect from them. I believe the less
verbalization that you have the better off you're going to
be. Simply state the rules, say there is no argument, and
that is that.

Each teacher should be very flexible. While it may
sound contradictory to what we have already stated, I believe
that rigidity is not the same thing as being consistent.
Every teacher must possess the ability to adapt to special
needs of every student, before he actually gets into what we
might call serious trouble.

Many of them have mental blocks. We need to go back to the
basics with these students. When you have established these
basics, the student will be able to progress. I remember once we built a hot tank vat to boil out engine blocks and what-have-you. I asked one of my special education students to fill it with water and check it for leaks. I assumed that he knew what I wanted done but when I looked back there 15 or 20 minutes later, this young man was soaking wet. As I watched, he took a deep breath and stuck his head down in the water. I went back there and asked him what he was doing and he said, "I am checking for leaks." I didn't have the heart to tell him any different; I patted him on the back and said, "You're doing a good job; go ahead." So go back to the basics with these students and then they will be able to progress. Don't assume they understand.

Some students can be hostile and frustrated and it's hard to deal with them. We should respond in a very non-emotional way. Always let the student know that you are calm, and that you have everything under control. There have been times when I have had to bite my tongue, and count to ten. I suggest that you never deal with a student when you are mad. Deal with him whenever you're cool, calm, and collected.

In blending handicapped with non-handicapped students, I believe that there are certain key attitudes for us to take. The first thing that I let my students know is that there is no student harassment whatsoever. Whenever you have student harassment, then you're going to lose control of your class. Pick your leaders in your class and let the handicapped students work with these leaders. To more or less give you an example, I've got one special education student in my class right now for a second year. Last year I carried this young man on a district meet, even though he was not capable of having a project that would match regular students. I took him because he had never spent the night in a hotel; he had never been away from his parents; he could not count change; he couldn't read a menu; all because he had never had the chance. I got one of my reliable students to go along. I said, "All right, I want Mike to pay for all of his meals, I want him to do all of his things; but I want you to be right behind him, so if they make a mistake with change, you can step in. Don't step in until there is a mistake." It worked out beautifully. Mike enjoyed the trip and the student who helped him enjoyed it. Let the handicapped perform what jobs they can by themselves.

Automotive trade, as most of you know, is getting to be such a specialized field. I try to find out what field a

*Name changed.
handicapped student likes to be in. Put a student on a job that he doesn't enjoy doing, I guarantee he's going to botch it up, so put him on a job that he enjoys doing.

Going back to Mike: last year I got him a job and told him and his parents about it. His mother would not let Mike have the job. It broke his heart, and it disappointed me. Yet I took him back this year, and I found him another job recently. I first talked to his parents before talking to Mike, because I didn't want to hurt him again. This young man is nineteen years old. I finally convinced his mother and dad that they were actually going to have to turn loose and let Mike do what he can. If he fails, then maybe he can learn something from it. They allowed him to accept this particular job. Two weeks ago he came dancing through the hall to the auto mechanics shop. He had his pay check, for more than thirty dollars, and it was the first money that young man had ever earned in his life. I was proud of him. He was proud of himself.

I don't try to make all my students mechanics. If I tried, I'd fail. I do try to motivate and direct them to some field that they might have success in. I don't think the follow ups that many of us fill out do justice to a vocational program or to what we actually do for these students. Out of a class of 24, I dare say we will make three or four mechanics, but I feel that we have helped motivate and direct each one of them, put them on their feet, set a direction and a goal.

Take time to listen to the problems that these students have. If they have a problem with school, parents, girl friend, or whatever, we should be willing to listen and help. I tell them that whatever they tell me will be held in the strictest of confidence. I also tell them that advice is cheap, because you can either take it or leave it. I have students come to me, young ladies who have become pregnant young men who have been kicked out of their homes, who didn't have anything to eat, who were trying to raise a family themselves.

Isn't it logical to assume that the handicapped might expect something out of education? Isn't it possible that the educational process might develop skills and competencies in them that will enable them to find jobs at their levels and at their capacities? Finally, isn't it appropriate to assume that the educational process might prepare each individual to live his or her life in a community as a productive citizen? Whenever it comes that my job as a
teacher just becomes a job for a pay check, that's the time that I'm going to quit. I love my students; I love working with them; if there's any way I can help motivate them, I am definitely going to do it.

Audience: John, are you saying that you don't find any particular difference in dealing with handicapped students?

Hutton: Not necessarily. Believe it or not, my feeling is that handicapped are a whole lot easier to deal with than other students, because they're more trusting, they have more belief. Sure it takes more of your time, but they are very educational.

Audience: These people who you have this year, what kind of handicaps do they have and what's it doing?

Hutton: One particular kid has dyslexia, and a speech impediment. You have to listen real closely to hear and understand him. Sometimes we just stand there five or ten minutes while he tries to speak to me. Yes, I can understand him, but I keep on working with him, and I have seen a tremendous improvement in his speech.

Audience: Do you modify the objectives that your handicapped students would want to reach? Does their level of competency have to be less than the regular student in your class? If they're working on a particular thing on a car, do you expect the same performance from them as from the others over an extended period of time?

Hutton: In auto mechanics class, I expect every individual student to do the best that he can do in his capability. In other words, I do not measure my students on a one-to-one ratio. But, yes, I have had some special education students who have come out and made terrific mechanics.

Audience: Let's say that a person does a particular thing in the first 30 hours of your program. At the end of the program, the 800 hours or whatever you go through, does his memory hold so he can repeat it?

Hutton: Yes, or I try to find out what he can do, what he can remember.

Audience: You teach 24 students and four handicapped students. How many people who need your program and want your program are you displacing?
Hutton: Let me put it this way. The 24 that I have are regular students, and generally I will take somewhere around four to six handicapped and mingle them in with the regular students.

Audience: That means you're taking 25% handicapped students in your class. Is this the average?

Hutton: Not necessarily, they fluctuate.
"There are little tricks, little things you can do with a little imagination, that will solve some of the problems you are asking about."

The first thing I want to talk about is the vocabulary for communicating with the deaf. The deaf use a concept language in their day-to-day communication with other deaf. It's not English. It's a completely separate language. That concept language doesn't lend itself to direct translation into English very well. For example, you might use a word like "run" in English. We use that constantly. A politician "runs" for office. What does he really do? He applies for office, he volunteers for office. A student "runs" a machine. What is he really doing? He operates the machine. If an interpreter interpreting in the classroom hears the word "run," he has 47 different ways of interpreting it to the deaf student. I'm late, I have to run means I'm late, I have to go. I have to run off a test means I have to copy a test. If you said in class, "I would like you to run to that point," the interpreter is kind of lost. What is "run" going to be this time? It may be go by the library; it may be try this welder. I'd like you to "run" the torch. I'd like to "run" by my office.

Other things are problems in teaching the deaf in vocational education. One is shop experience for the interpreter, whose signs really tie everything together as far as presentation is concerned. I was talking the
other day in class and I referred to the periodic table. Most of you would know that the periodic table lists atomic weights, valences, symbols, etc. The interpreter wasn't familiar with that term and said a table you occasionally sit at. At the end of class, the student said, "What's a periodic table? I don't understand." My pronunciation and her interpretation blew him right out of the water.

Changes in language of math and language of communication can be a problem. For example, what's math language? What's a math word? "Is" for example. What does that mean in math? Equals. Five times two is ten. "Is" means equal. "Per," as in miles per hour, means divide. If a deaf student is doing stress analysis in welds or doing any type of computation, he will have what they call story problems, written problems, and will need translation three times: from math language, to the English language, to the deaf language. Sign language and the deaf language are a little different. The sign language in many cases uses idioms. An example of sign language in spoken word would be, "Finish touched New York question." That's a complete proper deaf sentence. Translated, it means, "Have you ever been to New York City before?"

In interpreting or teaching a subject without basic knowledge of what actually transpires or of the concepts, you can have some difficulties. In the technical area many signs are missing or are not in common usage throughout the United States, so we have to invent them. From time to time, sign creation done by someone who has some basic knowledge in the area can really be more meaningful than if an interpreter comes up with an initial sign. A lot of signs are initialed using the first letter. Dallas for example is signed with a "D." Obey. Chicago is signed with a "C." Boston with a "B." Obviously if you are from Waco you wouldn't know what the Peterborough, New Hampshire sign might be. Who would really care? Some signs are very localized and others are restricted in communication. If you have some experience, you can come up with a sign that makes more sense. In welding we use a lot of different elements and materials and different terms that are very technical. Allotropy is the ability of a metal to exist in two crystal lattice formations. Just try to spell allotropic everytime you want to use the term in a metallurgical lecture. You know it's difficult for me to write it on a blackboard or a piece of paper. And for an interpreter to interpret allotropic crystal formation is even harder. The kid is sitting there saying, "What? You've lost me." If you can come up with a sign or invent a sign that can communicate that concept quicker, more understandably, do it. That's better.
There is an attempt right now at Rochester Institute of Technology in New York to come up with some sort of technical signs, to use in technical areas. Now for the last six years or so, I've been in New England; the signs in New England are completely different from the ones we have here. There are certain signs that are standard, certainly, but there are a lot of others that are completely different. The deaf world, being fairly involved within itself, doesn't spread the signs nationally. In fact, that is probably one of the biggest drawbacks of putting sign language as caption on a TV program. They have the technology to hook a little box on the top of a TV for a deaf person. He flips the switch, and in the corner appears a person interpreting what is going on. It's a great idea, but what do you do if you have a New England person signing, and a Southerner watching? New Englanders are people from the North, talk fast, right? Boy, they just spit it out! Would you believe that the deaf in New England sign fast, as well? Man, they just tear it up!

We all think that what we are saying is important. Everybody will pay attention. But realistically, students don't all pay attention all of the time. One student gets part of what you said, one student gets another part; someone understands a little better than another. Then they get together out in the hallway and talk about it: "Let me tell you what I understood he said." But what about a deaf student? He does not have that outside-class informal discussion. The only way the deaf learn is to be taught. The deaf don't sit in the cafeteria and casually listen to a conversation. They have to stop what they are doing and watch. All of their learning, all of their communication is a very definite, very concentrated effort. In fact, if you watch someone sign or if you sign, you know that if you take your eye away for a second, you've lost something. It's gone! I've learned some signs to use in class; I'm in charge of the class if interpreters are not. I can stop and say, "By the way, class, the sign for that is . . .", and give them a sign. Or I help the interpreter invent a sign. So now my regular student's can communicate with the deaf students a little bit and that helps a great deal.

Let's talk about safety in general working conditions. I'd like to have a dime for every time I've heard, "The deaf can't do that. If the machine goes bad, they won't hear it." If you walk into the welding shop and there are eighteen thousand machines going and some guy over there with a three-pound hammer in the middle of a steel plate is beating away, you can't hear either. I have found literally
no area in which the safety of a deaf person was any more in jeopardy than a hearing person. In fact, there are some advantages. When I'm teaching a person to weld and he has his helmet down, he's restricted; he can't see; he can't talk. It's like talking right into your hands. With the deaf student, it's kind of nice, because if he's welding away I put my hand down in front of his lens. He can see my hands, he can see my fingers spell what I want to tell him. My wife and I do that from time to time, I'll get a phone call when I'm out mowing the yard, so she'll wave through the window, and she doesn't have to come out. She'll sign, "phone call," and I'll answer, "Who is it?" She tells me and I sign, "Well, tell them I'll be in, in a second." It beats yelling.

Let's talk about other handicaps. The spinal cord injury is probably the most dangerous person in the shop to himself, but to no one else. Without being able to feel, they cannot tell when they are being burned. If a hot spark was to pop on them, they would burn. Now protective devices, leather aprons and proper protective wear will solve that problem without any difficulty at all, so it's not an insurmountable obstacle. Blindness is probably the only handicap that precludes welding, because it is strictly a visual operation. There is no way that you can listen to a weld and tell that it is right. I've worked with blind, deaf-blind, tunnel vision, etc., and that's the limitation. There's just no way that you can do it by feel.

Other physical handicaps in the welding field. You know, we have a macho thing in welding. You have to be muscular to move this heavy steel around, even though you now have a hoist, you have cranes, you have any number of mechanical devices to do the moving for you. A great many women are in welding, doing small, manual dexterity jobs, doing what used to be called Heliarc. Heliarc, by the way, is a trade term, like Xerox. Tig welding is actually the term for it. Anyway, Tig welding or GTAW, Gas Tungsten-Arc Welding, is very fine, very manual, fine motor dexterity operation. And it lends itself very well to a person who has that dexterity, whether they are in a wheelchair, physically handicapped in some way, or deaf. So the idea of the welder swinging around steel girders 30 floors up is only one small area of the welding trade. Construction welding is the only trade that would probably have difficulty with the physically handicapped. The other areas of welding could often present no problem at all. All right, does anyone have any questions?
Audience: Yes, I teach metal technology. I have only one deaf student in my program. Unfortunately, we have poor communication. At first, she was taking everything down that I wrote on the blackboard. She was reading her book. She was doing great, except that she just wasn't getting everything. I worked with her and she did very well, but it became obvious that she was falling further and further behind. But after the interpreter came, she closed her notebook and she sat with her hands folded, and watched the interpreter. What should I have done?

Jeffus: Nothing! The problem was that in addition to an interpreter, you need a notetaker. There is no way for a person to communicate or to get sign language and take notes at the same time. Now, in my class, we either have a notetaker provided, or I allow the students to Xerox my lecture notes at a later date. In sign language, and with an interpreter, you are talking three or four minutes behind the teacher. It is slow communication. If you have a fast lecturer, the interpreter is really going to be behind.

You need to allow a few seconds when you're pointing to something on the chalkboard. Educationally, it really doesn't slow the class down very much, but it's important to position yourself so that the interpreter and the student are in an ideal position, so that you can see the interpreter and the student are in an ideal position, so that you can see the interpreter and watch the student. When he finishes the information he will look up, and at that second, he can see what you're looking at and go on. It doesn't hurt the rest of the students. In fact it gives them a little more time to see what's happening and to make their own notes. Diagrams could be made before time and given to the interpreter or given to the whole class. That is why I keep very accurate lecture notes. Handouts are excellent, you know, thermofax machines are wonderful that way. If you make a thermofax for a handout, or for a transparency, run it through one more time and make a copy.

Audience: You are a very unique instructor. I come from a smaller community, and we haven't had any deaf. I'm just wondering, if one were to come, do you think he could handle this, if we gave him the written work and the demonstration? I don't think we can hire someone to translate, but we shouldn't just close the door on the student. Do you think we can overcome some of these things without having an interpreter?
Jeffus: It is very difficult. It is really difficult to get into, especially the deaf. Communicating is not just learning the sign language. It's learning the concept. The total communication deals with the concept. Learning a few signs helps, but to really get the full benefit, you will need an interpreter sometime.

Audience: What kinds of special equipment should we ask for?

Jeffus: In some cases it's only minor adjustments. I have a Braille micrometer that we fabricated at Perkin's School for the Blind, for the vocational program that I was in. We fabricated it in the school metal shop and any blind student can read the micrometer. Little things like that, little special devices can be fabricated for the handicapped. For other handicapped such as mentally retarded, there are ways around it, there are little tricks.

I worked at a center that was called Crotchett Mountain Rehabilitation Center in Greenfield, New Hampshire. We had multiple handicapped: a blind, mentally retarded, cerebral palsy; a deaf, cerebral palsy with a spinal cord injury; some really almost basket cases. We had a student who couldn't make change. He could count, but he couldn't tell the size difference in things, so he couldn't make change. He couldn't look at something and say, "Ice cream requires this type, five cents." He could read it, but if he looked down here, there was no relationship between the two. We used something simple to get around that. He was 18 or 19 years old; he was kind of embarrassed to come in and buy something, but he could count. So what we did was to tell him to always carry one dollar bills. If someone says that something is eleven dollars and anything, count twelve. They give you the change; you put it in your pocket, say nothing, go on. Now, if you buy a candy bar, if you buy a Coke, anything you want to buy, clothes, you don't have to tell the cashier the price, you just put the merchandise down, casually, look around, nonchalant. The clerk says, "Did you notice the price on that item?" "Sorry. I didn't." Don't tell them, "I'm sorry, I can't read it." You know that in the supermarket, the cashier asks how much that can of peas was, and you say, "I don't know." Then they send somebody to look. That took a little of the pressure off him.

So there are little tricks, and little things that you can do with a little imagination, after working with the handicapped, that will solve some of the problems that you are asking.
"You're only going to transport students in wheelchairs when you absolutely have to. If you can get them out of those wheelchairs and into a regular vehicle seat, you're way better off."

We've been working for the last eight years, and very actively in the last three years, with the Veteran's Administration and the National Highway Traffic Safety Administration, in the evaluation of adaptive equipment for transporting the handicapped. We do research, evaluation, and tests of adaptive equipment, not only for the transportation (that is, moving a fellow's body from here to there) but also for driver rehabilitation. Our interests have been with the severely physically handicapped, particularly the spinal cord injury cases. Many spinal cord injuries, from the tailbone right on up to the neck, have happened as a result of traffic accidents, which is why the Texas Transportation Institute is very interested in them. They are also a result of sport injuries, which happen a lot in schools. Of the injured, 82% are boys or men; that's why it's called a young male's injury.

Audience: That percentage surprises me. Are most of them traffic related?

Koppa: Many are motorcycle accidents. Others are sports accidents, particularly football. There are about 40,000 quadriplegics in the U.S., and about 200,000 spinal cord injury patients. We don't see as many polios any more; most of them are getting up in their 30's.
One physical disability which you see a lot in school situations is spina bifida, where the spinal cord is partially exposed. This, essentially, is the same as a spinal cord injury, only it's congenital. I'll also talk today about the cerebral palsy patient, particularly with respect to rehabilitating him as a driver. One unstable entity that we have to consider in rehabilitation is muscular dystrophy, which takes a generally downward course over a period of years. Multiple sclerosis patients have a very uncertain, limited life span. Syringomyelia is one of several disease entities of the spinal cord which is essentially a degenerative disease. It also has a rather unfavorable prognosis.

But for the time being, these patients are going to need transportation. They're going to have to be moved in some way; they are going to have to be rehabilitated to some degree. So you need to consider them in transportation.

What's the process of transportation like? It's best to consider it as an entire system. First, there's getting into a vehicle. Second, there's the ride itself, which includes both restraint and accommodation, either as a passenger or as a driver. In this part of the country, most of our transportation is by means of the motor vehicle, whether that vehicle is run by a bus system or a school system. It may also be a student's own personal car or van that he himself drives. Third, and finally, there's getting him back out of the vehicle again, which is the reverse process for getting him in. He'll have rehabilitation requirements at each of these three times.

The first one we can talk about is getting the student in when the student is wheelchair-bound. Now, if all you have for a vehicle is a car, you're going to have to get him out of his wheelchair. You can't transport a wheelchair-bound patient in the car unless you've got the entire surface of the inside of the car; and even then you don't have the head room. You need a van or a bus for headroom and wheelchair room. If you have a patient you are transporting in his wheelchair, then you're going to need a ramp, a loading dock, or a wheelchair lift. Now, let me say some things categorically right from the start. If at all possible, you don't want to transport a person in a wheelchair. Why?

Audience: Wheelchairs have a tendency to roll around.

Koppa: Yes. Let's say we nail them down so they're well secured. Even that's a problem. They're not built to
sustain the force that's routine in a motor vehicle collision, or even a hard stop. They are usually made out of light tubular steel, and they're not going to take that kind of load. They're not nearly as strong as that chair you're sitting in, and they don't have the structure. I know some school districts feel a little bad about hauling a kid out of a wheelchair into a car, and folding up his wheelchair in the back. Don't feel bad; you're probably doing that kid the biggest favor you could. He's much safer.

For some spinal cord injuries, though, you've got to think very carefully about getting him out of his chair. If he is usually in his chair, he's got a special pad that he sits on, and he's got a catheter for collecting urine, so he's not easily moved. Because of medical considerations, he may need to stay in his chair. If he's a cerebral palsy patient and severely disabled, you're going to have to restrain him inside the vehicle, so you may want to go with whatever restraint system he has in his chair.

Now, for those folks who stay in their chair, there are three ways to go. A ramp that leads from the ground into the vehicle, or a loading dock which some schools will have, or a wheelchair lift. Let me say first of all, don't kid yourself about these ramps. A ramp that will support itself is going to be a ramp too long to use. The Architectural Barrier Standard calls for 1 in 12 slope. That means you can come up 12 inches when going forward 12 feet. You'll have to come up nearly two feet to get up to a van, so you're talking about a 24-foot ramp. Then you're going to have to fold that thing up and put it inside the vehicle. Now if you have an attendant who is built like a gorilla, then you might have a short ramp and shove the patient in the wheelchair. Or if you have a small kid, it'll work reasonably well, and you can push him into the van. But for about $2,000 you can buy yourself a very nice lift and have it installed in a van. A motordrive lift is the way to go. Like I say, $2,000, but you don't need an attendant; the patient can fly it himself, and that is a big advantage. You want these kids to be as mobile and self-sufficient as possible. You're never even going to miss the $2,000, because the van's going to cost you about $14,000.

In a wheelchair you sit somewhat higher than you're sitting on that chair. Now most people need a pad when they sit in a wheelchair. I gives you a backache after a very short time. If you have never sat in a wheelchair for a while, you should do it. Just borrow a chair from your
local agency and use it for a day. Nothing will give you better insight into a handicapped person's problems than that.

Audience: They used to have a program here at A&M to give students wheelchairs for one day.

Koppa: They still do. Another consideration is head room inside the vehicle, which is generally bad. Now, if your van is going to transport these students for short distances then probably you won't need to worry about headroom. They can scrunch their heads down, particularly if they're passengers. But if they're driving the van, or if you're advising a parent who is buying some adaptive equipment for a handicapped student, then it's a very important consideration. You have about 51 inches. Your passenger's head is going to be about four feet off the deck, which means he's going to run out of headroom, and is going to have to scrunch down. If he's got torso stability problems, he's not going to be able to do that.

So you have two options, and they're both crummy. Option one is to raise the roof, and option two is to lower the floor. If your school district or your agency is buying a van for the transportation of the handicapped, and you're going to lower the floor panel or raise the roof, then you'll find that the people in wheelchairs can't really get good visibility through your windshield. You can't raise your windshield very well, because that's a major job. They have to either peek through a window up above the regular windshield or else do without visibility, if that's okay with them.

In any case, if you're going to consider major body work on your van, there's only one van to buy, and that's a Ford. Ford is the only van that has a complete truck chassis underneath and a separate body, so you can do a lot of things to that body and still have structure. The Chevy and the Dodge vans are unit-body constructions, and they don't like to be modified very much, because they depend on that boxy body for their structural integrity.

Now, once the person is in the car, what is done with the wheelchair? For most of these patients there are adaptive devices on the market which allow you to hook a crank-operated line to the wheelchair and yank the wheelchair inside. Another option is a car-top carrier for the wheelchair, which is very clever, and very expensive too. Two hands come down, attach to the wheelchair, and then yank the whole wheelchair up. It goes into a box on
The top of the car. It costs about $3,000. I'm sure it's no surprise to you to learn that all adaptive equipment is very, very expensive. Unfortunately, very little is worth the cost.

Another option that you have is to fold up the wheelchair and put it behind the vehicle, like a bicycle. That has advantages. For one thing, it's very accessible, but it means that someone else is going to have to get it for the student and then unfold it. This could be quite feasible in a school situation, but the disadvantages become clear on a rainy day. When you arrive at your destination, your wheelchair is going to be nice and dirty, and probably covered with dirt. That's not too neat.

One of the best situations is to put your spare tire behind the seat and put the wheelchair in the trunk. There's a device that you can buy or make, a pallet that comes out and hangs over the lip of the trunk. You lay the wheelchair in it, pick it up, and roll it in the trunk. It works real well. There's no reason to manhandle wheelchairs; there are devices available. Electro-mechanical lifts are very nice. Some are hydraulically operated. That's okay, but you're going to have higher maintenance costs on the hydraulic ones, because in the winter time they're going to get awfully slow, and you'll have to change to a lighter viscosity oil. But they do work quite well. All of these lifts cost about two grand installed, so they're really not too expensive, and they're quite reliable.

Some exterior lifts are not primarily designed for the handicapped, but for cargo. They work well, but lack the safety features. If you tell the manufacturer you're going to use it for hauling people up and down, they'll wash their hands of all responsibility. That's okay. It's still a good hefty lift for a bus that the school system might invest in, the advantage is that you don't have any of the hardware inside the vehicle.

Most of this adaptive equipment has a lot of sharp edges and protrusions, so you're looking at a liability problem. Your insurance carrier may well have a few words to say to you about them, and there's not much you can really do, because there's just so far you can go to make a vehicle crash-worthy.

One thing to avoid for sure, never put in anything that requires your students to activate their chairs on a lift when it's in motion; that's a big no-no. A cerebral palsy
patient, for example, with extremity tremors, could just
tremor himself right off that thing and kill himself. It's
happened before, so be warned.

Okay, we have the client inside with the wheelchair
stowed away. Now comes the biggest challenge. In
transporting these students, you've got to restrain them.
For restraining a passenger, particularly one that does not
have a lot of mobility, the standard inertia belt harnesses
that you see in motor vehicles will not do the job. You
need a racing harness, which is quite inexpensive. For
about $50.00 you can buy a complete racing harness by
Simpson, a very nice unit, big wide belt, easy to operate,
so easy that even a quad can operate it. It's good
equipment, what you want to have for restraint for
handicapped students in a van or a car.

But you'll still need to provide trunk stability. If
you have a patient who, unrestrained, collapses on himself
like an accordion, he's got to have a corset on anyway. You
will have to prop him up, or you could transport him lying
down, if worse comes to worst. By the way, you can always
spot a quad, because they're the guys who have their arms
hooked around the back of their wheelchair. Without some
support like that they just fall over, and if they fall
over they can't get themselves back up again.

The big problem once the client is in the vehicle is
the chair. Here are some guidelines you might want to keep
in mind. The most effective chairs are occupant operated.
Unfortunately that causes a paradox. The most effective
restraints for the chairs are not capable of being operated
by the guy in the wheelchair. If he's so mobile that he
can put on the restraint for the chair, he doesn't need the
restraint, because he can get out of the chair and remember,
if they can get out of the chair, do that. It's safer.

I implore you, never buy a restraint for a wheelchair
that picks up the wheels. They're just bicycle wheels, and
can't take the force. Any kind of side motion on them, and
they're going to collapse on you. When the collapse the
least little bit, the wheelchair restraint will let go, and
it will start rolling. It's just as simple as that. And it
doesn't take a great deal of force to make this happen. If
all you're doing is holding down a wheelchair without the
patient, fine, use those. They'll do the job. If the
patient is in the chair, however, you want to have your
restraint come in and grip the structure of the chair down
low, about midway between the big rear wheels and the small
front wheels. This way you can pick the structure up and
take it down into the floor of the vehicle. You want to do that if you have to carry a wheelchair-bound occupant.

In the restraint area, we don't really have an adequate positional restraint that will keep the patient in one place very well. If a guy's going to drive, he needs torso support and position with respect to control. We don't want these restraints to present pressure points. I'm thinking here mostly about quads again, because you know, quadriplegics have no sensation below the level of entry. You can stick a knife in them and they'll never feel it. They'll never say ouch. As far as they're concerned it's somebody else bleeding. These narrow belts that you get in a regular motor vehicle provide bad pressure points for a quad, or for a paraplegic for that matter. That's why, again, the wide belts are what you want to use, if the restraint is to be operable by a disabled driver. A lot of people like to drive in a captain's chair and just move the wheelchair right along side with two cords. That will keep it down perfectly well if they're not sitting in it. I've already discussed the carrier on the top of the car.

Don't have someone go buy a brand new wheelchair. Wheelchairs are all made by Everest and Jennings, Inc. in Los Angeles and have not changed significantly since 1937. Any well-built wheelchair could be rebuilt so that it's as good as new. If you go to your local friendly wheelchair repair service, they'll sell you a very nice wheelchair for a fraction of the cost of a new one. You will get exactly the same product. Maybe we'll have a few pits in the chrome, but so what? That means that in many cases for a student what you want to do is have a wheelchair at home, and transfer him into another wheelchair which you keep at the school. Wherever he goes, he's got a wheelchair.

Let me tell you about an honest-to-goodness, right off the market-shelf, wheelchair restraint, seriously sold to restrain a person inside a motor vehicle. This piece of junk holds one wheel, that's all. Now, what kind of collision do you think that thing could possibly sustain? And I know of another one that holds the top of the wheel. It's very elaborate, very expensive, and very ineffective. Another commercial unit holds two wheels, not a bad unit to use. It costs about $115. This is not a bad system to use for holding just the wheelchair down. It works pretty well for that. Don't expect it to hold the wheelchair and a patient.

Let me describe one that will work. It's got a nice big ring nut in the middle with a hook going down to another hook
that's secured in the floor of the vehicle. It's got a spreader bar that goes across from side to side by the ex-member. You can just imagine the dexterity and mobility a patient would have to have to operate that by himself. If he could, he would have no reason to ride in a wheelchair. But if you've got an attendant and you're transporting students in your school system, then this would be a good bet.

Here's what you want to do with your Simpson belt for the patient that's going to either ride or drive. Go ahead and install the lap belt on the wheelchair. With cables, bring it down to your spreader bar that you're going to use for your wheelchair restraint, or tie it in. A belt is a very good idea for any patient who must be in a wheelchair. It would keep him in there, and protect him; it would give a lot of security, and it's ready to go whenever the client gets in a motor vehicle.

A mechanical hand control installation has a lever drive with two levers going down to the pedals. It's nothing very esoteric. FDR was one of the first to use these things. A servo-hand control coming on the market now uses an engine vacuum to give throttle, forward direction, braking, and backward motion. You don't have the long lever arm throw that you have with the mechanical hand control; but you get very fine control with this system. They're rather expensive but the price will come down. The main news is that with this control system you can drive with something like three or four pounds force and need only one control for both throttle and brakes. This is nice.

The C-47 system has a very low ratio, high gain, power steering. This has a special conversion, because you move the whole pedestal for throttle and you bring it back toward you for braking. It uses about a three-to-one mechanical advantage for steering, so that you have a half a turn lock to lock to drive this thing. This is commercially built. You can buy this system for about $5,000 over the cost of the vehicle itself, a Ford Van, made out in California.

To sum up, let me say this. You're only going to transport students in wheelchairs when you absolutely have to. If you can get them out of those wheelchairs and into a regular vehicle seat, you're way better off. If you do transport them in wheelchairs, see if you can talk them into being transported backwards. Whatever you do, don't transport them sideways; sideways is bad news. The
wheelchair isn't meant to take any forces in that direction. Try and transport them either facing forward, or facing the rear. Any time you load up a van with adaptive equipment, you're compromising crash-worthiness, and you'd better accept that fact.

Better restraint of the occupied wheelchair is needed to advance transportation rehabilitation. Your biggest area of concern will be restraint, for both the chair and the passenger himself, but you will have a leg up if you go to racing-type harnesses. They will work for anyone except a very young child. For young children, I suspect the best thing to do is to lay them down in back of the van on a mattress.

If you've got to bring a patient who's wheelchair-bound or you want to transfer him after he gets inside the van, unless you've got a loading dock at both ends of your trip, you'd better go ahead and get a lift, because it's the best choice you've got.

Audience: About these vacuum controls, is there any problem if the motor dies?

Koppa: With the vacuum controls, or any of these adaptive controls for handicapped drivers, you have to provide a back-up system. For example, you can now buy a low-effort power steering and low-effort power brakes. They both need a back-up system. Some vehicle modifiers will sell you a low-effort power steering system. You'll get your effort of power steering down to something like half a pound at the rim, rather than three or four pounds. It will cost you an arm and a leg, because they have to provide liability insurance for themselves. Most of your rehabilitation equipment is made by very small manufacturers. In most states, if you want to write a quarter of a million dollars of liability insurance for yourself as a manufacturer, you're going to pay about $46,000 a year in premium costs. That has to be passed down to consumers some way or another. That's one of the worst problems in the whole rehabilitation equipment design area, the liability angle. That's why major vehicle manufacturers aren't really in this at all, because it just makes their problems worse.

Audience: Do you have any idea how many disabled drivers there are in this state?

Koppa: The Department of Public Safety has something like about 3,800 special equipment drivers. That includes
people who have to have special mirrors or a left hand throttle and stuff like that. I would estimate about 3,000 handicapped drivers required adaptive equipment. There are very large numbers of arthritic patients who should have adaptive equipment, who have never heard of such a thing and are just getting by without. Some of them are really badly disabled, and they don't even know there's something available to help them out. They can be very dangerous, when some very simple adaptive equipment can be used to really change their whole world.
"Orient the special education teachers to the vocational programs. A lot of them really do not have an understanding of what is involved in vocational training. The more aware you can make them of what services you've got to offer, the better the placements are going to be."

Handicapped children are now legally entitled to a free appropriate public education which assures effective learning in the least restrictive environment. There are several important points in Public Law 94-142 which I would like to address this afternoon. The first one is that each child must have an individualized education plan (IEP) developed for them. There can be a definite process for developing that IEP whether for vocational placement or other programs.

I want to introduce you to the child-centered educational process for the handicapped. During the past year I have had the privilege of serving on a district-wide task force, developing a model for the implementation of the policies and procedures for the education of handicapped students.

Now in child-centered education, public awareness is one of the greatest emphases. I brought along two or three documents which show efforts to educate parents of their rights and the rights of their children who are handicapped. Child Find leaflets are being disseminated state-wide. Another document is called Public Education for the Handicapped, put out by the National School of Public Relations Association. The third document put
Our recently by TEA is called The Educational Right of Your Handicapped Child. It goes along with Policies and Administrative Procedures for the Education of Handicapped Students. TEA Bulletin ADS-871-01. You may want to get some copies of these.

As a result of this public awareness campaign, we are getting a lot of referrals. People realize that their children may have learning difficulties and might benefit from special education services. These referrals come from parents, doctors, other teachers, people in the community. So this leads us into step two of the child-centered education process of the handicapped.

This step deals mainly with the educational liaison assignment and data collection. For every child who is referred, an educational liaison person is named. This person becomes an advocate for that child throughout the entire process. The person collects certain types of data, such as grades, attendance records, medical records, assessments, vision and hearing tests and other information which may give the group a lead as to what the child's learning difficulty or problem may be.

The third step is the referral committee meeting. In our district we have been doing something similar to this for quite some time, so I don't think that getting organized for the implementation of these new policies and procedures is really going to be as difficult for us as it may be for other districts. On each campus we have what is called a local support team. This group pulls together people who have expertise in support services. They take the data collected by the educational liaison and explore alternatives for the student. They try to make some decisions about a proper placement for that child in the event that the child can qualify for special education services. The written report prepared by the members of that committee is sent to a parent within 30 days after the referral is actually made. The people who serve on that referral committee include the principal or the principal's designee, depending on the organizational structure of the campus, the educational liaison, and the regular education support staff. This may include a lot of people. The special education services department could include anyone from an educational diagnostician to a visiting teacher or a nurse. The actual membership depends largely upon the problem that this child is having. Parents are encouraged to participate.
After the referral committee has met and has determined that the child does have a problem, a comprehensive assessment is begun. This deals with three major areas. The first phase would require looking at such things as language problems, physical problems, emotional or behavioral problems, sociological and intellectual problems. Phase two would require looking at the educational performance level, and phase three requires looking at the actual competency level of the child. Each one of these pieces of data is very important when you begin to look at the whole child and the problems the child is having. Once this information is put together, the referral committee prepares its written report to the parent. That's a lot of testing for one thirty-day period.

Audience: Is this done by your educational diagnostician?

Lindsey: Yes. I don't recommend that special education teachers do the testing.

Audience: Is vocational assessment part of this evaluation?

Lindsey: No, and I think that is one of the great weaknesses of this system. I think that before vocational placement occurs there should be a series of tests given to determine that child's vocational ability. In many instances this does not happen.

Audience: Well, if you are getting this information together for your ARD committee meeting to decide if the student needs vocational training, then I guess vocational assessment should be done before the vocational ARD committee meets.

Audience: In our district, if they think a vocational placement might be appropriate, then one of our vocational teachers is invited. Then they review the diagnostic material with the vocational teacher.

Audience: Our vocational guidelines require a vocational ARD committee with the vocational director and the vocational teacher whom they think the student might like to be with. You've got a vocational counselor involved and an educational diagnostician, the special education directors, principal, and so forth.
Lindsey: These are the people who are supposed to be involved in this ARD process if it involves a vocational placement.

Audience: That's a misunderstanding though. The special education people have their ARD committees and think theirs is sufficient to get the job done. But their meeting doesn't meet my guidelines.

Lindsey: But if a vocational placement is going to occur, wouldn't the ARD committee be the vocational ARD committee?

Audience: Only if you get the right people involved.

Lindsey: The right people should be involved.

Audience: But what happens is that the special education ARD Committee meets and the next thing you know Johnny shows up in the auto mechanics room. The vocational director, the vocational counselor, and the vocational administrator didn't even know he was coming. That's when I go to the special education director and say, "We are not accepting that kid until you do this thing right because the teacher has got to be prepared for it, and the regular students in that class ought to be prepared for it." Vocational teachers will accept these students if they have had an opportunity to meet the students, learn about their handicap, learn what special things they're going to have to do to teach that student. But if a special education student just shows up the teachers are scared to death.

Lindsey: That's why it's important for you to establish one ARD committee that has permanent vocational membership.

Audience: As a vocational director I don't need to be involved in every ARD committee meeting. Not every ARD committee involves a vocational placement.

Lindsey: They can let you know in advance. One thing that we did to compensate for that problem was to encourage special education personnel to take the student over to the shop area in which they would like to place the student, find out if that student is genuinely interested in learning that trade. You've really got to work with the special education personnel to develop that kind of rapport with them. I would also encourage you to invite parents to come out with their children. Some parents have taken
their children over to a shop or lab early in the morning when there are no other kids around so teachers can talk to the child and the parent and tell them a little bit about what they will expect from the child. It works out to be pretty successful. Are some of the rest of you having similar problems?

Audience: One of the things that concerns me is the number of meetings. We have more meetings to attend than we say grace over. We've tried to solve that. Anyone can refer a student to vocational education, but then the process goes to the vocational counselor on that campus. The vocational counselor will then start compiling vocational data and arrange for the student to visit the shop. If the parent wants to, fine. Then the counselor will go back and work with the diagnostician and the teacher. By the time we come to an ARD meeting there's usually agreement between the vocational department, and special education administrators and teachers. We inform the parents that their child is being considered. At the meeting the vocational counselor will explain why we are recommending this child or why we are not. If the student is recommended, then special education people and the vocational people sit down together and write that student's IEP. If he is rejected, then it will go back to a special education ARD meeting and we forget it.

Lindsey: It sounds to me like you are designating that vocational counselor as the educational liaison for that child.

Audience: They are collecting the data but they may not necessarily be the advocate for the child.

Lindsey: Any other comments that anyone would like to make regarding the organization of the ARD Committee? IEP forms are different in almost every district in the state but essentially the IEP is a statement of the goals and objectives that are set for this child. They should be both long-range and short range also. There should be some sort of description of the behavioral characteristics of this child.

Audience: Do vocational teachers need to be involved before the committee ever meets so they can know the child and know about his abilities and weaknesses and what his handicaps are when they come to the ARD committee? If you just invite the vocational people to an ARD committee without involving them in this information-gathering process, it's like the blind leading the blind.
Lindsey: I would think anyone who has been involved would know enough about it to begin to ask questions. Now you might make a mistake the first time and go wandering into a meeting without any prior knowledge of what is taking place, but I think that after it happens one time you are going to ask questions.

Audience: Besides placement of the child, special services such as transportation will be discussed. Services could include anything from occupational therapy to musical therapy.

Audience: How many parents help write the IEPs?

Lindsey: It varies I think. If parents are fairly knowledgeable about the entire process they can be a real help. Now I just had a conversation with somebody before I came in here who told me that she had two handicapped children and she was invited to an ARD committee recently and when she got into the meeting the committee members said, "Okay, what do we do with your children? The children have neurological problems and we've done everything we know to do. Now what do you want us to do?" She said they didn't present any options to her and she really wasn't aware of the kinds of services that were available to her. She needed a little prior warning about what her roles and responsibilities were going to be in that meeting.

Audience: How much do the students participate?

Lindsey: I think that also varies depending on the handicapping condition. I've been in some meetings where the children really did know that they wanted to go into a certain program. They had a definite goal in mind. Other students were very apathetic. They were willing to take whatever the committee set up for them.

There are a couple of other things that I would like to pass on to you. What I've done is try to develop an action plan for improving vocational education services for the handicapped. First of all, I think that it is essential for all vocational personnel to become familiar with this child-centered educational process for the handicapped. I would suggest that you consider presenting this type of system in an inservice conference next year and that you invite some people from special education to assist you. I've done some team work with special education this year and my people were just thrilled to have the kind of input that they were able to give.
Another step in this process would be to become familiar with the organizational structure of special education services within the district and to learn about the wide range of services available for these students through special education.

Next, I think it is important for vocational teachers to develop lists of criteria for predicting success of handicapped students in the different occupational courses, particularly in the area of reading and mathematics. If you know that a child is not going to ever read and if you know reading is essential to your vocational program, then I don't see how the child is ever going to succeed in that particular program. We have a problem right now in some of our office programs with kids who cannot read. Your vocational education teacher will be able to see where the problem lies in placement and for that reason I think that they should develop these lists. They don't have to be used as selection criteria but they can be used as guidelines. Special education people are constantly asking vocational people for this information.

Another thing that you can do is orient the special education teachers to the vocational programs. A lot of them really do not have an understanding of what is involved in the vocational training. The more aware you can make them of what services you've got to offer, the better the placements are going to be. The vocational education teacher should also get to know the special educational personnel and try to develop some rapport with these people. A lot of times they are afraid to talk to one another. They just don't do it and I think it would be a good practice for both of them to begin doing some observation of each other's teaching and to pass on some techniques that would be useful in working with those children in the vocational setting. As I said earlier, I would encourage the visitation of prospective handicapped students as well as their parents. This gives the teacher the opportunity to actually do some interviewing. And of course, I think it's essential for the vocational teacher to participate in these ARD meetings.

So these are just some things that I would suggest because I think there is a lot that we in vocational education need to do to improve services for the handicapped.
"I think handicapped people are just like anybody. They're different, but the differences are individual. They're not different as a group."

People ask me, "Why do you work with handicapped kids? Are you a Johnny-Do-Good or something?"

I say "No, I'm very selfish. I work with handicapped students because I get a lot more feedback from them. I enjoy that feedback and I enjoy the challenge of teaching them. Some do not succeed easily, but that's the challenge."

Today I'm going to talk about prevocational education. I'd like to hear your definitions of prevocational education so as you introduce yourselves, please describe what prevocational education means to you.

Hill: Pam Hill, Specialist in the Vocational Curriculum Lab at East Texas State University.

Lutz: What's prevocational education?

Hill: In Texas, it means teaching job-seeking skills, teaching attitudes about work, teaching an overall view of work and of different job clusters.

Hayes: I'm John Hayes. I'm Director of the Occupational Curriculum Lab at East Texas State University, and I would certainly agree with Pam. Prevocational training would be training provided for individuals in preparation for either on-the-job training or employment.
Boone: I'm Jim Boone, and I'm a Professor of Industrial Education here at Texas A&M, so my work deals with teacher preparation. Our students go into industrial arts; some of them go into vocational industrial teacher training. From my view, prevocational would be that area where students explore various activities so they can make a tentative career choice. They develop knowledge about why we work, why everybody works, why work is satisfying, and so forth.

McDaniel: I'm Conway McDaniel, Director of Special Education at Mount Pleasant. We're in the process of trying to develop a better curriculum for handicapped youngsters. I think prevocational is all these things previously mentioned; but I see it going back much further than that. You have a lot of severely handicapped youngsters who have coordination problems, for example, who have to have physical development activities. This is also part of prevocational; learning to use their hands.

Lutz: As you know, you don't go looking for a job when you're down in the dumps, because employers don't even want you. You get your sail high first and then go. I believe that kids have to have their sail high, to feel good about themselves, if they're going to be employable. Maybe you think that doesn't have anything to do with woodworking and metal working, but I've found that it does. My two high school kids have a lamp on their desks that they made in woodworking in the seventh grade, and of all the junk they've got on their desks, that's the only thing that never gets dusty. Almost every day when they do their studying, they use that lamp. I asked them once if they'd like to have one of those that has springs on it, and they said, "No, not really, my lamp's okay." That says something to me about what they think, and what prevocational education has to offer. Let's go on with the introductions.

Swift: My name is Frankie Swift and I'm a student at East Texas State University. I think that prevocational education is the exploratory phase of the child's attitude toward reaching a permanent vocational ability.

Swift: I'm Bob Swift; I'm also a student at East Texas State, and my only experience in working with any kind of prevocational skills would be teaching agriculture. I think the emphasis in prevocational training is being involved in the total person rather than just teaching how to do a skill.

Lutz: There's a real challenge involved in reaching the total person. I remember a girl who came into my office after school and said, "I've got to talk to you about something." I said, "What is it, Mary?" And she said,
"I'm pregnant." Now what does that have to do with woodworking? It's scary, but it's what you're talking about. There's a lot more to this prevocational bag than learning how to hold the hammer so you can go into the construction building trade. In fact, I think that's what I like most about junior high kids; that frankness, that openness, that "I can't talk to my parents; now will you listen?" kind of faith. I like to be involved with that.

Washam: I'm Dan Washam, and I'm a shop instructor at Richland Physical Rehabilitation Center, Texas Technic-ian for the Blind, Rehabilitation Center, in Austin. My definition of prevocational education is a lot like Mr. McDaniel's. We focus on the basic concepts; anything from size and shape discrimination to work plans and organization. We also get into basic manual skills. In our rehabilitation center, we work with the physical aspects of work, job application and job readiness.

Cascio: I'm Tony Cascio. Dan and I work together. So many of our clients have never had any work experience. A great many of them have been so sheltered by their families or by institutions that they almost fail because of that alone. They're so accustomed to being told everything. I agree with what you said. What the client turns out is concrete. It is something that they can take in their hands and they can see that it's good. We display the client's work, if they'll let us, and it does fantastic things for their ego and for their confidence when they complete a project.

Chappee: I'm Betty Chappee. I'm Director of Special Services at La Porte. I don't really know what prevocational is, although I've convinced the school board that I need a prevocational unit at the junior high this next year. I'm here to find out what prevocational teachers are supposed to do. I know I want it to be a doing class, a projects class.

Lutz: Yes, I'd like to have a whole sampling of everything so that the students can look back at what they've done and say, "I don't like that, I kind of like that, but I really like this." Junior high kids, especially, like a variety. Let's say we have home economics divided up into six things, and let's say we had general business divided up into six things, and had general agriculture divided up into six things. There'd be 36 little pockets that a seventh grade kid would explore during this class. Then, as eighth graders, the chunks would get bigger and the choices would get smaller; perhaps four choices in all, two per semester. Each would
be nine weeks in length. We would build a pyramid that leads to some ninth grade full semester courses where they have two choices out of about five or six. At that point they get a little more heavily involved in the knowledge and skills of two areas.

I've always said the pyramid goes in the wrong direction. When they go to junior high they don't have many choices; when they get to high school the choices open up. With so little background in junior high, they have nothing to draw from to make those choices.

We've been talking now about prevocational for all kids, and that's how I'd like to think about handicapped kids; as part of all the kids, as a person who is included as one of the twenty people in class; a person who is handled individually like every other person in the class. There are some programs that segregate kids and if the kids are getting a good shake there's no problem with that. But I think we have to accept that kids sometimes learn more from each other than they learn from us. If we isolate all trainable kids into the same facility, what they learn from each other drops way down.

My wife teaches at the trainable center. I went over there one day, and there was a kid rocking back and forth. I said, "What's the matter with Andy?"*, and moved to him and said, "Andy, don't rock. You're making me sea sick." He stopped for a minute and then he started rocking again. Three or four days later I came back and there were two of them rocking. They learn behavior from each other. I think it's inefficient for a handicapped person to be isolated in what we call a special program. I think handicapped people are just like anybody. They're different, but the differences are individual. They're not different as a group.

We don't have any special kind of attachments or anything for any of the equipment that we have in our shop. Would you believe, last time I was in Washington, D.C., on the President's Committee on the Employment of Handicapped, a guy came up to me and said, "Would you do a Research Project with a hundred thousand dollars on adapting equipment for the handicapped?" I said, "Which handicapped? Who are you talking about? Mary? Charlie? Give me some names." "Well, we want to adapt the equipment so that handicapped people will be able to use it." That's baloney. You can't adapt equipment until you do an assessment on an individual person.

* Name changed.
I think that the idea or notion of having a prevocational program for handicapped means that you deal with an industrial arts teacher and home economics teacher, a counselor and special education teacher. You put a package together for each individual student who's going to give them a picture of employment possibilities, leisure time possibilities, and self-development, so that when they graduate they'll have a picture of who they are and what kind of career they're in. My kids are leary of a permanent choice of a job. They don't want to identify something they want to do the rest of their lives. They want to identify something they might do for a couple of years. They're really not confident enough to say, "I want to be a veterinarian the rest of my life." I think that's healthy. My dad changed jobs six times. He retired when he was 71 years old, and now he works with trainable kids twice a week. I think it's a trend now, going through more than one career. It might have been triggered by military retirees in the '60's. I think they received much satisfaction from those changes, and when other people observed it, they started doing it as well. So I wouldn't want to try to lock students into one job.

Nor would I want to lock students into one kind of learning or a standard grading system. Class competition has always helped to mark certain students as "handicapped." Teach classes so as to remove peer pressure, remove the standard curve which says some people are going to pass and some are going to fail. If there is any place in the educational process where it is legitimate it would be at the university, where a somewhat similar, homogeneous group of people, all having basically the same entry requirements, get together. All those graduates from the university system take a first teaching job and thrust that same competitive process on a bunch of very heterogeneous kids, and expect some to fail and expect some to get "A's," and expect a lot of them to be in the middle. That's a major mistake because in public schools we're talking about 100% of the population. I think all kids are supposed to go to the public school system, and I don't think any of them should fail. Nobody learns by failing, yet many of us use that competitive process as a tool for motivating students. I doubt that anybody with a "C" average gets motivated by grades. "A" students like the system very much, and "B" students kind of like the system. But for the rest of the kids, grades don't mean too much.

The kids we're talking about are often in the last group, so in prevocational subjects we have to make an impact on that evaluation process. We have to get it away from the A, B, C, D, some pass, some fail system. I know
there are a good percentage of industrial arts teachers in a 50-mile radius from where I work, who work with all students on an individual basis, which helps take care of the process. At first that sounds terribly complex; it sounds almost impossible. But I think requiring projects, and making every student lay theirs down side by side at the end of the semester is a bad thing. When I say this, my undergraduate students always ask, "Yeah, but what are you going to have if you don't have a required project?" Well, I have a selection of projects to choose from; or better yet, let students make what they want to. Out of a couple thousand students, I haven't had one who didn't have something he wanted to make. The difference between helping a person make what he wants to make and making him do something that you want him to make is like daylight and darkness. So, I put a lot of restrictions on my industrial arts program. It has to be individualized; it has to be evaluated on each individual student's progress. But this brings a challenging environment for the teacher, one in which the teacher does not feel threatened by having some students accomplish very little and some students accomplish a lot. Teachers can evaluate each student based on the progress that they make.

Audience: What are your specific objectives for completion of this product? I mean, how do you balance skill development and exploratory opportunities?

Lutz: Basically, there are three objectives that industrial arts teachers need to keep in their heads. Number one: Prevocational exploration. Include something about graphic arts, and something about the printing industry, something in drafting, something about materials, soft materials, woodworking. Number Two: A leisure time activity. As our society is more efficient in manufacturing products, more and more time is left for leisure. I think we as industrial arts teachers need to emphasize the importance of developing some healthy leisure-time activities. Number Three is hard to measure, but the most important: The development of a positive self-image. When a student produces something out of metal or plastic or wood or whatever, and can put that on his desk it makes a difference. I've seen it have an effect on thousands of kids. You couldn't buy that lamp from the student for $150. Those are my three objectives.

Audience: You mentioned that the students were evaluated on the completion of their projects. To what extent do you rely upon the quality of the complete project?

Lutz: Very much.

Audience: This lends itself more to skill development
than to exploratory experiences and trying to determine areas of interest.

Lutz: I'm very stuck with that. Everybody can tell whether a product is poor or not. Even the kid can tell it. So it's the teacher's responsibility to stick with that product until it looks socially acceptable. At the same time, I wouldn't think a person at the junior high school level would spend more than four to six weeks on any activity. Then he wants to jump into something else. Manipulating tools is a very normal process for junior high school kids. The activities are what help handicapped kids to gravitate towards home economics, industrial arts, physical education. They like to work with materials and tools and processes and each other.

Too often there is too little articulation between that exploratory phase and some serious narrowing down of the vocational decision phase. In our state there is a great big chasm between industrial arts teachers who do career exploration, and the vocational teachers who teach entry-level skills for that occupation. In some cases there's almost more antagonism between those groups of people than there are between any other groups in the school system. That's really disastrous for a kid who gets excited about some activities, but then is never told the relationship between those activities and a two-year vocational block.

In our state the division of vocational education has not yet defined prevocational education. The department of special education has identified prevocational, and there is much in prevocational that probably only a special education teacher can do. But actually instilling in a child's mind what kind of occupation he will go into, I think, requires a team effort between home economics and industrial arts, maybe a coach, and a special education teacher. Special education just is not big enough to cover all those entry occupations. That has to be a shared responsibility.

There seems to be a fear of working with industrial arts teachers. Let me tell you that from my impression, the process ought to be quite simple. Some vocational teachers in our state have college experience, but at least 40% don't have any at all. All they have is work experience. If you give a person who is severely retarded or emotionally disturbed to a vocational teacher, in some cases they've blown a plug. But most industrial arts teachers who I know, are dumb enough to say, "Hey, I take whoever comes in the room. I don't make any judgements
about who I'm supposed to teach, and who I'm not supposed to teach." You see, as they go through an undergraduate program they get bombarded with psychology classes and pick up various tools for dealing with whoever walks in their classroom. Industrial arts teachers could build a bridge between the prevocational exploratory activities and vocational skills development.
"If you, as their teachers, don't always show handicapped people that they can succeed, then they will probably always fail." Shirley Price

J.R. Mathis: The future employability of a student is a major consideration in vocational programs, because the criteria for placement in vocational programs is that the student must have a potential to benefit from the training. We have therefore invited this panel of employers who have hired handicapped applicants, and handicapped applicants who have been hired, to discuss the placement process from a personal perspective. Without further comment, I will turn it over then to our first speaker, Donna Williams:

Donna Williams: I have cerebral palsy. I was born with this condition. I think we are all familiar with Section 503 and 504 of the Rehabilitation Act of 1973. It states that we're to give handicapped people the same job opportunity that any other applicant has. To explain how it all worked for me, I want to tell you how I obtained my job in Houston with United Cerebral Palsy. I received a high school diploma, not through special education, but through a regular academic program in the Dallas Independent School District. I graduated from college with a degree in Speech and an emphasis in Speech and Hearing Therapy. For six months after I graduated from college, I did volunteer work at a Crippled Children's Center in Dallas just for the experience. After I got my Masters from SMU in Counseling, my hardest job really started -- looking for a full-time job. I contacted 157 different agencies over a two-year period looking for a
job. Even though they advertised for a counselor or a speech therapist, when I would walk into the door, they would say, "You are either over-qualified or your qualifications don't meet what we're advertising for." Many times they didn't take me because I can't write legibly; even though I'm pretty efficient on the typewriter. So, after looking for two years, I came to A&M to work on my Ph.D in Rehabilitation Counseling for Industry. I left after one semester and started looking again for a job. This was a year ago in June, and in September I got my job as Project Director at United Cerebral Palsy in Houston. I'm working with people who have cerebral palsy. They range from 20 to 54 years of age. Most do not even know their ABC's. So we work on education, social skills, and development.

In the very near future I'm starting my own business in Dallas. I will be leaving Houston. This business will have employment services particularly for handicapped people, a counseling service for personal and job counseling, a health referral service, and a job seeking service. I hope to go out and inform the community around the metroplex of what we as educators are trying to do for our physically and mentally handicapped persons.

Audience: As educators, what could we do to supply the handicapped students with motivation and drive to keep them looking for a job? Where did you get your inspiration?

Williams: Well, it really started when I was a smaller child. We can't start with a sophomore and say, "Here, you are handicapped. Go the distance." You have to let them know how things are going to be different once they're out of school, but you also have to show where help is available when they need it.

J.R. Mathis: If there are no further questions at the moment, let me introduce Neal Barker.

Neal Barker: I'm with Home Interiors and Gifts of Dallas. Home Interiors and Gifts is a direct selling company, something like Tupperware, specializing in decorating accessories for the home. We have approximately 26,000 women selling for us. Retail sales for last year totaled $3,500,000. Shortly after the President of Home Interiors, Mary Crowley, founded Home Interiors, she was joined by her son Don Carter, who is Vice President in charge of merchandizing. Because of Mrs. Crowley's faith, and because of the loving and caring philosophy of Home Interiors, we have a unique business today. Handicapped and underprivileged people were taken into consideration from the very beginning. Twenty-five handicapped people now work in the warehouses and offices. They include...
deaf-mutes, victims of cerebral palsy and polio. These people are treated exactly the same as the other employees. They have no special benefits, they have no special training. They get the same pay, the same job opportunities, the same benefits, and the same promotion opportunities as the other employees. They're very efficient in their performance, mainly because they are more appreciative of their jobs. Their duties include processing, order filling, and working in the credit department. They also work on similar responsibilities in the award and certificates department. For many, this is the first job these people have ever had. Because of it they have become self-supporting and responsible citizens. The company has found that these people bring distinct advantages. Employee relationships are better, other employees become more courteous and thoughtful. Furthermore, I'm sure that the absenteeism is much less of a problem: when employees know that just getting out of bed and getting dressed is a problem for their fellow employees they will try harder to get to work. With the results we have had with employing these people, I am certain that there will always be a place for handicapped and underprivileged people in the future of Home Interiors.

Audience: I know you have a lot of people working in Dallas, but do you have handicapped people actually selling for you?

Barker: Our top salesperson in the nation last year was a woman in California who, as a result of polio, is crippled in one leg. If a person can drive a car, answer a telephone and get herself around, she's in business.

Audience: How good was her salary?

Barker: It's strictly commission. This woman made over $40,000 last year.

Audience: Are you sympathetic to slow learners, even though they might take longer to learn the job?

Barker: Yes, they can take orders and go through the warehouse and fill the bins and take it to the packers. If it takes them a little longer, that's okay because they stay on the job and do it efficiently. They don't take as many coffee breaks, either.

Audience: Has your company always hired handicapped applicants?

Barker: From the very beginning. Our deaf-mute foreman has 19 years of service, and the company's only 21 years
Shirley Price coordinates programs for the handicapped at NASA in Houston. She is orthopedically handicapped.

J.R. Mathis: Thank you, Mr. Barker. Now let me introduce Shirley Price.

Shirley Price: I'm Handicapped Coordinator for the Johnson Space Center at NASA, in Houston, Texas. I've been working now for the Johnson Space Center for eight years.

Let me say right away that I was never a part of the special education program. I had a special teacher until I was five and decided I wanted to be a part of the total community. In elementary school, I had to encounter other kids teasing, fighting, making fun of me and then treating me like an outcast. It became my responsibility to decide and do something about this. At that age, I had flaps hanging down my back and I remember one girl liked to pull on them. I told her if she didn't leave me alone that I'd tell my mother. My sisters wanted to take up for me but my mother said, "Now Shirley, I can do one of two things. I can let you go out there and fight that girl like you fight your brothers and sisters every day, or I can go out to the school and tell the teacher to tell the girl to leave you alone. Which do you want?" So I went to school the next day and I tripped the girl and sat on top of her, and that won my acceptance with the rest of the school.

I graduated third in my class in high school, but I should have been second. You know that the top two get lots of scholarships. Well, the Rehabilitation Commission had informed my school that they could pay for my education if I went to college. So the principal and the faculty decided someone else should be second and bumped me to third. I did go to college, but only after a lot of hassle from TRC; they would not allow me to go to college unless I had artificial arms. It took me a year to agree to that, then they said I had to go to school for clerical work. I finally made a deal and got my degree in Sociology. I went to work at the NASA-Johnson Space Center in 1971. I cook, sew, crochet, knit, embroidery; I'm an artist, I've written several stories, I type 50 words a minute, and I enjoy living. My car is parked somewhere around here, and even if they put a ticket on it, they can't move my car. They could only look at it and say, "Well, we can't drive it, so let's leave it alone."

I enjoy working at the Space Center. I work with the Independent School District from Houston, Galveston, and all the areas surrounding. I work with the CETA program. We have a total of 261 handicapped employees.

Audience: Do you employ retarded students? Is there a
Price: Yes, there is. Two of our student employees are retarded. One is presently working on the cap work experience. The one who is still working with us will be placed on a 700-hour appointment this summer, a temporary position. When we look for permanent employment, she could be hired. We train the students for positions where, if we can't hire them permanently ourselves when they are done, they will be able to go out and seek employment. I offer an employment service to these students. I give some information as to where they can go in the Houston-Galveston area for possible interviews or employment opportunities.

Audience: Can people come to you from all over?

Price: Oh, any place.

Audience: How can we place students with you?

Price: Well, you can call me at (713) 483-4918. Then go to any government facility, ask for a regular 171 application, have the applicant complete the application and send it to me. Then we arrange for an interview, probably over the phone. All we need is someone to let us know what the student's limitations are. Then they are treated like everybody else. I have them filing, I have some working in the mail room, I have some working in the astronauts' office, some learning to type. One young man worked as a tour guide, and one young lady with cerebral palsy styles the astronauts' uniforms for other kids. They're having a fantastic time.

Audience: Do you have a program for altering the employer's attitudes?

Price: We use a program from TRC and another from the President's Committee on the Employment of the Handicapped. All federal agencies are expected to have a Handicapped Coordinator, either part-time or full-time. As coordinators, we receive special training. We learn how to deal and work with people who have negative attitudes. I often ask professionals to come in, such as counselors, psychiatrists, or vocational teachers, to talk about supervisors and to visit work sites, so that students have a chance to show off to them.

I'd like to add this comment because those of you who are teachers and need to know that if you can just show them one thing, just one thing that they can be a success on, then that will win them over to themselves. As handicapped people, they have a lot to deal with, trying to get other
people to like them, but they have more trouble trying to like themselves. I have to be honest: sometimes I stand in front of the mirror and say, "My God, why me?" Then other times, I say, "You got it chick, go on." If you as teachers don't always show these people that they can succeed, then they will probably always fail. That is why I give these students sometimes up to six different times to make mistakes before I finally let them go. Of course, if I find out it's just stubborness, I say, "Three times and you're out!" But if it's actually a physical problem, or a learning problem, if it's something that they have to take time in doing, then fine. It's a case of laughing with them when they need someone to laugh with, and listening when they feel they need to cry. Try to make them realize that they can be a success just like everybody else.
"I hope we are here next year; I hope we are talking. There will always be problems, but there is a tremendous challenge. Disabled individuals are now understanding that things in their lives are not privileges." Pat Pound, President, Coalition of Texas with Disabilities.

Bonner: My topic will be current and future problems of disadvantaged adults in vocational programs. I am currently employed at Prairie View A&M University, I have a Bachelor's and Master's degree from Prairie View and a terminal degree from A&M, so I am what you might consider a black Aggie. I am currently President of TAVESNP*. We are an association designed to look out for the vocational needs of the adult; we are certainly interested and concerned about the handicapped population.

It is our association's prediction that the out-of-school disadvantaged adult will receive far less training in the future. That is a very unusual prediction, but it is based upon our analysis and study of current legislation. Under the new 1976 Amendment Act, the set-aside funds for the disadvantaged adult vocational training have a stipulation known as "excess cost and relative ability to pay." If you have not become familiar with this, I suggest that you do, because it's the same requirement for the handicapped. It is my understanding

*Texas Association of Vocational Education Special Needs Personnel.
that, of course, there are funds that are not being spent at the agency right now for the handicapped for this particular reason: the excess cost and relative ability to pay. We're really having a very difficult time getting a clear-cut definition or understanding of the two terms. The federal definition sounds very simple and very easy to understand. But how do you operate programs through this concept? The excess cost funds, which will be the majority of funds for the adult population, will be administered, as of July 1, through post-secondary education, basically the two-year junior college. In the past, 100% of the costs to train adults was available from these funds. Starting July 1, the 20% set-aside funds will be going to post-secondary and they will be required to mainstream these adults into regular, on-going vocational programs.

If that is the bulk of the money available for these programs, stop and ask yourselves, what happens to that adult that has to work in order to support a family? What happens to that adult who doesn't have the money who pay the tuition to go to college? This, again, is one reason we say that there will be less training in the future. The federal law that will assist in this area will be the Comprehensive Employment and Training Act. This program, which has some seven or eight titles, does not allow adults to go to school full time, while they're paid a stipend. But, if you read the 1978 law, you're going to find that they have changed the eligibility criteria. This has brought about the criticism we're heard about since. No one spent the time to make sure everyone knew that these were basically the public service programs, and not the regular skills training programs. Even when you have a CETA program, whereby you can pay a stipend, you still have that population that simply cannot stop to go to school full time. They must work. Thus, we are going to have a large segment of the underemployed population that is not being served.

Another reason there will be less training for the adult disadvantaged is the current emphasis on serving the needs of youth. Read the Vocational Amendments Act of 1976, and you'll note they're talking about you. Read the Comprehensive Employment and Training Act, and you will find that the bulk of the funds are going to meet the needs of the youth. It would be very simple to work with both age groups simultaneously. We're going to push this concept in the future.

There's another reason I see a problem in training. There is really no statewide needs assessment being conducted for Texas. Many of our programs do require a
local operator to conduct a needs assessment survey, but by
the time the data is returned, the agency simply does not
have time to utilize the input from the local operators.

We also don't have anyone at the state level to look
out for the concerns of the adult disadvantaged. We
recommended that someone be assigned at the state level,
who would be informed of and coordinate the handicapped
program, disadvantaged programs and all other special
needs programs. This person will also insure that CETA
and vocational programs are interfaced and used
simultaneously.

I would like to make just a few recommendations that
you might want to consider. We certainly need to clarify
"excess cost," and "relative ability to pay." We believe
that members of all the state associations concerned about
special needs populations should prepare a letter of
recommendation and lobby to get that regulation changed.

It would probably be to our advantage to see all
disadvantaged adult programs housed under one agency at
the state level. We certainly feel that programs should
not be split if they are designed to serve one particular
population. There should be a better correlation with
CETA, vocational, and youth programs. We're finding too
much duplication.

The last recommendation is for a statewide needs
assessment survey of the entire special needs population.

Mathis: Thank you Mr. Bonner. Keith Dial is our next
speaker, President of the Texas Council for Exceptional
Children.

Dial: This afternoon when we were introduced, we were
told as a panel that we would talk about the feelings and
attitudes of the organization of which we are the
president. I did not know that; I expect the Texas Council
for Exceptional Children would take exception to some of
the remarks that I might make this afternoon, so I want to
make it clear that the Texas Council for Exceptional
Children does not necessarily adhere to the theories,
attitudes, feelings, or philosophies that I might project.

The Texas Council for Exceptional Children is a
professional organization of about 3,000 members, including
administrators, teachers, and support staff, who work with
handicapped children in public schools, colleges, and

Keith Dial is
president of the
Texas Council for
Exceptional Children.
He teaches in Ector
County ISD.
universities in Texas. We're a part of a national organization which includes about 64,000 members. The national Council for Exceptional Children tries to provide additional resources through federal legislation, and so forth. The Texas organization is more oriented toward professionalism in the classroom and working with handicapped children.

I want to mention three things to you. One of them has to do with vocational education, but what I'm going to talk about isn't oriented toward vocational education. We've discovered that teaching a skill to the handicapped is not enough; certainly, and we realize, at least in public education, that vocational training without personal social adjustment in life skills does not necessarily make a person an independent, productive member of society. Now, from that premise, let me make two or three statements I think I can support. It's been said that schools give 90% of their effort to the cognitive, or basic skills aspect of education and 10% to the affective domain, and that 90% of the time, success in life depends on the affective and 10% on the cognitive. Now, I think probably this is where education has made a mistake, certainly in the area of special education for the handicapped, including vocational education.

I've been recently reading and seeing on the market survival skills materials. Though they may be good materials, the connotation that we're teaching survival skills to people bothers me a great deal. I want to say that we should ask what the pupil needs in order to thrive. What we want are thrival skills. Let me explain what I mean when I talk about thrival skills for the handicapped.

I think we've come through about three stages in our thinking about the handicapped since World War II. If the literature reflects properly the attitude and feeling of people, we ignored the handicapped up to about World War II. As a result of the war, our nation began to think in terms of providing the handicapped with educational opportunity that would help them to become more productive in our society. I think that we had a conscience-soothing attitude following World War II. After many years of this conscience-soothing, bringing the handicapped into society, and trying to provide education for those people, we are now on the threshold, I hope, of moving from a survival program for the handicapped, to a thrival program.
When I think of survival, I think of providing a person with a minimum opportunity at potential success. Maybe that person will make it, and maybe he won't, but my conscience is appeased, because I've made an effort to provide some degree of opportunity for a handicapped person. You see, it's just a matter of degree. If we talk about survival, then we must strive to prepare pupils to live full extended lives, just like people who are not handicapped. We must provide them with opportunities to be interested and interesting in the world of which they are a part. I think affective skills are just as easily taught as the cognitive skills that we give 90% of our efforts to. When I think of affective training, I think about trying to help a person know and understand who he is, and a handicapped person certainly does need to know. You see, I think a handicapped person needs to know, "How do I see myself?" and, "How do others see me in relation to the world around me?" I think they need to be taught self-confidence, or how to overcome the things that they are afraid of. I think decision making, and accepting consequences, and emotions have to become a major portion of the training that we offer handicapped people. Certainly vocational education is important, but they must also begin to learn social coping and other life skills.

To achieve success with the handicapped, I think that we must convert abstract concepts to concrete experiences. There are so many ways we can do this, but when we stop to think about what happens in public education to "a normal child," we sit there with the textbook and expect that child to convert abstractions to concrete experiences of those things which he or she must know to succeed in life. Time after time after time, the abstract concepts we present to regular kids go over their heads, because they just can't bridge the gap between the abstract and the concrete. In education for the handicapped, we must remember that teaching a skill through vocational education is not enough. If we're to make these people independent, productive members of society, we must concentrate on attitudes and feelings for the affective side of learning.

Mathis: Thank you, Keith. Alton Ice is our next speaker, President of the American Vocational Association.

Ice: It's a privilege to be here. David is passing out a reproduction of some AVA resolutions that have been passed. I was asked to speak both from the AVA point of view and the advisory council. There is a National Association of Special Needs Personnel within AVA; the
President is Gary Meers, from Nebraska, and they're quite active. This is the newsletter called the News Notes. I know they are pushing for division status with AVA, and that requires 1500 members. There is supposed to be a national conference on special needs in August. All I'm saying is that if you have an interest in this area, this is one area to identify with.

Harold mentioned the matter of CETA. AVA has been quite active in the area of that legislation, even though the principle people in this are the Department of Labor and the CETA folks. We feel like we've made some progress. We have a long way to go, but we're still working. I think if we would work at the local level, try to find out just what the problems are, these could be translated. If the problem is a matter of national policy and rules and regulations, perhaps we can do something on those. Also, the AVA is interested in the excess cost issue. Frankly we don't think it's a matter of law, we think it's a matter of interpretation for the Office of Education. Yet, we may have to have a law in order to correct that. Consequently, there may be some technical amendments in this session of Congress to do that.

There is one section of the Texas Education code that simply addresses the matter of recommendations on the part of the Advisory Counsel. The Advisory Council is a body of 24 people, recommended to the governor for the State Board of Education. They are confirmed by the senate and they make recommendations to the State Board. This particular mandate came to the Advisory Council in House Bill 1673, which addressed the matter of vocational education for the handicapped. Maybe I'd better just read that:

Recommend and evaluate innovative programs, to assure that physically or mentally handicapped individuals who cannot readily participate in programs in vocational education offered in public institutions derive vocational education benefits from sums appropriate for vocational education by the legislative extending vocational programs through the nonprofit facilities.

This one talked about the responsibilities of the Council to make an annual report to the governor and a bi-annual report to the legislature. The Council's report that deals with the responsibilities is called A Joint Report to the State, December, 1978.
Now then, some of the recommendations of the Council that related to the handicapped populations through the years: In 1972 the council called for strengthening vocational programs for the handicapped. In 1973, the council called for assessing the effectiveness of vocational programs serving special populations, including handicapped. In 1974, improving educational opportunities for the handicapped and other special populations. In 1976, strengthening preservice and inservice development for vocational education personnel to enhance their work with students with handicapping conditions. The Council spoke to these same issues back when they moved the CVAE programs out of a special unit within the department into the occupational areas, feeling that you can't just move these things around. If the programs don't have some special attention of people to understand our programs, then you may end up killing the programs rather than strengthening them. In 1978, the council developed a special report on vocational education for the handicapped called Promising Practices. That publication and others are available to those that might have an interest. Thank you.

Mathis: Thank you, Mr. Ice. Our next speaker is Brenda Plant, the President of Vocational Industrial Clubs of America.

Plant: I'm from the Vocational Industrial Clubs of America, and first I'll tell you a little bit about what VICA is. It's the student organization for those enrolled in trade, industrial, technical, and health occupation programs. In other words, we do for vocational education what FFA does for Agriculture. It is composed of 275,000 members all across the United States. In VICA, we're working to create a common bond between students. Through our national leadership conferences in district, and state and local conferences, we create a common bond between these students and together, we work for VICA.

Until recently, we had no spoken special purpose for handicapped in VICA; we had no involvement with them. But, recently we have been called an excellent vehicle by which deaf students can be introduced in a meaningful way to the competition they will face in attaining positions and in enjoying success in the careers of their choice. We also had several handicapped winners in VICA. When I say winners, I mean in the United States Skill Olympics. There are about 26 skills contests at nationals. In 1976, we had two winners; one was paralyzed from the waist down, the
Pat Pound is President of the Coalition of Texas with Disabilities. She works at the Criss Cole Center for the Blind in Austin.

other was paralyzed in both arms and both legs. One competed in auto trades and the other in auto mechanics. Both won first place at nationals and went to international.

Now we have a national VICA achievement program for handicapped students. This can be a success through their involvement, because it's designed to find a mean of recognition for their performance. In other words, they compete against themselves, not against anyone else. This way they can be a winner and be proud that they're a winner for doing what they've done. There's a leadership side and a skills side; you work at both levels at the same time. And you work against yourself. There is a book you have to go by. When you compete it really gives your inner self the feeling that you've done something great, handicap or no handicap.

Mathis: Thank you very much, Brenda. Our next speaker is Pat Pound, President of the Coalition of Texas with Disabilities.

Pound: Let me try to tell you a little bit about the Coalition of Texans with Disabilities. To do that I need to give you a little historical development of organizations of the handicapped. If you track the development of such organizations, you find that most began in what we call a union of disabilities for development. For example, blind people got together to solve problems for blind people. Deaf people organized to solve problems of the deaf. Physically handicapped people got together to solve problems such as transportation, health care, etc. Gradually, they began to work on common issues, but separately.

As each disability group began to learn about the needs of other disability groups and discovered that there was tremendous political advantage in gathering together and working on common issues, there were the legislators that said, "You know when you folks can get together and decide what you need, I'll do something for you, but until then forget it." They decided that it was much to everyone's advantage to begin working in a form that now we call "cross disability." The movement in terms of cross disability began first with people learning about each other's disability.

Now, as opposite as the two handicaps may seem, deafness and blindness have a tremendous number of things in common, because many of the problems that are encountered are communication problems. One, with printed materials, the
other with spoken language: But, they can still be combined under the label of communication. Those kinds of problems can be combined with physical access problems into a whole area called access. Access to communications, access to world, access to buildings. So they are group problems and increasingly you can find issues on which larger and larger segments of disabled individuals can coordinate their activities.

Out of this background came the Coalition of Texans with Disabilities, an organization composed right now of six local and state organizations representing many various types of disabilities: deafness, blindness, physical handicaps, developmental disabilities, mentally restored, and mentally retarded. We also have a number of individual members. I have some materials which at the end of the session you're welcome to come up and take. The CTD is a young coalition. Because of that, there has not been a tremendous amount of involvement in vocational education specifically, but there are many ways in which the members of CTD would like to be involved.

First of all, we'd like to see disabled individuals as consultants in role models in all of our programs. This could be of tremendous value to vocational educators throughout the state. CTD will at any time be happy to develop or provide you with a contact with disabled individuals who understand the law, who know about the lives of disabled individuals, who know about development of needs, development of programs for disabled individuals.

There's another area that I think is very important that the coalition has been and will continue to be involved in. And that is legislatively. We are a nonprofit organization. We do not lobby. Instead we educate people. We attract large legislation on the state level and we have some involvement with the American Coalition of Citizens with Disabilities on the national level. In the past, if you said the word handicapped in the legislature, everybody jumped up and voted yes. It's time that we all got together. There's some things coming in the future that CTD is co-sponsoring. One is a conference we have in Dallas. Some of you may have seen this brochure. I have a few extra that I'll be glad to pass out. It's called "Issues and Mainstreaming." It happens right after the CEC convention, so if you're in Dallas just stay right on. Patricia Neal will be the keynote speaker. It's a tremendous opportunity for people to come together, learn together, and get our act together.
I hope we are here next year; I hope we are talking. There will always be problems, but there is a tremendous challenge. Disabled individuals are now understanding that things in their lives are not privileges.

Mathis: Thank you very much. Our next speaker is Mary Ann Webb, President of the Texas Association of Vocational Adjustment Coordinators.

Webb: Thank you. I enjoyed what Pat had to say about special groups joining forces in solving problems. We organized because VAC's have problems. Our organization represents the majority of 500 VAC's across the state; and yet I must admit that if each individual program were closely investigated, one would find as much diversity in our programs as one would find in the students that we serve. No one VAC problem is like another, yet we continue to exist. Our students' successes give us our accountability. TAVAC organized itself around three prime objectives dealing with this particular conference:

1. to aid the VAC in promoting the total development of handicapped students in the cooperative work program;
2. to enhance communication at the local and state levels; and
3. to aid in formulating and establishing curriculum for the handicapped student.

I want to refer to each of these and how we've tried to accomplish some of these.

The organization, I believe, existed for a long time to achieve one goal, and that was certification for VAC's. Our present executive board feels that effort is a dead issue, because we've continued to get no answer. As Marc mentioned yesterday, five years ago, we came very close, but as time has come along, we got tired of beating our heads against that same wall. We decided to take up some short-term goals to see if we could find some other reason for existing. We did it in vocational training, and we did present to the legislature a certification endorsement program for VAC's to receive vocational training. I did receive a lot of response from them individually, but we have not proceeded any further.

In attempting to enhance our communication we hold an annual statewide conference. This year it will be in Fort Worth, the first week in August. We do this without any
assistance from TEA, which pleases us, because that makes us very flexible; we can do our own thing. If you have ever attended one you would find it highly motivational and inspirational. This year, we'll be inviting VEH and CVAE teachers to attend. We hope that someday all of us will be joined under the same umbrella, because we are all vocational special needs personnel.

In order to meet the needs of this special group, we are spending an awful lot of time, money, and energy in developing inservice where we could combine all these efforts and have a fantastic one. I was glad to hear Mr. Ice refer to the TAVESNP* organization. I have worked very closely with Mr. Meers this last year in trying to affiliate our organization with his in some way. We're not sure just what kind of relationship that we're going to have just yet because we have just contacted TAVESNP in the last month and we are definitely going to join forces in some way. I feel like this is part of our responsibility as an organization, in representing professional educators, that we join forces with those who are meeting the needs of these special kids that we've worked with.

In the area of developing curriculum, we have accomplished very little, I'm sorry to say. When Tico asked me to bring this presentation, I wanted to bring something that was meaningful, so I went to a person in our district who is very well versed in vocational education programs. The question was, "What would you have me do, as the VAC referring a special student to one of the vocational programs, to make the transition easier on you and me and that student?" Now, I asked this of a vocational counselor. And this is the dissertation I got:

First of all, have you visited any of these programs, personally? Have you read any of the textbooks or manuals? Have you been to any of the shops at the area vocational school? Have you met any of the shop teachers? Have you tried to understand their views and why they are skeptical of having a handicapped student placed in their program?

This dialogue didn't happen with the administration building between us. This happened across our supper table because I'm married to this man. I suddenly realized that I had been guilty of saying what Marc had said yesterday

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*Texas Association of Vocational Education Special Needs Personnel.
we're not supposed to say, "Well the law says this and you're not doing it." But, even though we do now have more in vocational classes and we're going to have more next year, I didn't let him get by without a revolt.

We both started 11 years ago as mainstream teachers; his field was English and mine was math and science at the Junior High level. I suddenly found myself in a little community having to find a job and the only one that was open was special education, and that's how I got into special education. He became discouraged in the classroom, wanted to move up, and he became vocationally certified and moved into the vocational counselor field. I'd like to say that it has made our marriage strong. Let me put it this way, if our marriage wasn't strong, this would have destroyed it, because we do have a lot of professional dialogue.

In order to educate the whole child, we can no longer hide in our own little corner of the educational field. The responsibility must be shared. In most cases, the VAC knows how the students learn, but we do not know everything about what that student needs to learn. We are electives in our resources on the secondary level in skill training. Our employers have supported us in this effort; I don't know what we would do without the fantastic employers we have in Mesquite and across the state.

There are three key factors involved in a successful cooperation between special education and vocational education:

1. Teacher preparation. Vocational educators must receive training in special education and special education people must receive training in vocational education. The two have got to meet.

2. There must be modification of regular programs to enable the handicapped student to acquire a positive self-concept in vocational skills to accomplish vocational goals.

3. A positive attitude of both special educators and vocational educators that these things can be done.

Let me finish with this. Most of all, we need to make use of feedback from the handicapped completing these programs. The handicapped students and the graduates have so much to tell us—professional educators, that we need to listen and we must listen.
A PLAN FOR SECONDARY PROGRAMMING
FOR THE HANDICAPPED STUDENT

Eleanor Mikulin
James Cogdell

"Our primary objective was to identify the basic standards of quality education."

Mikulin: Secondary education for the handicapped student has been a priority in the special education division for the last two years. To give you an idea of where we are coming from, two years ago we were working hard at trying to decide how handicapped students would graduate from high school. At the time we met with Dr. Bob Montgomery, who at one time was the Associate Commissioner for Special Education. He is now the Assistant Deputy Commissioner for Programs and Personnel Development. We met with him and his grey area committee to try to identify means of graduation for handicapped students. At that time we were told, "We don't know how handicapped students can graduate from high school or what the best method would be, but you make a plan and we will present it to principals, school administrators, and so on, and we will see if they will approve it."

That began a long effort to develop a plan for secondary education for handicapped students. You may be familiar with a plan with two formats. It was mailed in January, 1978, and responses were received by April. A rewrite was done on that plan from the 300 responses; we literally threw it away and started over. We renamed it and started over with a plan for secondary programs for handicapped students. We have been working with a committee composed of people from general education, including one person from math, one science, one reading

Eleanor Mikulin and James Cogdell are chief consultants at the Texas Education Agency in Austin.
and English, one strictly reading. We have also been working with people from the vocational division. When we began developing the plan, every division or every area in vocational education had a representative on the committee. For the implementation of the plan we are working with fewer individuals from general education, and with Hayden McDaniel and James Cogdell from vocational education.

I see some of the people in this room are part of the pilot. A request for volunteers for piloting was sent out in November of last year. In December we had 49 schools that had volunteered to be pilot representatives on the project. We were asking for a commitment from the school districts to send the building principal, to send the vocational education, special education, and regular education administrators. In some cases, it was simply the teacher in the small district; in others it was an administrator. They were asked to send these representatives and provide the transportation and per diem expenses for their personnel. They are making three trips to Austin to work with and revise the plan for secondary programs. The other commitment besides personnel and money was that there would be coordination and effort between regular, special, and vocational education, to develop the plan in the school district. We have 18 school districts now that have met in Austin twice to develop the plan for secondary programs. The third meeting this year will be on May 1 and 2. After that meeting, we will be able to say this is the pilot plan that we will be using in our school districts next year to see whether it is workable. Then we are setting up the framework for education of handicapped and for allowing handicapped students to receive credit and graduate.

I want to tell you our goals and a little bit about the plan, and then I hope we'll have a minute for questions and answers. Our primary objective was to identify the basic standards of quality education which would lead to graduation or to completing identified competencies. The second goal was to determine the continuing curriculum elements for instruction and related services needed for secondary educational programs for the handicapped. The third goal was to provide guidelines for coordinating the program resources within a school district, including academic, and vocational education and to provide for the education of handicapped students. The fourth goal was to encourage total coordination of school and community resources for the education of handicapped students, including the use of any available community resources and other agencies. The fifth goal was to identify methods by which students may receive credit from regular and special education courses leading toward graduation.
Briefly, we have taken the five essential curriculum elements from the policies and procedures for accreditation. The legislature says that every student will receive instruction in English language usage, mathematics, citizenship, health and physical education, and science as required by the State Board of Education. The sixth essential that we are adding to this is the need for vocational instruction. We are saying that handicapped students should receive instruction in these six areas during their high school career (more or less four years according to the needs of the student). We are setting up an ARD committee in conjunction with a school counselor who sets up a graduation plan for high-school-aged handicapped students. This committee is to plan a sequence of four or more years for developing a high school education for handicapped students. In developing this graduation plan, the ARD committee members are assigned or requested to consider placement in either regular education courses, specially designed courses, or highly modified courses.

This brings us to the meat of the whole plan saying that each of these six curriculum areas are essential. Every student must, by law, be instructed in these six areas. Therefore, different handicapped students will need to receive instruction in different manners. We have named the three instructional options. They may differ in method of instruction and the materials that are used.

To give you a quick overview of what we are suggesting, Option One will be courses taught by regular teachers, attempting the same goals set for every student in that course. At this point in time there is discussion as to whether we should add a statement that the instruction may have a different level of attainment for the student. We have discussed it at length. Option One is, typically, regular education with support by special education. In some school districts, they may place handicapped students in with all regular courses to the maximum extent possible, and the courses or attainments by individual students may differ.

Option Two is specialized instruction taught by special education teachers. We had arbitrarily put the VEH units or VEH teachers in Option Two, because it is specialized for the individual handicapped student. Option Three is for severely modified or adaptive instruction for severely handicapped students. It will develop self-support skills.

The purpose of setting up the options is to show
that instruction may occur in English, whether it is in English literature, or speech, or functional reading, or working on a sign board. The same type of instruction or same curriculum area will be addressed with modifications to course content, so we have one student who may at any time during his four or more years in high school receive instruction in any of the three options. For instance, you may have a handicapped student who is a non-reader. He does okay in math so long as he doesn’t have to read. The choice would be to take the courses primarily geared to reading in Option Two, or to have a recorded text or recorded instruction. And this type of support would be used in Option One. The student does fine in math, so he is definitely in Option One. History, you need to read, so he is back to Option Two instruction. He does great things with his hands, so he is in regular vocational education, but he has support necessary to read materials. He has a physical disability and needs adaptive PE. You are going to have a difficult time finding this kid, I know, but if he has a need for adaptive PE, that would be an Option Three. So one student may receive instruction in all three instructional options at any given time, according to need.

At the end of four or more years, that student is expected to have earned 55 quarter units of credit, or more, according to local policy. At that time the student will graduate. At our last review session we added a few things about graduation. Most of you are familiar with the VAC program, the work-study program. Our first draft plan said that a student must stay two years on campus to receive instruction, prior to placement in on-the-job training. This seemed to cause a problem, since it was arbitrarily decided that out of 55 quarter units, only 24 may be used for on-the-job training experiences. So we are going to discuss that at our next meeting.

During this coming year, it is going to be piloted. We hope the kinks will be ironed out and that in the following year, 1982, it will be available for all school districts. There may be individual regions that want to attempt to begin this year. After this overview, do you have any questions?

Audience: Concerning 55 credits, do you have it measured out among the areas of education?

Mikulin: You saw the first plan. It specified the number of credits in English, history, etc. We really got a lot of input on it. Now when the graduation plan is developed, the ARD committee along with a local counselor developing the plan must decide on the student's needs. Special educators may feel that one student will need four
years of English and other students may be able to learn in only two years. The one thing that we are saying is that every student will receive instruction in all six areas, at least one time, during their high school career. We are not spelling out so many credits for one year.

Audience: Are you specializing levels? In other words, does it have to be high school math for a handicapped person?

Mikulin: No. He may receive instruction in Option One, Two, or Three.

Audience: And you don't specify what kind of credit?

Mikulin: There is a portion addressing awarding of credits. It says that the ARD committee for a more severely handicapped student will set up goals for the student, and for each goal they will give credits. This is a way that you can assign credits, assign courses, without at the end of just so many years saying, that's it.

Audience: Will there be different diplomas?

Mikulin: If you are going to graduate a student, and local policy right now controls graduation, they will receive the same diploma. We are not saying that every student will graduate. The legislature may make that a decision for us, however.

Audience: How many students are we talking about?

Mikulin: I think I heard that there are approximately 13% identified handicapped students statewide. A year ago when I looked at the staff report in detail, there were some 90,000 at the secondary level, from grade seven on up. When we are talking about this plan it is technically from the ninth grade up. Numbers decrease in the higher grades.

Audience: Are students with speech handicaps going to be in regular programs or in Option Two or Three?

Mikulin: Getting speech therapy in a regular program would be letting them write a regular program with speech therapy as a related service.

Cogdell: As far as vocational education is concerned, we probably have more specialized VEH programs (Option Two) than any other discipline in the secondary
program. But we are stepping up our efforts to prepare the regular teachers to receive handicapped students through this mainstreaming effort. In fact, at our inservice workshop this summer, we have presentations designed to do so.

Mikulin: The easiest way to get inservice training is to go to a service center and have a region bring their personnel in. Then we can contact more people. I know it's simple for you to have it in your school district, but it will go further if you use the service centers.

Audience: It would be two years then, before the school districts really start using your plan?

Mikulin: That's right, but school districts that want to start going on this line can start putting it in place.

Audience: This will be a surprise for us who do not participate then and are not geographically located close to a district that is participating.

Mikulin: Service centers have people involved in working on the plan. They should know what is being developed and should share that with their people in each region.

Audience: It sounds like you rely on service centers a whole lot. Do you rely on the service centers more than you do TEA?

Mikulin: Yes and no. They are in the progress of things. They are the technical assistance and support to school districts. TEA is supposed to develop administrative procedures, do monitoring, and so forth. We are trying to develop this so that eventually service centers will be working with the school districts.
"These kids just really didn't believe in giving when I first got them. They always had their hands out to see what they could get. Now they're willing to share. When someone's birthday comes around, they always bring a card."

I teach a class in Home and Community Services to handicapped students. Most of my students are retarded, but I do have one CP.* And I have one of the best aides ever. Today I'm going to share some of the experiences I have had, some of the things we've done in my class.

At the beginning of the year I started with my students where they were, and for most of them that was dirty. Really! Right at the beginning I had them all bring me a change of clothes from home and for the ones who didn't have a change of clothes, I got people to give us some. Then I washed and dried their clothes at school because so few of them have washers at home.

You wouldn't believe how dirty those clothes were. One of the guys who is 20 years old pulled off a pair of shorts that were jet black. Honestly. Which all goes to show why they were smelling so bad. Being clean and smelling clean really changes their self-image. One girl was crying because the kids were making fun of her, so we sent all the other kids to the academic teachers and we washed her clothes, sewed them up, and helped her clean up. And now she's just a different person. She comes to school, when before she was absent all the time.

* Cerebral Palsy.
So this is something I do before we can start cooking or sewing.

Something else I do that doesn't directly relate to cooking or sewing but is really important is getting my students involved with the rest of the school. This way they're a part of the school, rather than "those retarded kids out there by the football-field." My students have entered in the dance contest with the other students. And for our F.H.A. - H.E.R.O. activity, we walked down to FedMart, selected roses, and planted them. We decorated our door at Christmas time. And we cleaned up the yard as our FHA project. All these help the students feel like part of the school.

As for cooking, to give the students some work experience, preparing food, serving, and selling it, we serve dinner to the faculty on Fridays. We have served fried chicken, hamburgers, cheeseburgers. We had an enchilada dinner and grilled cheese sandwiches. When we served cheese sandwiches we didn't get any Black teachers to come out, so we had to change our menu a little bit. We went to greens and pigs feet. Even some of the Anglos tried those pigs feet because they had never had them. They also asked me to do chittlings, but I didn't go that far because that's a lot of cleaning.

I really have to watch the kids. Once when we did collard greens, I showed my students how to wash the greens and I went back and started working with some of the others on the cash register. They washed those greens, cut them up and put them in the pot with some salt pork and cooked them. Well, when we served them, one of the instructors came across this white stuff in the greens and said, "Ms. Mitchell, come here and see what this is." And do you know what? It was the twine tied around the greens. The kids just dumped the whole bunch, rope and all, into the pot. The next time I was careful to demonstrate how to take the rope off.

We've done other things. At Easter time we tied eggs and hid them outside. And we celebrate a student's birthday when it comes around, by baking a cake for her. Those kids just really didn't believe in giving when we give them. They always had their hands out to see what they could get. Now they're willing to share. When someone's birthday comes around, they always bring a card.

To teach consumer education I show them how to

*Future Homemakers of America - Home Economics Related Occupations.*
comparison shop. Every Monday and Thursday when the grocery ads come out, we find out where the better buys are, like strawberries at 49¢, or lettuce at 28¢ a head, or six 32 oz. Pepsis for 99¢. And they compare: apples for 39¢ at one store versus 59¢ at another store. They come prepared to do this on Monday because they know the ads come out then.

We work hard on trying to find jobs for them. This summer Astróworld will be hiring 3,000 people, and a lot of my students would fill some of those jobs. We plan to go out and help them apply. This emphasis on employment is why I stress food so much. Right now there aren't too many clothing factories in Houston but there are lots of food places. I take them on field trips to show them how fast food places work, then we try to duplicate that.

We have done some sewing though. When we first started in this program I went out with the money we had, bought material, and we made tablecloths. Then when the district finally supplied fabric for tablecloths, we converted our tablecloths into aprons. We also made skirts for the girls and bow ties for the guys which they wear when serving dinner on Friday. You would not believe what a difference it makes in teaching them hygiene.

We work a lot on the cash register, too. We keep some of the money out and drill them. They give us change and then we give them a problem that a customer might give them, so they have to decide which button to hit to make the right corrections. We try to keep them thinking about working, so we use a lot of role playing. Like, I'm the customer and hand over my bill; then after they've run it up I decide to buy some mints or I decide I've been overcharged. When they feel comfortable with us I put them on the line when we're serving the faculty. I figure if they can't get a job preparing food, then at least they can get a job doing the cash register.

When we first started, the room was a mess. We didn't have our equipment and they really hadn't finished our building. So, we did macrame. Environment plays a great part in their training, so we worked hard on making our room look nice. We went out on the high school and cut some Pampa grass, bought some baskets and spray-painted them. I let the students help decide where things should go in our room, and what should be done to keep it clean. Most of them never had the opportunity to make those decisions.

Now, do you have a few questions?

Audience: What do you do when they make a mistake?
part? One of our students just sat by the side all the time because her mother didn't want her involved.

Mitchell: Invite her mother in to see some of the things that you are doing, even if you have to go get the mother and take her home afterwards. Most of my kids' mothers don't know what their kids can do. I call the parents when I get home to tell them that I'm real proud of the improvement in their child's grooming. I also call if the kids act up. When I ask them to, most of the parents come in.

If parents don't want their children cooking, perhaps they are on an ego trip, perhaps it's a matter of status. Then I think it's very important that you know why the parents have this fear. Status is harder to deal with than fear of equipment. Find out why parents have the attitude, then deal with the mother, not the student.

Audience: Here again, it might be education. And to go about educating the mother, invite her in.

Audience: When you come up across the status problem, show parents that what we teach is just the first building block and that their children can work up.

Mitchell: Does that answer your question?

Audience: Yes, I think that helps.

Audience: Can you tell us about the student whose mouth you washed out with soap?

Mitchell: That was Julie.* Julie used very ugly words so I called her father and he said, "Well you can tie her down. Just tie her down and whip her." I took that to mean I could do what I needed to. The next time she used the words in class to show off, I said, "Julie I don't want you to use those words. You know this is not the time and place." She kept saying, "You ain't big enough to do anything." So one day I just went and got that soap and washed her mouth out, and I did it three times before she stopped. But do you know even though she has since left school, she still calls me. She really wanted some discipline.

Audience: How old is she?

Mitchell: She's 17.

* Name changed.
Audience: Why is she not in school?

Mitchell: Well, her father worked at night and she would have boys over until 2:00. One night her father called and told her to get the boy out, and when she didn't, he called the cops. So she ran away from home. She's staying with her mother outside of Houston, too far away to come to school here. I gave her mother my phone number and I've had Julie call me at 3:00 in the morning. That just goes to show how much she wanted some discipline.

I think that you can talk man to man or woman to woman without being profane. I tell my students that the only reason people use profane language is because their vocabulary is limited. I grew up in the third ward in Houston, and I know those words and they know them all, too. You just have to give them something to replace those words. You can identify with your students and with the world they will face in employment without lowering your standards. These students need someone to look up to. I can be extremely rough with students, but I feel that they need to be taught respect for something and somebody. Most of them are reaching out for it.

Audience: To me it is the same thing that Betty is doing with the clothing and the body odor. She's upgrading them, showing them another way, so they will have more opportunities available.

Mitchell: Thanks. You've been a great group.
"I would like to develop some awareness of potential preconceptions that act as obstructions to the learning processes of our students."

What I am planning to do today is to try and get us involved in some activities together. In recent years we've all become very familiar with the term, "barrier free," as it has been associated with facilities that are accessible to all individuals. Until recent years very little thought has been given to the physical impediments that have been actually designed in, drawn right into architectural plans. Recently, just several weeks ago, on a CBS special report entitled, "How Much For The Handicapped," there was a gentleman being interviewed as he was wheeling himself to the top of the Lincoln Memorial. Some of you might have seen that. That memorial has been ramped at an expense of over a million dollars, which is quite an amount. He had been there before but at the expense of another individual who had bodily carried him up to view the monument that was dedicated to one of our nation's most outstanding equal rights proponents. But that's very humiliating. Environmental impediments such as those are being addressed now and corrected in existing facilities and in buildings that are now being designed. They're trying to work around those barriers and provide access to all individuals regardless of any sort of handicapping condition.
In addition to those environmental factors, however, there are also other impediments that arise for the handicapped. Those are what I like to refer to as internal obstructions. These come as a result of our own conceptual development. In other words, in growing into adulthood we have all drawn from many different sources and different experiences in making our concept of the world. As a natural result, we act with preconceptions toward individuals and the world around us. These preconceptions are not in themselves negative or positive. On an individual basis you could probably evaluate them properly. As educators we have preconceptions built in. They develop very naturally and we're not necessarily aware of them.

Today, I would like to develop some awarenesses of potential preconceptions that act as obstructions to the learning process of our students. The first step will be a little brainstorming session. I'm going to ask that we break up into three groups of six. Your assignment in that group will be for one person to take a piece of this newsprint and a pen and list some things that all of you think might result in an obstruction to the learning process of these students.

Remember, these are internal things. Let me offer an example. When I first started teaching General Construction Trades for the handicapped, one of the major objectives I set for my students was to learn linear measurement. By the time we're in the sixth or seventh grade, we've usually picked up that sort of skill, but many handicapped students haven't. So I went about trying to teach linear measurement. I had them measure 34 inches, 34 and 1/2 inches, or whatever, the way that I had learned it. I thought that this was the way to teach measurement.

I set out first to develop fraction skills. I drew my pie and I cut it into pieces and what happened? They all got hungry! They didn't quite relate the pie to measurement or to fractions. So we tried it with dollar bills and half dollars and quarters and what happened? Some of the money disappeared! I was really baffled by what to do with these kids and how to teach them one of the major skills in construction trade.

I finally realized that the reason I was having a problem was that I had in my mind a preconception of how to teach that particular skill. I had a preconceived method of learning in my mind. I knew the kids, so they would learn it this way, and that just wasn't the case.
I had to set out to find some alternate methods, some different ways to approach teaching that same skill. After our first activity, or actually at the very end of this session, I'll pass out a little learning guide. It's just a step-by-step process that I learned to teach measurements that has been working very effectively with my students.

I would like you to list any preconceptions you think might be operating. There are many possibilities. We base preconceptions on sex, on race, on appearance. Anyone who is overweight is always jolly. Anyone who is thin and tall should be a basketball player. So we have many preconceptions.

In this session accept any idea anyone mentions, build on the ideas of other people and don't edit anything. Just write down the idea. Number them as well. Don't be worried that I'm going to say, "Whose idea is this? Come up and tell us about it." That's not going to happen. You're just going to write them down. Then we're going to tape them up here on the wall and then we'll have an opportunity to discuss them briefly and go into another activity.

Okay, now that you've written your preconceptions and barriers, let's look at these lists. We have preconceptions based on outward appearances and barriers founded on messages we receive from parents, teachers and classmates. These are all very valid preconceptions that do exist in one form or another in our classrooms and in other classrooms. We've seen them operate in different areas of life all the time. And what we'd like to do is to get you back in your same group, get your pens out and try addressing these particular problems.

Now I'm going to ask you to come up with some ways to overcome, alter some of these stereotypes or to remove them completely. I will have the results typed up for you.

(The following is the summary sheet prepared by Terry Moynahan.)
PRECONCEPTIONS THAT MAY ACT AS BARRIERS TO LEARNING AND SOLUTIONS TO ALTER OR REMOVE THOSE PRECONCEPTIONS

Third Annual Vocational Special Needs Conference 1979
Terry Moynahan

1. APPEARANCE: dress, body, cleanliness, haircut
   SOLUTIONS: training for students and teachers—same reinforcement for handicapped and regular students

2. All people with handicaps are disabled
   SOLUTIONS: Public awareness of the advantages as well as disadvantages of being handicapped; for example, the advantage of being able to turn off a hearing aide

3. MODE OF TRANSPORTATION:
   SOLUTION: Emphasize the positive; for example, saving gas with motorcycles, exercise on bicycles

4. Parents are responsible for behavior problems
   SOLUTIONS: Spend more time with parents of behavior problem children, i.e., ARD's

5. SAFETY: Handicapped can't operate machinery
   SOLUTIONS: Awareness of how handicapped compensate with other abilities; adaptive equipment for special students

6. Sex stereotyping for vocational programs
   SOLUTIONS: Changing policies—career education—encouraging girls to enter vocational programs for construction trades, etc.

7. Handicapped are retarded
   SOLUTIONS: Public awareness, T.V. shows, movies, less use of general terms, i.e., "handicapped"

8. Learning by lecture
   SOLUTIONS: Learn by checking achievement on each child

9. All kids learn the same way
   SOLUTION: Public education about handicapped

10. Handicapped are feared by people
    SOLUTION: Volunteer programs, work with handicapped

11. Some handicapped feel inferior
    SOLUTION: Treat as equals, build self concepts
12. Handicapped need supervision  
SOLUTION: Proper facilities for type of handicap

13. Handicapped can't learn  
SOLUTION: Public education

14. Handicapped are slow  
SOLUTION: Individual attention (are they really slow?)

15. Handicapped look different  
SOLUTION: Education for children to prevent future misconceptions

16. Special education means retarded  
SOLUTION: More public awareness through TV and demonstrations. Have education majors take a special education course in college

17. Uncomfortable with retarded people  
SOLUTION: Community awareness programs. Demonstrate accomplishments of handicapped persons

18. Blind people can't see anything, etc.  
SOLUTION: Public awareness

19. Handicapped students are disruptive in a regular classroom  
SOLUTION: Awareness - Show local examples of success

20. Mental retardation is permanent  
SOLUTION: Public awareness

21. Slow learners are retarded  
SOLUTION: Awareness

22. Black children tend to be in special education  
SOLUTION: More education in field of sociology

23. All teachers are prejudiced toward minorities  
SOLUTION: Exposure to minorities

24. Limited English speakers are retarded  
SOLUTION: Exposure to LESA students. Also providing programs for LESA students.

25. Handicapped students are not safe in a vocational classroom  
SOLUTION: Awareness, demonstration, show statistics to refute this
26. Behavior problems should be in special education
   SOLUTION: Education of teachers to show purpose
   of special education

27. Retarded people don't adapt socially
   SOLUTION: Integration of handicapped into classrooms
   to give them more interaction and to change
   attitudes.
"Self-mastery is where individuals try different levels of difficulty, set up their own individual goals, and try to maximize their performance. It rarely occurs in schools."

I would like to begin by clarifying a couple of points. The first is acknowledging the difference between performance and competence. When a student does something incorrectly, we often assume the student can't perform the task. But a student could write down $2 + 2 = 3$ for reasons totally unrelated to math skills. For example, it could have been an attention problem. Let me give you a more detailed illustration from research. In these studies, the researcher first presented children with five clay balls in a line with one inch between each ball. Then the researcher showed the children a series of seven clay balls, but with only half an inch between each ball. Younger children will often look at how much space the clay balls cover and promptly say the first group of five has more clay balls. This experiment has worked again and again. Finally, one group of psychologists decided to see what other factors or variables were involved. Instead of using clay balls they used M&Ms. Suddenly, the five year olds had no problem deciding which group had more. Because they were getting the M&Ms, they were not going to take the group with less. Obviously, motivation had an impact. So we have to ask whether students lack ability or whether they are performing the task for other reasons.

The second point of clarification deals with the idea of success and failure. Our standards of success and failure vary. I have students in my classes that
get 90% on tests and are depressed because their expectation is 95%. In the same class, I have students with C's who say, "Whew, am I glad!" Whether you succeed or fail depends on your own expectations. You set standards for yourself and if you meet those standards, you are succeeding— even if that standard is a D.

Research in self-expectation goes back to the '30s. A familiar experiment uses a ring toss. When I illustrate it with my classes I use paper baskets and wadded up paper balls. The only direction I give is, "I want you to throw a paper wad in this waste paper basket." Some students will stand a little ways away and miss. Then they walk up a little bit closer and make it. Eventually they start moving back again, maybe at the end of the session they are back where they started. When people have a minimal amount of direction, they constantly evaluate their expectations of performance; they constantly change their ideas about what they can do.

Other research shows that when people miss from a long way back they don't feel bad. Shooting from way back is a very difficult task—no big deal if I miss. But when people missed from right up next to the basket they didn't feel that great! So just doing or not doing something not only makes you feel good or bad. It can tell you if you're too far back or need to throw higher. It can tell you if you don't have the right skills.

It is also private information. Whether you make the basket or not, your performance will not be written up in the morning newspaper. Self-mastery is where individuals try different levels of difficulty, set up their own individual goals, and try to maximize their performance. It rarely occurs in schools. First of all, schools are places of evaluation. Students are constantly evaluated, records are kept, rewards are given. It's no longer private. Secondly, school evaluation is "extrinsic." You no longer perform because you feel good or the performance feels good. You perform because you may receive praise teachers or gold stars, a car from your parents, a diploma, certain grades. This changes everything. In fact, some recent research has indicated that if you pay kids to do things that they previously enjoyed doing, when you cease to pay them they no longer do it. What often happens in schools that we don't allow this self-mastery system to operate. Are they learning a task because it is meaningful to them or because it will help them get out of school?

The third reason school conflicts with the self-mastery system is because schools have an expected performance level, an accepted criteria usually established by the teacher.
Regardless of the entry-level skills of the students, teachers have certain goals. Many students in vocational special needs programs can't make those established goals.

The scarcity of rewards for these students affects this individual goal setting. Grading on the curve is so prevalent that even if these students got up to 70% competency, because everyone else is doing so much better the student will still get a C or D. So what can our students do to try and avoid this psychological failure? One way to avoid a feeling of failure is non-participation: nothing ventured, nothing failed. If the student doesn't try and does poorly on the test the student says, "Hey, this doesn't reflect my ability. I just don't care!" Setting impossibly high goals is another strategy that is used. If I stand in the hall and try to sink the paper wad in the basket, I can say to myself, "Well, who cares? No one could have gotten it from way out here." Another strategy for avoiding failure is to insure success, to set very low goals. This individual takes four years of Spanish in high school, then goes to college and takes first-year Spanish. Cheating also helps to insure success.

It is odd, but even when you give these students success, it often doesn't appear to help them. They are still very unsure about their performance. These students are so afraid of failing, that when they succeed they come up with their own reasons: "Aw, it's because I was lucky. The teacher helped me a lot." They just can't believe that they have the capability. And what effect will this attitude have? First, the student will not expect to succeed in the future, will not expect to perform that task correctly. The student will not feel good about the performance. And when these students fail — as they have expected to — they say it's because they're stupid, because they didn't try hard.

So what can you do? Well, first you can train your students to say, "If I perform a task it means I am trying." Communicate to them that through effort they can succeed. Also, train kids to recognize that what they do has an impact on their lives. Another thing you can do is set real goals." Match your goals with the student's current level of performance. Try to get away from that conformity in goal-setting. These techniques will go a long way toward meeting their motivational needs.
"While it's important to set boundaries and to assign needs, it's also important to remember the unexpected capacities of people, and to remember that behind all our efforts is our desire to show our clients just how much they can accomplish."

When seeking to place a handicapped applicant in employment, you first need a clear idea of the handicapped client's abilities and limitations. This information helps match the needs of business and industry with the abilities of the handicapped client. Matching these needs is what this whole session is about. So begin by asking yourself: What are the potential employer's needs? What are the client's needs? What are the needs of my facility or program? What do I need to be able to bring all this together? How do I communicate to that employer that this client is an asset?

From these questions we get off into a whole web of philosophy that I have collected over a period of time, but before I get into my experiences and the attitudes and techniques I have found important, let me remind you of something. According to the theory of aerodynamics, as demonstrated through experiments, the bumble bee is unable to fly. The weight and the shape of his body in relationship to his wingspread makes flying impossible. But the bumble bee hasn't heard about all these scientific truths, and he tries anyway, and ends up making a little honey every day. So remember, everything that enlarges the spirit of human power, that shows man he can do what he thought he could not do, is valuable. While it's important to set boundaries and to assign needs, it's also important to remember the

Mr. Patrick is a staff member at the Institute of Research and Rehabilitation in Houston.
unexpected capacities of people, and to remember that
behind all our efforts is our desire to show our clients
just how much they can accomplish.

When I first started trying to place my clients, I
dwelt too heavily on my own workshop's needs. I would
walk into an employer's office with crisis written all
over my face, stressing my needs, and offering this
bagful of people I had, and get no results. So, I came
back to the facility, sat down, and worked out the prob-
lem. For one thing, we were trying to sell our needs
rather than meet the needs of industry. As a placement
person concerned with communicating to industry, con-
cerned with placing people effectively, you must first
of all sell yourself. The second thing you must do is
sell the facility you're working with. Describe selected
services and the disability group you work with. It's
really impossible to go into a business office and sell
the whole world of the physically impaired. This is
going to overwhelm the employer; he has a whole host
of rumors and fears that will block off your message. So
you have to become very specific. Talk in very concrete
terms about your facility and about your clients. Help
the employer think of your clients as people.

Then the third thing you do is describe one speci-
fic person on your list that you're trying to place.
If industry is opposed to hiring handicapped indivi-
duals, we have to sit back and decide what the needs
of industry are. What does a specific company manu-
facture? What are its services and commodities? How
are they succeeding? Before you go out trying to sell
anything, go out there and find out the needs. Then
show how one person from your group meets one of the
specific needs that industry has.

One approach I've used is to look up various com-
panies or organizations in the Houston/Gulf Coast Area
Manufacturer's Directory. Then I call the personnel
director, or the production manager, and introduce
myself and my facility. I ask that person whether or
not he would mind my mailing out some additional infor-
mation concerning our facility. If he says it's okay,
I send the information and give him two or three days
to digest it. Then I call again to find out if he
received his information and try to arrange an indus-
trial site visit. If his schedule does not permit me
to visit him, I try to arrange a time when he can view
my facilities and some of the services we have to offer.
When we meet I do not try to sell him handicapped as a package. At that time I'm just trying to get him interested, and I do that by really getting into what that manager or director needs. We discuss the number of his employees, what services or commodities he's involved in, whether he has ever considered employing handicapped individuals. I bring this information back and share it with my staff. Is this an appropriate company for us to work with? And more importantly, how can I communicate effectively with personnel from this company?

To show you how important this question is, let me just share some information put out by Employment Standards Administration of the U.S. Department of Labor. It starts, "What is the universe of the handicapped people?" The answer: "The world of handicapped population is estimated at over 300 million." The known population of the United States is over 200 million and conservative estimates place the number of handicapped persons between 16 and 64 (workforce age) at about five and a half million. And this probably doesn't include people with cancer, heart disease, diabetes, and many other disabilities which are barriers to employment. What are the handicaps of these Americans? Muscular or skeletal paralysis impair approximately 5,400,000 people. Mental retardation impairs 3,500,000. In the hearing loss category, we find 2,000,000. I threw those numbers at you to show that when you start going in attempting to sell the whole world of the physically handicapped, the numbers and the different disabilities can really swamp you. You have to sit back and decide whom you serve; and then you have to come up with some identifying terms so you can qualify and quantify what you can and can't do.

At our facility we do everything we can to get to know each of our clients personally. We do a big evaluation when they come in; we see that person every day; we find out what he can do and what he can't do. I ask myself the questions employers might ask about that client. I ask questions about accuracy, manual coordination, counting, color discrimination, following the diagrams and instructions, finger dexterities, following a model, etc. I find out various aspects of this total person. You can't describe the person as paraplegic, quadriplegic, diabetic because an employer is not going to relate to this medical jargon. What he's concerned with is, "Can this guy make some money? Is he a potential risk? How is he on co-worker supervision, attendance, punctuality, all those work-related factors that are so important? Will he cause me problems?" You
have to be very specific. I've seen some placement people get involved in the medical dictionary, coming with these hot terms. By the time they get through telling the employer about this person, he's scared to death. Employers need a stable work force. If you describe all your client's disabilities, why would the employer hire him? Instead, in the employer's language, describe how your client has overcome those disabilities, how well he works, why he would be an asset.

Stout University has put out a list of about 22 characteristics that you might observe in a worker. The list:

- hygiene
- grooming and dress
- irritating habits
- inappropriate behaviors
- communication skills
- attendance
- punctuality
- ability to cope with work problems & frustration
- tolerances
- personal complaints
- stamina
- steadiness (consistency of work)
- types of distractabilities the person might have
- conformities to shop rules and regulations
- methods of organizing tools and materials
- access to change
- reaction to unpleasant monotonous tasks
- social skills & relationship w/ coworkers
- amounts of supervision after the initial training period
- reactions or acceptance to the supervisory or authority figures
- amounts of tension
- aroused by close supervision
- requests for assistance from supervisor
- reactions to criticism and pressures from supervisors at work

These are what the employer is interested in. Your job is to collect the information, put it together, and present it so the employer will see the value of your client.

You know, it is easy to get frustrated in this job; it's easy to think all your noble goals aren't accounting for anything. You think about money problems, staff problems, placement problems, and you start taking these attitudes with you to the potential employer. It's written all over your face. Who could succeed with all those self-inflicted limitations, thinking that you can't do it? When that happens, look back and say, "Hey,
I'm not just a placement counselor. I'm also an employer consultant. Remember that you have a very important role working out a map for client and employer, matching their needs.

Audience: I find it difficult to get employers to make accommodations. How do you handle that?

Patrick: Go out into industry and spend some time observing that environment, then come back and educate your facility. Look at your resources. Do you have contacts with any industrial engineers? Do you have any contacts with retired businessmen, support groups? Start looking at your resources and then go back and say, "Well, if you consider hiring a person and if we could provide some of the technical assistance such as appropriate heights for tables, appropriate widths for doors and ramps, and such things, would you be receptive to this? Our experience has been that with assistance, employers have been receptive.

Audience: Do you go to large industries or smaller ones?

Patrick: Both large and small. An industry with seven to thirty-five employees would be small. We place people there and on up to some of the major companies.

Audience: Would you say large or small companies were receptive to providing accommodations?

Patrick: Here again, I think both would be receptive to it, provided you show a very technical approach and that you really know what you're talking about. You have to look at a very specific industry and know entry-level jobs in that industry could be modified and what would be required, right down to the heights of tables. And you have to know as much about your client. Business people are very busy, and you have to respect that. They don't want to do the thinking for you. If you come with a proposal or a packet, and it shows that you know what you're talking about, they will be more receptive.

Your resources will vary if you are in a rural community rather than an urban community. The state employment agency places a priority on money and overlooks skill requirements and advancement possibilities. So with state employment agencies, you have to help them see the information from a different perspective. You have to say, "Well, we may have been overlooking something. We may have been looking at..."
this position from the wrong perspective. If you sit down with the Texas Employment Commission managers, and explain what your goals are, describe the people you're working with, the employment agencies will get involved. But you've got to qualify and quantify what you're doing. You have to know what you want.

Another source of support would be the Governor's Committee for the Employment of the Handicapped. Looking at their innovative programs, decide what would be appropriate in your environment. They can give suggestions and recommendations as to what other committees you might get involved with, what groups could help you.

Remember, you want to stress your client's abilities. No one has to employ handicapped applicants out of pity. No one should. Instead they should hire handicapped applicants because the applicants are qualified, assets, and good workers.
"You're going to find that most of the people we work with can only name you ten or twelve jobs. More than likely, the job that they would be better at than anyone else in the world and would rather do, they don't even know exists."

We've got ourselves in the maze of teaching school and not children. I am trying to get you to see that if you'll find out what a child wants to do and what he can do and put the two together, you can teach him. If I had the power, I'd throw out all of the academic books that most of you use in your resource rooms, I don't think they're pertinent or relevant to what we're trying to teach them. I would also like to develop some continuity, K through 12, in most of the schools that I enter, including our own state department. Now the intermediate teacher is not too concerned about where students are going from her classroom; nor is the elementary teacher.

Last year in my home region the eleven VAC's took 374 students. They ended the year with them earning $1,283,000. They paid $185,000 in income tax, and they paid better than $50,000 in state sales tax. So when I go into a place and sometimes I'm asked to address administrators, school boards, etc., I use this argument. You probably also know it takes $4,700 a year to keep someone in a state mental institution. The average welfare recipient in Texas draws $2,400, and the average special education student, secondary level, requires $1,200. If we spend $1,200 a year for four
years, and if we've done our job, we put him out in the world of work. We've got $4,800 invested in him, and he'll pay that back in four years. If we graduate him at 18 and he retires at 65, that's 47 years of his life he spends working. Now don't tell me education of the special population costs; it pays. What you invest in that fellow in the penal institution, or that lady in the mental institution, or vice versa, it's gone forever, you never recover that; but you can recover what you spend for vocational training.

This vocational evaluation is the simplest form of evaluation that I would even attempt to use. You get any more simple than this on a vocational evaluation, I think you're doing an injustice to the student. I developed a vocational evaluation system, but when I gave it to the teachers and so forth they talked about what a beautiful work it was and how much information there was, and put it in the back of the file and never used it. I asked them where I was missing the boat, and they told me if I put it all on one page they'd use it. I threw out the irrelevant material, and got it down to three pages.

Let's go through what we're using, where I got it and what I paid for. For manipulative skills, we're using a new peg board. The Pennsylvania Bi-Manual Works Sample is the bolts and nuts. The Minnesota Rate of Manipulation is this one, the Minnesota Spatial Relations Test is this one, and the Practical Dexterity Board is over there on the floor. I use some other boards for particular cases such as a child that's interested in small appliance repair. We have no way of testing him, other than the very fine motor skills with eye-hand coordination, finger dexterity, and we'll go to such things as the proper small parts that has to be administered with tweezers and the fine screw driver. We don't use that on all clients, only on those with special abilities and special needs.

I call your attention to one thing that you might think is a mistake on my part. If you'll notice the Minnesota Spatial Relations Test in the J. A. Preston Corporation is listed as $396.75. That is the correct price. The exact identical board from American Guidance is $230.00. Shop around before you buy anything. For interest inventories, my preference is Becker, the American Association on Mental Deficiencies, Reading-Free. You can get a sample copy of that now for $10.00 and it's good. Also, use the Wide-Range Interest Opinion Test (WRIOT). All of our commercial companies are capitalizing on 94-142 and the fact that we're trying to keep up our evaluation program.
Audience: Who administers these tests?

Pendleton: When we started several years ago, we used VAC's, because VAC's did not yet know what it was they could be hired for. Then they became employed in other areas so that I couldn't use them anymore. They didn't have the time. So I started with diagnosticians. Diagnosticians and I differ, because I don't think IQ has any place in a vocational training for the handicapped, and I certainly don't think a diagnostic report has. It is totally void of work. You can find out what a kid wants to do and he may bust his insides for you, but he may spend the same amount of energy harassing that classroom teacher, because she's not teaching what he wants to learn. I will rephrase that: Within the last six months I've had more diagnosticians at my workshop than anyone, and we are now working beautifully together; but I still say you cannot write an IEP from a vocational evaluation. By the same token, you can't write one from a diagnostic evaluation. But, if you'll take a diagnostic report, a vocational report, and any other pertinent information you've got, and scatter it out on the table, it's very simple to write a beautiful IEP. Now, to further address the question you ask: If I had my choice now of whom I would go into the schools and work with, it would be with the teacher's aide.

Audience: My question really is to find out if there has to be certain certification to do evaluation.

Pendleton: No, ma'am. The very best evaluator I have working now is an aide. I do have some resource room teachers that do well, and seven or eight real good VAC's.

Audience: Do you find that on these tests across the board the kids score well? We are using it since you were in our region, and we found our kids scoring awfully low.

Pendleton: Depends on the ones that you are using. On the lower level boards that you expect the handicapped population to achieve on, they score low. But on the Minnesota Spatial: there are four forms, 58 cut outs each. The boards are marked A, B, C, and D and should be given in that way only. Given progressively, this particular test is free of verbal intelligence, free of previous experience. It's the best measure of mechanical aptitude I've seen, and it tests the ability to recognize odd sizes and shapes. I have had some handicapped people score as high as college graduates. By the same token, I have some who, after 10 or 12 minutes, obviously can't hack it. Then just put your arm
around them, and hug them, tell them they've done a good job, and then go to something else. For some you'll find that you haven't got a manipulative skill that they can do. But I also find some resource room teachers that can't, so I don't hold that against them. In the workshops we sometimes test the people who actually administer the test and I norm them on their norm sheets. It's very disappointing to a lot of people. Most of the educators I work with have one very dominant hand and the other hand's virtually useless. They obviously haven't changed any diapers or played a piano, or strummed a guitar, or typed or any of these other things that require cooperation between hands.

This is what I think a cumulative folder for a secondary handicapped child should look like. On the fly sheet you'll see what has been administered to this child and what has been done. I took this out of the case file, but I've changed it. The front page includes the vocational write-up. I want them to know low interest as well as high interest. I remember this particular kid. Look at his interest on the front page. He had 100% interest in animal care. His second interest is patient care, his third is horticulture, and then store room messenger. In an interview we asked this particular kid, "Would you work outside all of the time?" He said no. "Would you work where you got to do the same thing everyday?" He said no. "Would you take a job where you have to work by yourself?" No. "Would you take a job where you have to do heavy lifting?" No. Where would you recommend that we job train him, based on what I've told you right quick?

Audience: With a veterinarian.

Pendleton: And he worked beautifully. The vet's proud of him. He's going to graduate this time and stay with the vet. The only thing wrong with the kid is that he's getting too important, he's getting over educated nearly to the point that I'd believe he'd do brain surgery if he'd just get a dog to lay still long enough. We may have overtrained him. He's having a little trouble keeping the proper prospective. He doesn't understand that he's not yet an assistant vet.

When I started doing evaluations, it took me a day for each one and a day to write one up. Obviously that was too long. So we started taking them in multiples of four. Testing four children starting at 9:00, I can be through by 1:30, 2:00 at the outside. I have my write-ups typed, so that all I have to do is fill in the blanks and the
secretary knows enough about me to know what I'm saying, and we have our write-ups done at the end of the day.

Throughout the test, I ask these kids, "If you could do anything in this world you wanted to do, what would you do?" There's 44,000 jobs in Texas. You're going to find that most of the people we work with can only name you ten or twelve, because those are what relatives and friends are doing. More than likely, this job that they would be better at than anyone else in the world and would rather do, they don't even know exists, because our career investigation or job exploration is not good enough to expose these people to enough jobs.

Start with the Purdue Pegboard. The instructions are to pick these pegs up one at a time. I'm going to be looking to see if you use this finger, this finger, these fingers, if you go directly into the hole, if you get overheated and have to feel and hunt to the hole. I want to know how mature you are, vocationally. How well does your right hand work? You do this three times at 30 second intervals. Again, you tell them to pick up pegs one at a time. Now if the kid cheats every time your head's turned picking up three or four of these, you call his hand on it and set on him pretty firm. If he'll cheat on this, he'll cheat on the job. He needs some behavior modification.

At the end of each one of these profile sheets, we have a place to put notes. I'll get behind this trunk with the lid raised up and keep notes on that dude. I don't ever let him see me keeping notes, because he's going to tell all of the intimate gory details of his home life and his personal life but he won't want me blabbing it. If you ever betray that kid's confidence, you've lost it.

I dearly love to do the evaluations, but I hate to write them up. So, because I know that I procrastinate, I have now trained myself to do it right away. This is the way I keep up with the children, but as I am giving the test or as we're visiting over coke or coffee, they'll tell me a lot of things about their personal habits, their personal life, their family; I'll make notes. I don't always put them into the write-up, but I'll make a set of notes on the side. When we go back to the committee meetings with a vocational plan, if they don't have the tape recorder running, I will tell them the things that I found out about the child (but you'll never write in a vocational plan that this boy's mother is a bootlegging prostitute!).
Anyway, you go back to the left hand, on this board, see how many pegs they can get in 30 seconds and you do that in three tries. Then you do it with both hands at the same time. The fourth and final thing, done in 60 second intervals is to pick up in order a peg, a washer, a collar, and a washer. You're going to have to take the child's hand in yours to show him. He's going to have to build some of these until he learns how to build them, then you go back and let him do it on his own. Then when you're through you'll take a profile sheet, and show the child exactly where he stood and what he's got to do to correct it.

Now, I can tell you some things to do in the home, in the resource room or in P. E. to correct these deficits. Everytime you get a chance to do something with your hands, do it: Squeeze a 10c rubber ball, punch a bag, juggle rocks from the yard, type on a typewriter, or play a piano, strum a guitar, dribble a basketball, do it, and use both hands. None of these things cost money. Get an old engine or motor, steam clean it, put it in the classroom and take it apart and put it together. The very population of kids that are needing the greatest physical education are getting the least, so I quit trying to fight the elements and started trying to breed a concept in the resource room that will do the same thing. When we finish up an evaluation, we write a plan for the home, the school and the job. We call the parents and say, "This is what you've got to do to help us help your child, because his hands are not saleable at this time. I don't want him sitting his feet under your table the rest of his life; I want him out on his own. This is what he can do; but you are going to have to help us. You're going to have to give him definite duties and responsibilities with reward and punishment commensurate."

One of the picture interest inventories is Becker's Reading-Free. This is what it looks like. You go down through your answer sheet. The first lady is working in laundry, the second is repairing a chair, the third is a mail clerk. Which of those jobs would you rather do?

You go to the next page, next picture, and when you get through then you plot the scores. Now these are such that the child cannot load it on you. Now when you put it over the profile sheet it's going to show you that there were 15 pictures in patient care and they picked 14 of them. You've got to percentile it out. This is probably their number one interest. What areas did they have no interest in? You also plot that.
I am real, real, particular about getting an interest. There's no way I'm going to play God to a kid by saying, "You look like you'd make a welder" and at 18 put him on a job and find that it literally blows his mind and he feels like he's hung there for the next 47 years of his life. He's got to have an out. That's why I use a job sample. We spent six months training a kid to be a welder. He was good. I took him to my farm and started him. He built a feed trough and sold it, and he got a job. They set him on a little stool with a big tank and a jib and he sat there eight hours every day welding. It blew that kid's mind. He couldn't take it, so we had to find him another job. Had we put the boy on a job sampling situation, we would have saved six months of our time and his time. We should have tried him before we trained him.

I think it's time to go. If I can help any of you, holler; I dearly love to work with these kids.
DON'T JUDGE A PERSON BY A LABEL: ATTITUDES TOWARD DISADVANTAGED MEXICAN AMERICAN STUDENTS

Olivia Rivas

"It's unfortunate that we have to use all of these labels. They probably have hurt minority children more than anyone else, because in the past and even today, people form stereotyped images."

I'm from Brownsville, Texas, and we are largely Mexican-American. We have a lot of students coming from Mexico this year. Disadvantaged students can be found everywhere. They aren't necessarily Mexican-American students. They can be Black Americans, Anglo Americans, they can be handicapped individuals. "Disadvantaged" is such a broad title. A student can be disadvantaged because of a minority group membership or be actual physical disadvantage, and this allows including a lot of people.

When I tell teachers that they are going to get disadvantaged students in their classroom, they get very uptight. If I go to my Auto Mechanics teacher and say, "You're going to get a special education student who has a learning disability, aphasia, and he can't communicate well because he has a limited vocabulary," the teacher gets pretty uptight and says, "Well, how do I help him?" When I say, "You're going to get a disadvantaged Mexican-American student," that brings some uneasy feelings, too. They have some preconceived ideas as to what Mexican-American students are like. But when I add the entire title, "disadvantaged, Mexican-American, learning disabled student," that really overwhelms them. They feel very threatened about it. They say, "Well, I can't work with

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special education students. I haven't been trained. And I have never had Mexican-American students. They're probably migrant workers, and they don't know how to read or write in English. How can I communicate? I can't do it."

It's unfortunate that I have to use all of those labels. I'm not using the labels, because I think they're necessary but to use another advantage to using labels, there are disadvantages. It's probably have hurt minority children more than anyone else, because in the past and even today, people form stereotyped images in their minds. For example, when you say "disadvantaged" you think of someone on food stamps, or someone who doesn't want to work. You have misconceptions that may or may not be true, because you generalize your misconceptions. By the time the student comes into your classroom, he's got to fit some preconceived ideas as to what he can do and what he can't.

Of the popular misconceptions that people have of disadvantaged Mexican-Americans, probably the one that seems to bother me the most is that Mexican-American students cannot learn because they are bilingual. How many of you have heard this? I heard it last week with my own little girl who's in the first grade. She's in the first grade, and she doesn't speak a word of Spanish. We speak English to her at home. But her elementary teacher believes that because she is Mexican-American, she is bound to be bilingual, so she is going to have problems in school. According to current misconceptions, if students are bilingual, they're confused because they're learning two languages. And yet, for every study that says bilingual children grow up confused, there is another study that says they do not. We do individual students harm when we force them to fit our conceptions of a large group.

Another popular misconception is that parents of disadvantaged students are not interested in their children's school. There are quite a few parents to whom we write letters, who never come up, who never find out what their children are doing. So we say, "Well, parents of disadvantaged students are not interested in their school." We tend to generalize, and that hurts certain students a lot, because their parents do care and do want to come to school.

Audience: Do you get many parents of disadvantaged children who come up to the school?
Rivas: Well, we get some. We get one group who is really enthusiastic about education! "This is the key to success," they say. "Without it you're not going to get ahead. By God, you're going to get it if it kills you."

Then, particularly among the more recent immigrants, we find the attitude that education is a frivolous thing that isn't needed by girls (although this attitude isn't as prevalent now as it was eighteen years ago). When you go to these parents and say, "Your daughter is not doing well in school, she's not passing the test," their question is, "Well, why'd she even have to take it?"

So you take each case on an individual basis. "Yes, this student is going to have problems being bilingual." "No, this particular student is not going to have problems." "Yes, this one's parents care." "No, this one's parents don't care." I tell counselors to try not to generalize. You need to develop an awareness, a sensitivity for the group that they come from, and yet treat each one individually, and this is very difficult. I wish we could describe a student's problem, describe what extra help that student will need, without using any labels.

Audience: Let me tell you how we've done that. We have more or less abolished, except in special cases, our referral program. We've encouraged our teachers to develop a plan for each child. If that child's plan happens to be in the area of special education, then it is the special teacher assigned to that cluster who provides for unique needs while the other needs are taken care of within the confines of the cluster itself. Thus, the classroom teacher still retains privacy for the entire education program itself, and specialized help is required to come into the cluster and work with it so that each child receives basically the same treatment, the same attention. The treatment will vary depending on the individual.

Rivas: I wish we could do that, and I'm coming from a school district that you would think would have a better approach since we have so many Mexican-Americans. I am an advocate for taking the individual and finding out what that student's particular needs are. Unfortunately we get hung up in the system. I heard someone ask at the Issues Panel this morning, how to streamline the referral process of the ARD committee meetings. Mr. McDaniel answered that he didn't see how it could be done. It had to come from us, from the local level.
Let me give you an example of something that happened earlier this year. I had a student come in at the beginning of the year. He said he wanted to drop out of school. He was very upset. He didn't like his program. He didn't like what he was doing, and he had a lot of trouble. I found out that he was not happy with his schedule. His counselor had given him college-bound classes, and he was having a very difficult time in college-bound English, Chemistry, and Algebra. He told me that he had wanted to get into Appliance Repair but was unable to at the beginning of the year. His brother had been in Appliance Repair and was now working at Montgomery Ward and doing very well. So I said, "Well, fine. Let me check your record and see if I can't change your schedule." I went to the Appliance Repair teacher and said that I had a student with a special kind of problem, who needed some help. "It's a migrant student, 15 years old, and only in the tenth grade." And the appliance repair teacher said, "Okay, I have room for someone."

Meanwhile his college-bound English teacher had noticed he wasn't passing in the classroom, and referred him for special education. Well, they sent the letter home to give the parents, because as you know, parents have to approve testing. The parents never signed the letter, never returned it. Two or three weeks later he came by and said, "When am I going to go into your program?" Well, I couldn't do anything for him anymore because the referral process had started and I couldn't change his schedule until that committee said what to do with it. If the referral hadn't gone through, I probably could have done it.

About a month or two passed and he was still not in the program, still failing. So, I called him down and said, "What's the matter? Why haven't your parents sent the letter back?" He said, "Well, my father didn't understand the letter." Now, even though the letter went home in both English and Spanish, it was written in such correct Spanish that the parents didn't understand it. It's not written in what we would call local language. The boy said, "My father read the letter, but the only thing he understood was that I couldn't learn and there's something wrong with my head, and my father won't let me test it." I said, "No, we're not saying there's something wrong with your head; we just want to do some achievement testing to find out what kind of special help you need. Ask your father to come and see me and I'll explain it to him." So, the father came and I explained what the special education referral process was. I said, "We're saying he has a learning problem; he's not doing well, because something is
It--DON'T JUDGE A PERSON BY A LABEL

And he said, "You're trying to tell me he is crazy, and that he is going to take psychological exams and that you are going to send him away to a hospital." That's how he interpreted everything I said, and all the letter had said!

The father finally said, "If you'll give me your word that you are not going to put tubes into his head and are not going to send him to a hospital, I'll sign the paper. I'll take your word. You don't have to explain anything. And he finally signed the paper, and the student went through the referral committee. His problem was that he needed glasses, and that he didn't belong in a college-bound program, and that he should go into Appliance Repair.

But all that had taken three months! By this time it was early March and the appliance repair teacher said it was too late for him to come into his classroom. In all that red tape and in all the system, the individual student got left out. The whole problem had been a lack of communication. And we seem to forget that these students come with different values and different cultures.

Audience: Speaking of that, do you find it very prevalent in your part of the country that severely retarded Mexican-American children tend to be closeted away from the general public because it is a threat to the father's machismo?

Rivas: Yes, it is. Children are either "loco" or "normal." There's nothing in between, no degree of handicapping conditions. "So, therefore, we either keep children hidden or bring them out. This is prevalent and it's very, very hard to reach the children. It's very hard to understand.

Culture has a big effect on our lives. It's not just with Mexican-Americans, it's with blacks and anglos, too. The disadvantaged have a culture of their own. There are many superstitious beliefs. There is a mistrust of the school and a fear of being "found out" and discredited.

Let me mention some things before I run out of time. These are some of the common characteristics that Mexican-American students exhibit in a vocational program or a special education program:

1. Short attention span;
2. Limited reading and writing ability;
3. Limited self direction (structure). Many of the students become confused when they get into an L/LD class or a vocational program away from the regular classroom, because of the lack of structure or order. Therefore, you have to have some strict, firm, but necessary rules in working with the students.

4. Poor learner self-concept and fear of failure. Notice I said poor learner self-concept. Many of them have a good self-concept once they get out of that school room.

5. Low levels of aspirations.
"If we just take the time to say, 'This is your student, this is what she can do, and this is how you can help her, this is how she can help our classroom, more of our placements would work.'

I'm going to start today with mainstreaming. Dr. Marc Hull said yesterday that mainstreaming is very, very good for some people, and very, very bad for other people.

Some students need some self-contained classes to fall back on for self-preservation. Some of these kids will never be in the real world. To force them to go through mainstreaming is not justifiable. It's not their least restrictive environment. You definitely have to look at mainstreaming very, very individually, if you don't want to defeat its whole purpose.

Let me tell you about a quadriplegic boy, who was paralyzed from his neck down. When he was 10 years old, he was playing army with his brothers, and with real guns, unfortunately. One of them went off and shot him in the neck and he was paralyzed from his neck down. At our school, we had him in a self-contained class, but for a 15-year-old, he was very intelligent. We could not get the regular high school to take him because of the personal care he required. Finally, at 15, it came out, we mainstreamed him into Scolling. I was determined that Roger* was going to eat lunch room like everybody else, but it got to the point where he wouldn't eat anymore. One of his really good friends

*Name changed.
who had been in a wheelchair from birth came to me and said, "Chrissy, you've got to remember that Roger is not like me. I've always been in a wheelchair so I can cope with it much better. He can remember what it's like to run and to walk and to do the things that he can't do now. It's harder for him."

She really woke me up to the problems mainstreaming can sometimes cause. I'm the counselor and here was this student telling me something I should have seen. She suggested, "Let him come into the lunch room twenty minutes early and feed himself, and then he can stay for the social part of the lunchroom. But don't make him embarrass himself." Now he's coming to school, he's doing great in his academic courses, he's just fine. It was little things like that which would have ruined mainstreaming for him.

Another problem was that when we mainstreamed all the students, we didn't prepare anybody, principals, administrators, teachers, or the regular kids who were going to have them in their classes, or the janitors, or the people in the lunchroom, or the bus drivers. It is really very easy for any of you to adapt yourselves to a handicap, but you have to experience the handicap. You have to put yourself in that handicap and try to be the student. Teachers need to be in a wheelchair for a while, or in a job blindfolded.

Also, before you even start to put handicapped students in vocational training you need to do a study on who will hire them. While your task is doing this study, teachers need to be in the classrooms, rather than at meetings talking about what they're going to do. They need to be with students so they can see what those students are like, so they can go back to whatever job they're representing and say, "Gee, a deaf student could do this, a student in a wheelchair could do this, a blind student could do this," and then suggest the right training.

To get our school prepared for mainstreaming, we have a handicapped awareness day. Everybody picks a handicap to have at least one day. Having a handicap for one day is such a small thing, but it really puts things in perspective more. Once when a student was sorting something for a vocational assessment, I couldn't understand why the student in a wheelchair was having trouble. I was sitting down and I could see it! When I got in a wheelchair I was at a different angle to the table, so I understood why he couldn't see everything.

School districts need to start having workshops for the regular students who are already in the classrooms. They're curious. They've never seen kids like that. They want to
ask questions but don't know how to ask or what to ask. They often tease or make fun or mimic just because of their questions. We had a blind student and I saw three students in the corner of the auditorium walking around with their hands out, pretending they had a cane out in front of them. I just went over and said, "You kids don't know how valuable it is for that person to tap his cane and find out what's in front of him." It's amazing how fast a little bit of awareness helps these students become more sensitive. Even the custodians and the people in the lunchrooms are glad to know where to set the plates so the kids can reach them, to know how to help them in the bathrooms, how to help them get on the buses.

Inservice doesn't need to take a long time. For one student, you can do it in 30 minutes. "This is what the student can do, this is what he needs, this is how he feels, this is how you deal with him." But if you do inservice for a group of teachers who don't know which student you're talking about, your information has to be very general. When a specific student is coming into your program, you can go through some very practical inservice. We had a functional ability chart on every student. We would list how long it took each to walk 30 feet on crutches or how long it took them to push their wheelchair; if they needed help carrying their lunch trays at lunch, or if they needed little helps (some of the muscular dystrophy kids can't push their eye glasses up on their nose). When that student walked into a classroom the teacher had all that information available.

I'd like to be as specific as I can, so I will give you some examples of the modifications we've made for students. One of our students with cerebral palsy spends half of her day in regular academics, and the other half in a VEH* business typing class. When she entered the class it was really too much for her. So rather than just leaving that student in the class, the resource teacher sent an aide with the student. For the first three or four weeks, the aide would stay with her for an hour. After about three weeks Lindsey+ fit right into the program. The aide really helped the teacher, too, learn about working with Lindsey and understanding her speech.

Another cerebral palsy girl falls all of the time. Her teacher is always wanting to pick her up. He hasn't

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*Vocational Education for the Handicapped
+Name changed.
worked with them before. He finds one of the hardest things for him to learn is to let them help themselves. Learning this takes a long time and you'll feel guilty about it, but you'll get used to it. They want to do it themselves, and if they don't do it themselves they'll never be able to be employable.

Unlike Lindsey's class, my next example involves a regular business-math class. One of our students has muscular dystrophy and was mainstreamed into this class. There's nothing wrong with Peter* except that he has muscular dystrophy. He can write and do everything at the same speed as everybody else. But you wouldn't believe what we had to go through to get him in that class. Now that he's in, he's shown how well he fits in. He didn't even need an aide. The only thing he needs is somebody to push his wheelchair and that can be one of the other students. The only change made for his program is that he has to leave class five minutes late or five minutes early and that was no problem.

Some activities you could use for raising the awareness of teachers and students include:

1. Giving them some IQ tests that take for granted physical abilities. This helps show people that even when physically disabled students test out as retard ed, they aren't necessarily.

2. Simulating handicaps. People know so little about being deaf or blind or in a wheelchair. They don't know how to start conversations with these students, when to help, how to be friends.

3. Asking impaired students to talk to regular kids, to tell about having the handicap.

4. Doing something with the Parent/Teacher Association. We even hired babysitters and got transportation so parents would come.

I've been talking about several physical disabilities, but would like to go through a brief definition for each one: what they are, how people get them.

I'll start with spina bifida, which occurs when the vertebrae don't close. This condition starts at birth. Part of the spinal column protrudes. The size of the lesion determines the amount of paralysis. Everyone with spina bifida is incontinent, which means they have no bladder or

*Name changed.
bowl control. This presents a problem concerning teachers' attitudes but recent medical advances are improving things for the students.

You'll be seeing a lot more students with muscular dystrophy. Usually this condition occurs in boys. They seem normal until they're three or four years old. They have started running, walking, playing, and then suddenly they start falling. Duchenne is the most common muscular dystrophy; it is always terminal, causing death between the ages of 18 and 30. Basically, muscles atrophy. After kids start falling, then they reach a point where they have to walk on crutches and wear leg braces, and then they're in a wheelchair, then they can't push their own wheelchair anymore, and then they can't even lift their arms up to scratch their nose. They usually die from some other minor problem, like a cold, because complications set in. Muscular dystrophy students are often very bright, because they spend so much time in a wheelchair reading. An extremely difficult aspect of secondary education for the students and their families is deciding which direction to go. Because they are terminal, and because they know it, it becomes very hard to think about.

Audience: Is it always terminal?

Rydman: Always.

Audience: And you say this always happens in males?

Rydman: Almost exclusively. Only about one out of two million females will have the Duchenne form of muscular dystrophy. Females can have other types of muscular dystrophy.

Don't get multiple sclerosis and muscular dystrophy mixed up. Multiple sclerosis is the crippler of young adults, and muscular dystrophy cripples children. Multiple sclerosis happens to both males and females. Cerebral palsy, which is the handicap you're going to see most often, can happen before birth, it can happen due to lack of oxygen during birth, or it can happen in a car accident when you're 25 years old. One student we have right now in the building and grounds maintenance cluster had an accident last year on a motorcycle. He has almost no speech. These are the students hardest to deal with. Andy* already had his vocational career planned out before the accident. He was going to be a motorcycle mechanic and he was going to race motorcycles. Now he is disabled. It's not just putting them in something

*Name changed.
they're interested in, it's a whole counseling process.

Just a few explanations like these that I have given you could help prepare teachers immensely. This is especially true at the ARD* meeting when the IEP is written. If we just take the time to say, "This is your student, this is what she can do, this is how you can help her, this is how she can help in your classroom," more of our placements would work.

Audience: Aren't students brought up before a vocational committee before they're admitted into vocational education?

Rydman: Yes, but often a placement is just decided, rather than having a long discussion with parents, vocational teachers, and the student. When it's the beginning of the quarter, it's easy to decide that now is the right time to start a student. But you just can't rush things with physically handicapped students.

Without the right preparation, there goes our personal relations. That teacher goes to all the other teachers and says, "You wouldn't believe what they did to me today!" It ruins the whole system. You have to have positive things going through. If you get a good placement and get the positive feedback through one teacher, the other teachers are going to be more acceptable to having handicapped students.

A few words on the IEP. In order to get everybody required by 94-142 at the meetings we have to have somebody from the home school, a counselor, a regular teacher, somebody from vocational education downtown, an administrator from our school, a counselor from our school, a teacher from our school, and a parent. We also like to include the student. Well, in comes the student to see all these adults sitting around talking. Wow! So there's an educational process that you have to go through with the students: "What we're going to do in this meeting today is talk about your career goals." If the student wants to help, then good. But be prepared for this. Students and parents have different vocational goals. Do some counseling with the student before you sit down to write that IEP.

Audience: How specific are your goals in the IEP?

Rydman: Our long-term goals are very general. Our short-term goals are very specific. An example: in the buildings and grounds maintenance cluster, John will be able

*Admissions, Review, and Dismissal Committee
to use and identify the lawnmower, the electric scissors.

Audience: Do you include regular education objectives and goals?

Rydman: Yes, but they are prepared in conjunction with vocational goals. For example, we give them a vocabulary list.

You know, the IEP can be an extremely beneficial tool. This year, with the program just beginning, we had trouble getting through an IEP for all the students, so some didn't have any. When we finally did, they had missed out on a lot. I can't really say there's an easy way to do them effectively. Right now we're trying to make the process a little less time consuming. First, the vocational teacher makes up a vocabulary list for the academics teachers, so that the student's math and reading can relate to the vocational training. Then we all sit down and have the ARD meeting and we do a lot of discussion and talk over what will probably appear on the IEP. We started trying to write the IEP at the initial ARD meeting, but it didn't work. With all those seven different people there were too many ideas. So we just had one person take notes from everybody (usually me). After the ARD meeting I would look at what everybody said and try to make one IEP out of that. Then I would pass that around to everybody else. If it was okay, then they would sign it.

It's ridiculous to keep having meetings. If you can take the notes at that initial meeting, when you put it all down in writing, then all those people that had an input can decide whether that was what they said, whether it coincides with what their goals were.

Audience: How do you write a valid IEP at the initial ARD committee meeting without knowing the student?

Rydman: You can't. That's another problem. Here's a student we don't know from Adam, and we are supposed to write an IEP. You just can't write a worthwhile IEP on somebody who just walked into a school. I know 94-142 says that you have to, but it's not going to do any good for anybody. That's why at my school, we discuss the student's test results and any vocational assessment done on the student. Then two or three weeks later I take the IEP around to everyone. Since by now they've had a chance to have the student in their classes, to talk to them, they can better evaluate the IEP.

The whole placement process is really important.
know it sounds like there are a lot of problems, and there really are. But with the right preparations the whole thing can work really well. It is for us in Dallas!
"It seems to me that the fundamental act of teaching is giving frustration in manageable dosages."

I'm going to talk about what I call double exposure, issues related to the training and employment of handicapped minority youths. I say exposed because they get a double dose of stigma, being both handicapped and minority. A third exposure comes from just being youth in the United States.

Actually, I would like to look at four different levels of exposure. The first is exposure to schools. I'd like for you just to dream with me a little bit, back to that particular time when you were just getting ready for school. That's five or six years old depending on what state you were in. Big people started to ask you questions, sometime near the end of July, "Do you think you'll like school?" Now just think about that and think about kids. Usually little kids know that when big folks ask them questions, especially questions like that, they have a hidden agenda. There's something about school that you're not supposed to like or big folks would never ask about it, so you have a whole bunch of little kids shrugging their shoulders. That's the best thing to do when you don't know the answer to the question or you don't want to answer — you just shrug your shoulders. You're hoping that you'll like school, but big folks wouldn't ask that question unless there was something about school that you weren't supposed to like. That question itself, "Do you think you'll like school," produces frustration in little kids.

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Then the next thing you do is get your school clothes. You go down to Penney's or Sears, or Montgomery Wards with mommy and little kids don't like to go shopping with mommy because mommy seems to pinch you in places that you don't like to be pinched in. Just in getting their school clothes little kids are frustrated. Then it's time to get your school shoes. You go into a school shoe store, and there's so many kids that you have to take a number. It takes 45 minutes just to get waited on. You can always tell if a child likes shoes if they ask to wear them home. Now you see a whole lot of school shoes being brought home in a box, so that tells you about what kids think about school shoes. So there's all those questions and getting those clothes and shoes. Okay, then they take you up to kindergarten round-up and get your school shot. It's frustrating. I didn't know anything about state law. I couldn't read anything. All I knew is there's something about this school thing that I wasn't liking.

Now, I also knew, my older brother had to do something called homework that he brought home from school. We used to listen to the radio, the Lone Ranger, the Green Hornet, and I could just sit and listen but he had to leave and do something they called homework that came from school. I didn't know anything about school, but there was something about that homework that didn't seem too appealing.

So the magic day comes. Just before I go out the door my mother comes to me and says, "Do not get your school clothes messed up. Do you understand?" I said, "Yes, mom." She said, "When you come home from school you change your school clothes. Do you understand?" I said, "Yes mom." "When you come home, bring home a hat and coat. Do you understand?" "Yes, mom." "You listen to what the teacher say, and do as you're told. Do you understand?" "Yes, mom." My kindergarten teacher's name was Mrs. Sullivan and my mommy's name was Mrs. Sullivan. They took pictures of every child when they came up at kindergarten round-up. So when I came up, the teacher came out the door and she knew my name. "Hi, Allen, how are you? I'm your new teacher, I'm Mrs. Sullivan. I'm going to be just like your mommy." I'm kind of checking my mother; she's black and my teacher, she's white. My mother says pay attention to her, that was instruction number four. I wanted to ask her, "How are you going to be like my mommy?" I didn't know what was going on. So my mom says, "You can go with the teacher now." So I kind of hold my mommy's hand a little tighter, and she says, "No, go with the teacher now." Think about that symbolic interaction. I've been with mommy for five years and now, all of a sudden, she's giving me up and I can't
understand why. But I take this teacher's hand reluctantly and my mother walks down to the car. She takes out the handkerchief and starts to wipe her eyes, and I wanted to break loose and say, "Mommy, don't cry. I'll stay with you. I don't want to stay here anyway."

All I'm really saying to you is that schools, by their very nature, from the beginning to the end are frustration-producing to all children. Just as soon as my mother takes off around the corridor, the teacher says, "Take your hat and coat and put it up on that hook." Now the hook is outside the classroom. Instruction number three was: come home with a hat and coat. Now I know that the probability of my hat and coat being missing increases with my inability to keep my eye on it. I know that. Instruction number four says pay attention to the teacher, so I put it up on the hook reluctantly. And I get ready to go into the door and I find out that I not only have a new mommy, but I have new brothers and sisters and the new brothers say, "You have to share." Now, I said I had an older brother. Sharing doesn't happen with older brothers, because any time there's trouble the bigger one gets in trouble because he should have known better. So, you don't have to share when you're the youngest of the two. And so, when I began to look at new brothers and sisters, I couldn't scream, couldn't shout, couldn't cry, couldn't yell, couldn't run around, had to do as I was told when I was told, had to ask permission to go to the bathroom. All these rules don't make sense to me:

Then they sit me down and they want to teach me how to cut paper. Every kindergarten teacher is right handed, but just suppose you're left handed. Then you're in all kinds of trouble. And just think about these little muscles trying to get coordinated with all those expectations of school. It's frustrating.

Then it's time to socialize. They tell us to hold hands, and all circle around the piano, and sit on the floor. But mommy told me, instruction number one, don't get my school clothes messed up. The floor's dirty; they didn't have rugs and all that stuff in the good old days. Some of those instructions really competed with what I was being told at home, and it was producing frustration. If you really check it out, when you give kids tests, you're trying to give them a test to find out what they don't know, not what they do know. And right in the test it says we're testing for the child's frustration tolerance. So in essence, the very act of teaching kids what they don't know, when they don't know what they don't know, and they're not supposed to know, is frustration. Learning, by its very nature, is frustration-producing. It seems to me that the
fundamental act of teaching is giving frustration in manageable dosages.

Frustration is there for all kids; for handicapped kids it's increased. The exposure to schools, the exposure to competition produces frustration. Report cards, the blue jays, the red hearts, all help set up a competitive process that, for some kids who cannot master in the scope and sequence that people expect them to, is frustration-producing. So frustration or exposure to frustration is the first thing that all children have to deal with.

Then there's an additional problem, the societal expectations of handicapped youth. You can look at some of the literature where they have tested counselors who are supposed to be trained. They are given a room with two chairs leaned up against the wall. They are told, "You're going to interview a person that's epileptic." The person's already sitting down, but the counselor can move the other chair any distance that he or she wants. They measure the distance that a counselor places the chairs apart, and they did this with various handicaps — epilepsy, blindness, simulated amputation, deafness, etc. They found that the more severely perceived the handicap, the farther away the counselor moved the chair. They also did that with black and white and found out that the counselor sat closer to the white person and farther away from the black. With the black interview, the counselor made more speech utterances that were mistakes, stumbling for words. They actually measured it on the tape in a shorter period during the interview. You had to get across the same information in a shorter period with less eye contact, more distance if you were handicapped or minority folks in that particular process. I thought that was very interesting. I think the same thing happens in employment interviews, when you begin to look at class instruction, or when handicapped individuals work with their peers in any training or learning situation.

I've gone to a restaurant with a blind person who's treating me to lunch. The waitress comes to me and asks, "What does he want?" I say, "Ask him. Don't ask me, how do I know?" He pays for the meal and she brings me the change. You see what I'm saying? There are some societal expectations that need to be dealt with. If I had a bigger group I'd show you how that gets operationalized, but let me give you an example of what I'm talking about. It's called an A over B process. A is a person or a group who is superior and dominant. And B is a person or group who is inferior and subdominant. For example, let's put women in the B group — subdominant, inferior. Who are they
subdominant to in this country? Answer what you feel most of the people in the United States would give for an answer. If women are in the B group, subdominant and inferior, who are they subdominant and inferior to? Children are subdominant and inferior to adults. I'd do the same thing with the students — they're subdominant and inferior to teachers. I'd put the teachers in the B groups and they're subdominant and inferior to administrators. I'd put the administrators in the B group and they're subdominant and inferior to whom? To superintendents. I'd put the superintendent in the B group — who's he subdominant and inferior to? Then I just switch a little bit and I put the Polish in the A group — who's in the B? And we switch from ethnic groups and they can't give me an answer. I put Italians and they can't give me an answer. I put Blacks in the A group, they still can't give me an answer, because we're American. I put Blacks in the B group and all of a sudden folks say White; I put native Americans and Indians in the B group and all of a sudden they say White. I put handicapped children in the B group — who's in the A group? Non-handicapped.

So we have bipolar thinking in the United States. That's the role that you're supposed to play. There's a script that goes along with it. There's a merger between racial groups and handicapped groups in terms of how they're treated within our society. At one time, I lived in Minnesota. Everyone used to tell me this was a very liberal state. Hubert Humphrey came from there. Mondale's from there. They don't have any race problems there. Well, I found out that they don't have many black folks in Minnesota. I lived there for five years, and I could go for weeks on end and not see anyone black except the members of my family. So I went to a little shop and a little white girl came up and held my hand and I thought how cute this was. As I was praising her for her virtue, she took my hand and she bit it. I said, "It's not chocolate!" It was just fascinating to see mommy grab the little girl and "shhh, shhh" her right out of the shopping center. I used to call that the "Shhh, keep quiet" phenomena, you know. And it was very interesting how that little girl learned that flesh was the same the world over, that she could bite someone and not say she was sorry and that there's something about the man that mommy doesn't want to talk about. If there were a child in a wheelchair, that little girl would have still been asking the same questions of how, and why is that person different from me; and mommy would have still said, "Shhh, keep quiet." If a congenital amputee or a seeing eye dog, or a cane came along; the little girl would have still been asking the same question and mommy would have still been saying, "Shhh, be quiet," like...
Now, we assume that it's embarrassing to the handicapped person. When it happened with my kid, I'd say, "Go ask him. If he doesn't want you to know, he'll tell you, 'None of your damn business,' otherwise he'll tell you." Why should we make the assumption that folks don't want to talk about themselves? When a little girl asks that question in the shopping center now I say, "No, she needs to know." And I follow right behind them chasing them when the mother is "Shhh, shhh" running around. I'm not ashamed to talk about myself. If the little girl has some questions, that's okay. I'll let my daughter bite her and see if she's vanilla; then we'll be even. These are some of the expectations that go with the script.

Now, in reference to vocational education, we're doing half our job. Schools are frustrating. Schools are so competitive now that they don't pay attention to the competencies and skills that the kids should have. Kids are coming out very incompetent in terms of training. Handicapped individuals are just getting doles on the public roles; racial groups aren't really interested. The employment reality is this: There are 3-8% unemployed of all ages within the United States. For white youth between the ages of 19 and 25, there's 12-18% unemployment. For black youth of the same age, 25-37%. In some cities, it's as high as 50% unemployment. Even if your vocational program trains you very competently, what if you can't get a job? We're doing half our job if we get them competent and skillful, but the other half is to create those societal changes, those changes in the system.

Take Section 504, Public Law 94-142; I can predict already that there are going to be second generation problems for children getting educational and training opportunities. What's going to happen when these folks are skillful and trained? They're going to come into the "mainstream" of minority youth in core cities that have 40-50% unemployment. Now, what's going to happen to these handicapped kids that we're training? I think we're sitting on a time bomb that we haven't paid much attention to.

What are the implications for non-traditional training opportunities for kids? We have McDonalds and Burger Kings, which all these people think provide significant training experiences. But is that really what a vocation is? Should we not be training for more meaningful types of experiences? What's going to happen to this society when they're projecting that job opportunities are going to decrease? They're talking right now about 35-hour work weeks so they'll have more opportunities for jobs. What are we
going to need no matter what?

For one thing, every vocational training program is going to have a critical counseling function. It's going to be a very difficult job to motivate and train children or youths to look at their vocational future when their parents are unemployed. It's going to be very difficult to elicit community and parental support for extended training opportunities for students using family resources while family members are unemployed.

We can look at programs such as CETA and VISTA, and begin to say that handicapped children should be included in those programs on an equitable basis. There are all kinds of programs for youths and for youth employment. This week, for example, the forest service is talking in Dallas about the opportunities for youths in terms of employment. In Dallas, we employ 14,000 individuals each year. It seems to me that at least 1000 positions should be set aside within Dallas for our own products. How can we talk about other people employing our kids if we don't make a commitment to employ them ourselves?

Another thing. In Texas, a significant number of the jobs are gone because of the inclusion of women in the last few years. There's been 1.9 million women included in the job field within America itself. Some 0.4 million of those are minority women. The whole issue of illegal and legal aliens taking jobs that were previously available has created a problem.

When I talk about women, when I talk about aliens, both illegal and legal, I'm not setting up competing groups. All I'm saying is give us our quota of handicapped individuals within any of those categories. They don't have to be mutually antagonistic groups. We're not talking about any special favors; we're saying include the handicapped within that particular process.

Everywhere, especially in Texas, people pride themselves on a favorable business climate. It seems to me that we really need to work on getting some of these favorable people in and having them make some very serious commitments to handicapped youths. And I think that the climate is right in Texas; you just need a systematic approach.

It seems to me the last thing that we really need to deal with is the future. We're so caught up in the present, that we forget to ask what the future holds for handicapped kids. How do we help them deal with that?
The kids that we're talking about in schools right now will spend the essential portion of their life in the twenty-first century. How can we begin to help children understand that society is about to change? How can we begin to have folks understand that there are not going to be as many jobs? I have some questions about how meaningful the jobs will be, with the increase in technology. I go to the Safeway store down the street from my house. They have a conveyor belt now, recently remodeled. And you put your bread, milk, and bananas on the conveyor belt and they go down past a little space with a light beam. All of a sudden, there's a little screen that says bread 69c. Unaffected by human hands, just press a little foot pedal — bread 69c, milk $1.05, bananas get weighed and get a price.

We have the capability of giving a $10 bill to a machine that can tell if it's counterfeit better than the cashier can, and then give you your change. We also have the capability of having that same machine writing and speaking to us. We have a voice synthesizer that is very clear; it speaks to us and we can even talk back to it.

Right next door in Houston, Texas, they're talking about a space shuttle capable of interplanetary travel. Just about a month ago we saw pictures of Jupiter. People have already walked on the moon. The space ship is headed out to take pictures of Saturn, millions and millions of miles away.

Right now we have the capability of doing surgery from here with an exact replica of a person who's in San Francisco, and have impulses sent to San Francisco where the surgery will actually be done. Not only done, but done better than the surgeon could do it right here, because one of the problems a surgeon has is hand tremors and the gloves correct for hand tremor in San Francisco. When I left the University of Minnesota they gave me a special number to call, any time I wanted to dictate a letter. I'd just get on the telephone, and when I got there the letter was sitting on my desk waiting for my signature.

Do you understand? I'm talking about reading, writing, and arithmetic; and is that really going to be the skill of the future? Is it the skill of the future now? Over 50% of the people get their income tax done by H & R Block or Sears, so obviously there isn't anyone calculating. When was the last time you looked at your little slip from the grocery store to check on its accuracy? Everyone says that all these skills are important; I'm not saying that they're not, but once you understand the function that it serves and once you understand what division really is, there's no
redeeming value to sitting down and doing division when you have a little calculator you can pull out and do it. They have machines that will make themselves, and that's going to go on in the future. We have all kinds of questions about safety standards. You don't have to pay insurance policies for machines, and I'm really sure that's the direction we're going in!

The last thing that I need to say is the whole concept of retardation is going to disappear. The whole concept of speech impaired individuals is going to disappear. The whole concept of mobility-impaired individuals is just going to disappear, because we're going to come up with an alternative system for transportation. They're already talking about individual modules for transportation that will come to your house and pick you up and take you to another point. I don't think that's too far away, because HUD has already funded some cities to do it now. After making some decisions, small decisions, you don't have to think through mathematics, you don't have to think about a whole lot of things. Therefore, retardation is going to disappear. The challenge is not only to deal with the here and now, in terms of the whole employment question, but to deal with future in terms of the way a kid's going to be, and to dream a little bit, because we're going to have to have kids really anticipate some things that are unanticipatable to us.

The major thing that I'm asking for is a critical counseling function. Usually people call upon success models to help motivate Black kids. I can talk with kids, but I'm a role model only for a certain segment of kids, not for all. So it would appear to me that you would need some folks who wanted to do something but failed to talk to those kids about what some realistic impediments are. And so I think we need to deal with how realistic our role models are and then to actually look at graduates from our own programs as helpers and peers who can give kids some feedback. Include some successful and unsuccessful graduates from your program in a critical counseling, peer-related function. If I had anything to say I think that would be the most important thing. Let's remember how it is — the frustration, the lessons (and not just the ones we know we're teaching) — and let's tell it like it is to the handicapped kids we're mainstreaming. Let's talk about that mainstreaming like it really is.
"Consider the handicapped. If we give them a free ride, then we won't help them. We will hurt them even worse by taking up more of their time and keeping them from achieving something that is worthwhile."

Today I'm going to address one of the common concerns that vocational instructors have expressed about having handicapped students in their classes. I'm going to give you some of the ways we have handled the situations we have run into in our mainstreaming.

One of the problems that a director has is keeping teachers motivated. How do you keep your teachers from being turned off as far as kids are concerned? I'm sure every one of you has had instructors come up and say, "Hey, I give up on that kid." They just throw in the towel. And the directors just cannot allow that to happen, so we have to be very careful about our teachers' views on working with handicapped students.

When I talk to instructors about bringing in special education kids, they become concerned about accountability. They ask, "Am I going to be held responsible for training a youngster who has so much trouble learning? What about safety? Are my other kids' lives going to be in jeopardy? What about the hyperactives? What about the emotionally disturbed? If they start throwing things around the classroom, are they going to hurt themselves?" These are all fears instructors have and we need to help eliminate them if our programs are going to retain quality.
The problem with working with any youngster that you might classify as a special education student is that there are probably as many answers as there are students. There is no set of answers, no set of magic solutions. If we had set answers, we could read books or collect them from people and put them in practice. But we can't do that. Back in the 1960's, we watered down education; we figured the thing to do was just socially promote everybody. "Let's protect the feelings of these youngsters; let's just move them along and they'll be happy." We found out that didn't work, because we passed them up to where they could no longer help themselves. We may have saved their feelings but we ruined a lot of futures. We ended up depriving them of learning what they should have received in the lower grades.

Even special education found out they couldn't do it, so they said, "Hey, let's involve vocational education." I'll be the first one to admit that vocational education can't do it by themselves. It's going to take resources from special education, vocational education and whoever else we can get to help. The handicapped people themselves are hollering at us and saying: "Hey, give us some skills. Give us an opportunity to go and be part of the mainstream life. We want to be there. We want to be involved."

And, folks, we cannot do this if we water down the quality of our program. This really is the thrust of my talk today. We cannot help these youngsters if we just make it possible for these students to exist in a mainstreamed situation. We can't just let them get by like they have in the past. We have to maintain quality. We have to bring that youngster along. We have to be able to account for the training and document how far the student can go in a particular class.

Now in McAllen, where I work, handicapped students have been run through the vocational education programs as mainstreamed kids right along, primarily because we don't have any special education programs in high school. We don't know a special education student from a regular student, because they all come through there together. We could go to the records and identify them as such, but we avoid that. We try to work with each student individually as they come on through without assigning labels. You can walk around our campus and you'll see kids with physical disabilities, or with eye problems, with dyslexia, or with hearing problems. They're all mainstreamed.
MAINTAINING THE QUALITY OF VOCATIONAL PROGRAMS

The fact that we don't label these kids is both good and bad. It's good in the sense that we require more of them. We demand that all of these students meet our program requirements. And believe me, when you require something from a student who wants to succeed in vocational education, they come through. I firmly believe that special education underestimates their abilities and unfortunately many of us in vocational education are following their lead. By not knowing who they are, we in McAllen have so far avoided that problem.

Not knowing about their handicaps does cause problems, though. When we don't know, we can't provide the special allowances that they need. I can think of one student in particular. We almost threw him out of the program, because we didn't know that he had dyslexia. To begin with, he was in electrical trades. He got through one year because he's a good worker, but he really couldn't grasp the information and the instructor didn't want him back the second year. So he changed over to building trades and learned something about carpentry. But the instructor there began coming apart at the seams. That's when we found out this youngster had dyslexia. Well, that helped us solve some problems. We didn't ask him to take any more tests. We didn't ask him to learn by reading the book. If the instructor was absent, we just let this kid go on and work, because if we put him in a three-hour study period, or had him work in a textbook, he wouldn't get anything out of it. So we let him keep working. Now, he is an electrician's helper in the city.

Physically handicapped I don't think scares any of the people in our ISD whatever. You can accommodate for the physically handicapped. You can raise the desk, you can lower the desk. You can even take a person who's completely bedridden, and suspend a sling from the ceiling so they can work with their hands. So physical disabilities aren't so much of a problem.

But we do have problems with our mentally handicapped. The problems show up in two areas, really: discipline and non-involvement. The thing that bothers me more than anything else, I guess, is to walk into a classroom and see five people busy working on something, another five people looking like they're getting in the process of working on something, and another five just hanging around with no intention of working. I'll go over and ask them, "Hey, what's going on? What's happening? What are you doing?" "We're through," they say. This is a three-hour class that

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started at 8:30 in the morning and it's now 9:00 and they're already through for the morning. You know that can't be true. When you talk to the instructor, you find that he's given them a job; in fact, every day he gives them two or three assignments. As soon as he turns his back and helps someone else, they're all doing nothing again.

These teachers really worry about getting special education kids coming in their class, because they don't have enough time to take care of the people they've got now. If they're going to have someone else in there who's going to require even more time and more concern than the students they have now, they ask, "How can we do it? We simply can't handle it." And one thing we cannot afford to do, if we're going to maintain our programs, is let our teachers down.

What do we do now with students who won't work? Quite frankly, most of them end up in my office at one time or another. My first reaction is to sit them down and try to make them understand why they have to work, and what they have to do. Then, I take them back out there and try again. If they're a discipline problem, probably I'd give them some sort of mild punishment on the second or third go around. Eventually, you have to increase the amount so that it gets through. Occasionally we just have to move them on out. The program must come ahead of any individual child; I believe that strongly. Maybe some of you will disagree with that, but I believe we have a program established to treat the bulk of the kids that come through and to see that they get an education. If these kids are not given that education then we fail. So we need to get the kids out who don't really belong there, because we've got to maintain quality. You can't do it any other way.

At McAllen High School, we guarantee that every student who completes our program will have a job at the end of the training. We just flat tell them that when they start. "You go through our system and we will guarantee you a job." We have a placement director. His job is to work with our shop people. If a student applies himself we defy him to take us up on that offer and not get his job. Now, if the instructor has a student who is not getting the instruction, or is not trying to get the instruction, we want to know about it, because we want to move that student to where he will get training. That student is not doing himself or anyone else in that program any good at all.
Before an instructor can move a student out, however, we ask that he come up with some objective-based criteria so that we can be sure and treat all the students fairly. We don't want the student moved out just because the instructor doesn't like Johnny or Sally, or just because the student happens to be a girl in what the instructor thinks should be an all-male program. But if the instructor keeps the student for two years, we don't want him walking into our office and saying, "Well, I can't recommend this student for a job." Don't tell me that you can have a student in your program for two years, and then not recommend him for a job, because if you're telling me that, you're telling me you like having the student around because he isn't any problem. He didn't get in any trouble and you didn't have to bother teaching him anything. We can't have that. We want our instructors to guarantee the quality of the product that they're turning out. I think it's a necessary part of any program.

Now this means that we're going to lose some students, but let me go back to the building trades instructor who doesn't think Johnny should be in his program. That doesn't mean that we keep Johnny out completely. Not at all. It probably means, though, that building trades is not what this student wants. So, we suggest some other vocational program, perhaps adding some restrictions. We want the student to know why he didn't like building trades, if he was a problem or just failed to work. If he didn't work, we want some guarantee that he will work in some other vocational program. He's got to convince us that he's grown up a little bit and is ready to turn the page and do a good job. We'll put him on probation, and if it doesn't work out, if he goes back to the same thing within the first month or two we'll just decide he doesn't want vocational education. He's not ready yet. If we're going to be realistic we have to realize that we can only reach a percentage of the students and only some of the students really want what we have to offer. And what we have to offer better make first class in quality and be given to the youngsters who will take advantage of it. If they can't, we really can't help them. We have to face up to the fact that we can't save every youngster. If by trying to save everyone we do anything less than keep high standards, we have not helped anyone.

Consider the handicapped. If we give them a free ride, if we just bring them in and say, "Hey, we're going to help you out; we're going to let you play around in here," then we won't help them. We will hurt them even worse by taking
up more of their time and keeping them from achieving something that is worthwhile. That's the way I look at it.

I'm real happy with what the IEP can do for us. I can see where it can do a lot of good. If you sign up a nonhandicapped kid you've got him for nine months whether you want him or not. But if we have an IEP for a handicapped student in an auto mechanics class or building trades class and after three or four months we find out that this is as far as this kid's going to go, we can take him out of there, go to the VAC, get him a job and put him to work. You have more flexibility built into the system for handicapped students than for the other students. The IEP can be very promising when it comes to being sure that vocational education really does what's best for these students.

And remember, that includes keeping the quality of your program up.
"By communicating realistic goals to the student, by giving appropriate activities, the teacher can implement a 'can-do' approach to vocational education."

When I first started teaching Office Duplication Practice - Vocational Education for the Handicapped (OPD-VEH), my classroom was next to the Vocational Academic teacher's. Parents of students with special needs would frequently come by to see the school and its facilities in preparation for enrolling their children. Without fail, they would begin to talk about what their child could not do. The Vocational Academic teacher had a masterful way of turning the direction of the conversation and getting the parent to talk about what the child could do. It was interesting to note the difference in tone and in parent-child relationships that developed when the parents were describing those things that their child could do.

This is the source of the title "A Can-Do Approach." Instead of talking about what students cannot do and how difficult it is to accomplish learning goals, let's look at what they can do and rejoice with them in the accomplishment of goals that are attainable. I want to discuss with you these goals and some activities and evaluation useful in reaching them.

Goals for the course should be realistic and measureable for each student and the student should
always know exactly what is expected. To begin with in the first week give each student a copy of the plan for the year, showing each skill the student will be asked to demonstrate and all the information the student will be responsible for mastering. To implement this, make and hand out plans each week, showing goals for that week. Each student gets a copy of the same plan, possibly with some activities modified or left out depending on the needs of the student. This helps to avoid making the student look different or less capable in front of peers. With written goals for the year and for the week, the student can understand where he or she is, where the student is going, and how to get there. The student's assignments are based both on what the student needs and what the teacher needs, and all is done without making the student conspicuous in front of classmates.

Learning activities should have a present purpose as well as a learning purpose. For instance, it is better to learn to operate a ditto machine by making a class newspaper or a student telephone directory than by making meaningless marks on a scratch paper to throw away. Activities should be based on students' interest and prior knowledge. They should be short and make the work seem easy, and they should result in some written evidence of the activity, so the student will have work to turn in. The activity should make it necessary for students to work together and communicate effectively. Activities I have found successful in ODP-VEH include the newspaper and directory mentioned above, band programs, and football programs. These activities also provide immediate intrinsic feedback without waiting for extrinsic feedback from the teacher's gradebook.

Student evaluation is also a measure of how well the course is meeting its goals: Can the student operate the machines for which he or she has been trained? Can the student follow a work order? Can the student get along in a work environment? The evaluation should also reveal the extent to which the student accomplishes objectives in relation to disabilities. By communicating realistic goals to the student, by giving appropriate activities, the teacher can implement a "can-do" approach to vocational education. The evaluation at the end of the course will give both student and parent a clear picture of all the things the student can do.
"I tell my students all the time that because they are handicapped no one is going to give them a job. They're going to have to earn it, they're going to have to work for it, and they can learn to do that in their Homemaking class."

Whenever we work with handicapped students, it is our responsibility to minimize their limitations. What you do to minimize handicapping conditions will not always be something you found in a textbook. You will probably have to come up with something on your own, innovate, or change an old technique slightly. I would like to discuss a few things I think are most important when working with handicapped students, things which are important with any students, but especially important with handicapped students. First, a vocational goal should be chosen. The goals set up in the individualized education program (IEP) will not always last. Once a student starts working, many goals are thrown out the window because they just don't fit the person. We say screen, but how on earth can you really screen a person to the extent that you can get specific goals? So you will probably have to keep setting newer goals.

When setting goals, it is more important to provide competency skills than just to teach a certain pattern, because if a student can operate the equipment, then the employer can teach the student on the job. Instead of dwelling on specific projects, teach back-up skills. These are what the youngster needs to keep a job: information about employment, employment strategies.
even how to move up in a job. Just because a student is handicapped does not mean we say, "Look, Honey, we had a hard time getting you this job in the first place, so this is it." I think handicapped students should look forward to advancement. If we don't pass on that confidence we are short-changing them.

I feel that a job-like situation is very necessary. In homemaking we have a tendency to be less job-oriented than some shop classes. I believe that every lab can have a job-like atmosphere. Even though industrial careers might not be glamorous, they can be very interesting. Look for the industrial names of jobs (sewer, stitcher) and use those names in your teaching. We decided we wanted to create some interest on the campus so I put a notice on the bulletin board as you enter the cafeteria saying, "The VEH Boutique will be hiring January 10, 1979." We left it there for a few days then announced the job openings that we had. The first was machine operator. Well, all the machine shop fellows wanted to apply for the job, but I made sure each position could be filled by a VEH student. The VEH students had to decide which one of these jobs they could best fit in, which one they were going to apply for. They filled out the application and I had them complete a regular resume form. I think I brainwashed them so that when they applied for a job they applied for the one I was going to give them anyway, but you can do that without making them feel badly. They also have to be taught evaluation so they can look at their own work and see whether it's okay.

In order to keep their jobs, students need to be taught to use their own evaluative tool. If you are going to use some device to evaluate a student, that student should be familiar with it. If he is familiar with it, then he knows where he is going and what he needs to do to accomplish, and how to improve what he's done.

I want to show you some things that we have used in our class. Houston Technical Institute, where I work, has the fifth VEH center in Houston teaching a section of clothing services. Students participate in FHA and proudly support their cause. Our program includes simple repair like buttons, snaps, hooks and eyes, replacing zippers, alterations conversions, and construction. Since everyone is talking about industry and the assembly line, our students are given experiences in the assembly line

*VEH: Vocational Education for the Handicapped.
Students are shown laying out, pinning, and cutting fabric, assembling lining and top fabric, stapling labels, marking up a section of cases, turning and closing the lower section of the lining and pressing the finished product. All these steps make up the assembly line for an eye glass case. Clothing services would be incomplete without alterations and the entire campus can benefit while VEH students practice. Our students had the honor of sewing on patches for the Marine Corps jackets.

I believe that if fundamentals are taught, specifics will be easy for an employer to request. Students work with figures using standard equipment like a yardstick, T-square and marking chalk. Learning to use commercial equipment is fun if it is for a purpose. We have used the serger on many projects and each project gives a little more experience. The projects are much more interesting than practicing on scraps of fabric.

To give students repetition in construction, small garments are made first then full-size duplicates are constructed. Students make their own small patterns, completely marked and have the opportunity to use figures and measuring devices with step-by-step instruction and demonstration.

Audience: Do you have TMRs as well as EMRs in this class? What is the composite of your handicapped situation?

Wanza: I have two sections. The morning class is a multi-level class, with all kinds of disabilities. The evening class is labeled orthopedic, but I have only one student in that evening class with a regular credit structure. The others are graduating from the special education department.

Audience: I was curious to know how your TMRs handle measuring.

Wanza: Everyone is given a sheet of butcher paper, a T-square and a yard stick. I will have already explained basic measurements and I started them using the T-square as soon as they walked in the classroom. They start by drawing a straight line, then I tell them how many inches over to measure from the straight line. That would be the distance for the lay-on-fold line. For every measurement after that I say, "Now, using this many inches go over from your folded edge," and tell them what to do. They do their own marking, with clips most of the time. We haven't used
any carbon paper as some teachers do. In industry they
don't use carbon paper and I try to keep training as close
to industrial sewing as possible.

Audience: Do you let them use a seam gauge on the
machine?

Wanza: Yes. I allow them to use the marks on the
machine. I have even considered putting a piece of tape
on the machine like they do in industry.

Audience: Do you have all commercial equipment in
your lab?

Wanza: No, I start them off on domestic machines, then
move them to the industrial machines when they're ready.
If my cerebral palsy students are too shaky, we spend some
extra time on safety. I give all my students a safety
chart and then let them decide what is safe in the lab and
what's not. When they say our store room is not in safe
order I have them go down their list, decide why it's not
safe, and then let them make it safe.

Audience: Is your class two or three hours long?

Wanza: Three hours long. I only give them regular
breaks like everybody else on campus. You know, I have
really enjoyed teaching VEH. When I left regular
preemployment no one thought I could work with this group,
but they are beautiful kids. I just keep them moving.

Audience: Did you develop your own curriculum outline?

Wanza: The district gave us some competencies that
they wanted the students to achieve and I did my planning
from that. I had to wait so long for the students to go
through the ARD process that I ended up doing a lot of
individualized planning. For instance, one student wanted
commercial arts, but they wouldn't put him in commercial
art because he was handicapped. I think he could have
performed real well in commercial arts, and I hated to
see him stay in a self-contained classroom when he wanted
vocational training, so I told the ARD committee that I
would prepare a program for him in window dressing. That's
how we worded it on the objective and the goals for the
year.

Audience: Does each one of your students have an
IEP? Do you work it out?
Wanza: Yes, each student has an IEP, written by a team. I write the objectives because I know where I think they should go. I seldom look at the student's records because I think after reading all those test results I would block all the student's strengths out.

In closing let me restate some of my points. It's important that you establish a job-like atmosphere in your lab and that you give the back-up skills necessary for employment. Probably the most important technique for teaching these students is to simplify procedures.

I tell them all the time that because they are handicapped no one is going to give them a job. They're going to have to earn it, they're going to have to work for it, and that they can learn to do that in their VEH class.
"As teachers, counselors, and administrators we have a responsibility to each other and to our students to help them become the people they should be."

Section 503 and 504 of the Rehabilitation Act of 1973 have started to change the attitudes of employers, but even now we are just beginning to see the results of this Rehabilitation Act. It has taken approximately six years for it to come into its own right. This is like many other pieces of legislation. It takes years to see results. Now many employers are having to change their ideas about the handicapped. It used to be that an employer could see a physically handicapped person walk through his door for a prospective job and automatically decide whether he wanted that person to work for him. With this new legislation, even in high school and in junior high, the vocational teacher and the special education teachers are having to look at these handicapped students differently. The handicap may be from mental retardation or being in wheelchair or a slight hearing loss.

Vocational teachers sometimes are skeptical of having special education students or handicapped students in their classrooms or in their labs, because of the safety factor. Other times it's only because of wives' tales and prejudices that they don't want to take the time to work with the individual student. As a handicapped student growing up in the Dallas Independent School District, I
felt this many times. I had cerebral palsy and before the psychologist or the special education teacher would even test me as far as my capabilities mentally and physically, they would decide that since I could not write and I could not talk very plainly that they were going to put me in a class where I could not progress at my own speed.

Society is beginning to look at handicapped individuals differently. We are now being forced to decide whether to sit at home and watch TV or be as productive as possible. The students are willing to take the chance more readily than the employer or the vocational teacher. We just cannot educate our handicapped students or our nonhandicapped students in the Three R's and then let them go out into society. We need to help them realize their full potential and help them to be well adjusted citizens as they go into college or their chosen life's work. These people will feel much more productive, in my opinion, if we can show them that we're behind them, and that we want them to succeed.

On the note of showing the attitude of one individual toward me even at Texas A&M, I would like to relate a story of a teacher that I had in a vocational occupation course, as I began to work on my Ph. D. The first day in class, I met this man on the steps of the building where the class was held. His name was Dr. Dick Swinney. I feel comfortable about naming him now, because we have become good friends and he understands my position and I understand his. My advisor introduced me to Dr. Swinney as I was going into the building. He seemed cordial and nice. Of course, I was scared to death, because this was my first course at Texas A&M under my Ph. D. program. I really didn't know what I was getting myself into. Several weeks went by. He gave us some options as to how to make an "A" in his course, or a "B." I set my goals high and decided to strive for an "A."

One evening the class was to go to a local high school that had an exceptional vocational program. We were to tour the facility. I rode over to the school with Dr. Swinney, and much to his dismay, he discovered that the doors that he thought to be open for easy access for me were not. I told him that it didn't matter, I could walk around to the next door. This really shook him up. He had never dealt with a handicapped student before, and was surprised when I said I could walk the rough terrain. After the tour he didn't say too much more to me.
Several weeks afterwards we were asked to go on a local TV show together with Dr. Parrish, the Head of Vocational Special Needs now. For the TV show we were going to discuss Section 503 and 504 of the Rehabilitation Act, and Public Law 94-142, the Right of Handicapped Students to a Free and Public Education. Dr. Swinney, Dr. Parrish, and I, and also the host of the TV show all sat down to map out what we were going to talk about. As we began to prepare, Dick Swinney began to let his feelings show about handicapped people. He began to tell me how apprehensive he was to even have me in his class and that he did not like me from the very beginning. This was quite a shock to me, because I had never had a teacher be quite so honest with me. This made me feel extremely good to know that someone would actually level with me and give me their feelings so I could help them work through it and respect me as an individual.

We continued to work through our problems throughout the semester. Dick and I became good friends and he was the one who persuaded me toward the end of the semester to go out and look for a job and not stay in school for the rest of my life. I really have him to thank for where I am at this moment, because I was very scared to get out into the real world.

As teachers, counselors, and administrators we have a responsibility to each other and to our students to help them become the people that they should be whether they have a physical handicap or a mental handicap. What we do with them today as students and how we help them to look at themselves will undoubtedly make a difference in their future. The thing we need to look out for and hopefully be quite aware of is that we look at them positively and help them to see that they do have great potential in life. Then we can make them first class possible citizens of the future.