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# Proceedings: Public Hearing on Vocational Education

April 25, 1986



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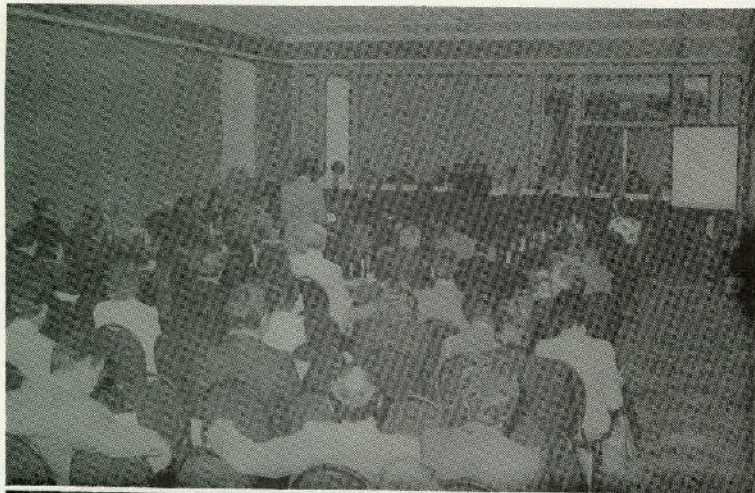
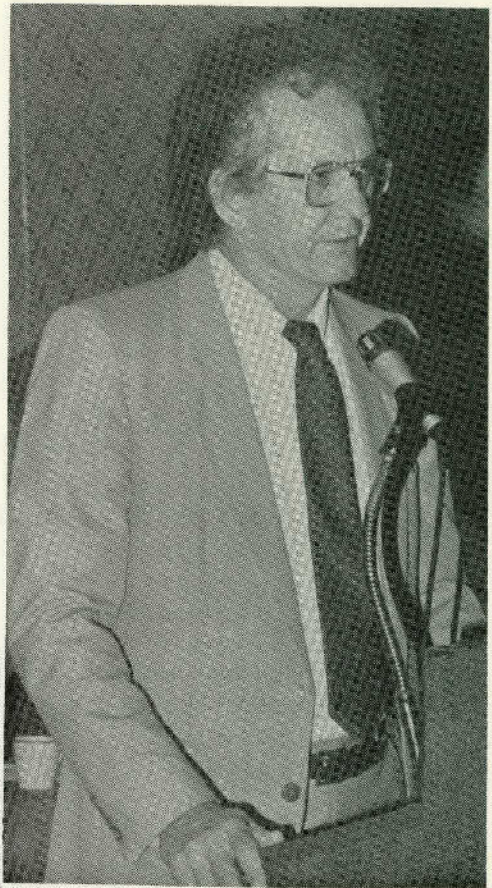


**Proceedings:  
Public Hearing on Vocational Education**

**April 25, 1986**

**Austin, Texas**

**Sponsored by:  
Advisory Council for  
Technical-Vocational Education in Texas**



# Advisory Council For Technical-Vocational Education In Texas

P.O. Box 1886, Austin, Texas 78767 (512/463-5490)



Will Reece, Executive Director

August 8, 1986

To The Citizens of Texas,

Key representatives of business, industry, labor, government, and education from across Texas converged in Austin to share a myriad of ideas, thoughts, and recommendations at the April 25 Public Hearing on Vocational Education sponsored by the Advisory Council.

**CHAIRMAN**  
Gary O. Boren  
Lubbock

**VICE CHAIRMAN**  
George F. Matott  
Austin

**MEMBERS**

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Filomena Leo  
La Joya

Ted Martinez, Jr.  
Dallas

Joe Pentony  
Houston

Donna Price  
Houston

Talmadge D. Steinke  
Waco

William E. Zinsmeyer  
San Antonio

Many "challenges and choices" face vocational education as was evidenced by the varied testimony presented. Viewed collectively, the testimony identifies key issues which are included in the report.

Individually, the testimony describes many innovative recommendations as well as exciting models for new programs. In addition, individual testimony highlights successful accomplishments of the current system. Summaries of all the testimony are included in the report.

The testimony received at the public hearing is currently being utilized as decision makers determine the future of vocational education. In preparing a response to the State Board of Education's request on ways to reshape vocational education to meet the needs of the changing work force of Texas, many ideas generated by the testimony were incorporated into the Council's recommendations.

Special thanks is due the many citizens of Texas who gave valuable time to respond to the "challenges and choices" currently facing vocational education.

Decisions that are made within the next year affecting vocational education will determine the future work force of Texas.

Sincerely,

A handwritten signature in cursive script that reads "George Matott".

George Matott  
Public Hearing Chairman

GM:lp



April

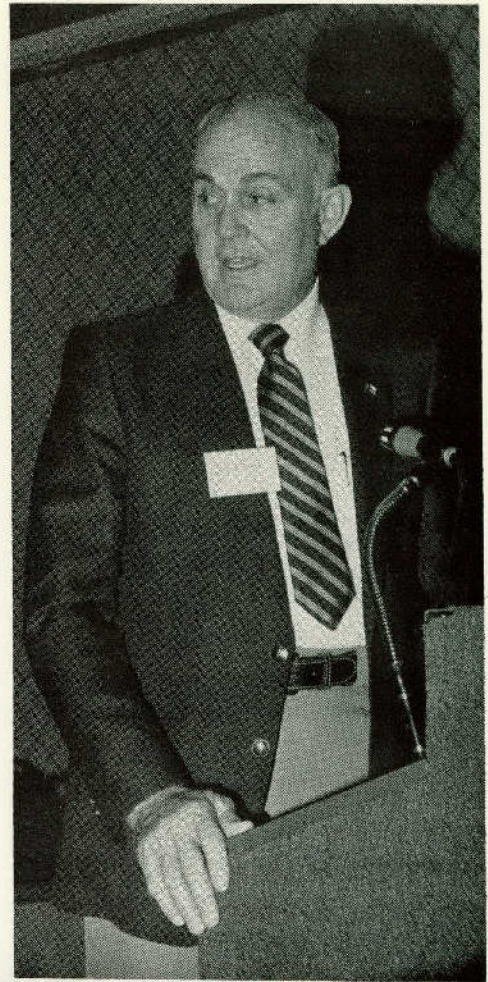


1986

## The Advisory Council for Technical-Vocational Education in Texas

### Contents

Letter of Transmittal .....	ii
Introduction .....	1
Public Hearing Participants .....	1
Issues Surfacing from Public Hearing .....	2
Summary of Public Testimony .....	5
Summary of Written Testimony .....	63
About the Council .....	71
1985-86 Council Membership .....	71





April

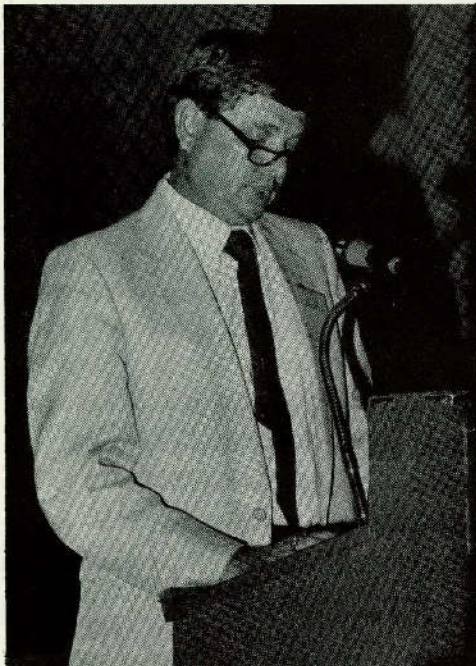
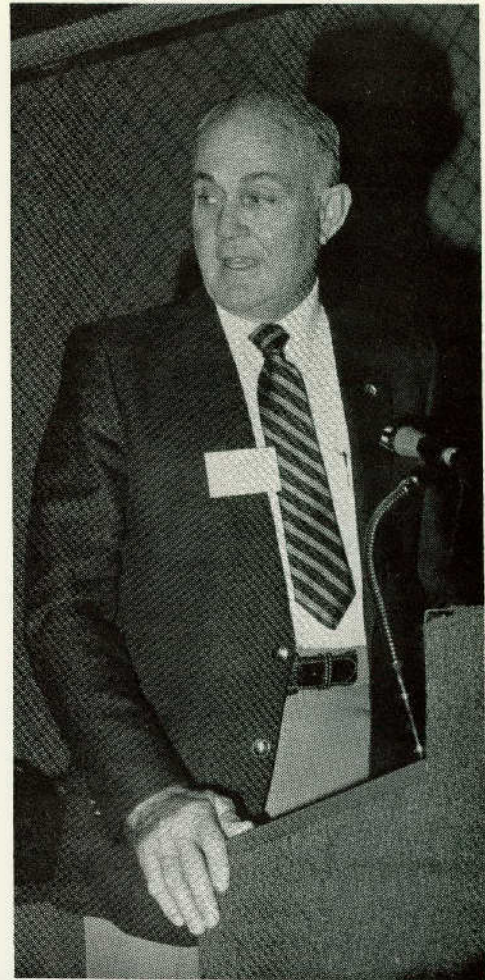


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Introduction . . . . .	1
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Summary of Public Testimony . . . . .	5
Summary of Written Testimony . . . . .	63
About the Council . . . . .	71
1985-86 Council Membership . . . . .	71







## Introduction

The Advisory Council for Technical-Vocational Education in Texas held a public hearing on April 25, 1986, to provide the public an opportunity to express views concerning vocational education.

"Vocational Education: Challenges and Choices" was the theme of the public hearing. Participants discussed the challenges of reshaping vocational education and choices of ways to strengthen vocational education to make it more responsive to new demands.

Participants examined methods to strengthen vocational education's: relationship with business, industry and labor; capacity in a technological economy; relationship with other employment and training systems; and ability to serve special population groups.

## Public Hearing Participants

Over 160 persons attended the public hearing with 82 individuals actually providing testimony. The composition of the group providing testimony was as follows:

Employers (including Local Advisory Committee Members)	22	26.8%
Labor Representatives	9	11.0%
Educators		
Public Secondary		
General Administrators	5	6.1%
Vocational Personnel	8	9.8%
Public Postsecondary	11	13.4%
Private Vocational	1	1.2%
Professional Association	11	13.4%
	<u>36</u>	<u>43.9%</u>
Governmental Agencies (JTPA, Local Agencies, State Agencies)	12	14.6%
Vocational Students	3	3.7%
	<u>82</u>	<u>100.0%</u>
	TOTAL	

# **Issues Surfacing from Public Hearing**

## **I. Mission of Vocational Education**

The emphasis on gainful versus nongainful programs, and specific versus general occupational training were the major issues related to the mission of vocational education.

## **II. Career Guidance**

Comprehensive career guidance should be available to all students.

## **III. Business/Industry, JTPA, and Education Linkages**

A variety of ideas were generated regarding collaboration between business/industry and education (i.e., business and industry must become the classroom for vocational programs and vocational and job training programs should be implemented together).

## **IV. Funding**

Funding issues include state versus local share, various formulas for accountable weights, and redirection of voc ed funding in relation to the state's economic needs.

## **V. Special Population Needs**

Accessibility to vocational programs has improved, but more work needs to be done to insure these students have life skills as well as specific skills.

## **VI. Dropouts**

An effective alternative program needs to be established which combines academic basics and vocational training to meet the needs of those that are not succeeding in a traditional setting.

## **VII. Vocational Education Leadership Activities**

The vocational youth organizations serve a very vital role in developing leadership skills in students. The organizations have suffered this year and measures need to be taken to maintain the quality of the groups.

### **VIII. Economic Development and Priority Occupations**

The economic development of the state is linked closely with the available trained work force. Much of the training is provided by secondary and postsecondary public schools. The needs of the economy of the State must be matched carefully with the training provided by the public schools.

### **IX. Articulation Between Secondary and Postsecondary Schools**

Economy demands that articulation and cooperation occur between secondary and postsecondary to eliminate duplication both for the student and the institutions.

### **X. Apprenticeship Programs**

Apprenticeship programs are in jeopardy without some outside assistance.

### **XI. Vocational Profession**

The "good" in the vocational profession needs to be recognized and rewarded and the "bad" needs to be eliminated. More updated, vital inservice needs to be offered and/or sponsored by business industry.

### **XII. Vocational Education's Role in the Educational System**

Vocational education must work with academic education to create a "totally" educated individual that is capable of going to work or on for further education.

### **XIII. Rules and Regulations Affecting Vocational Education**

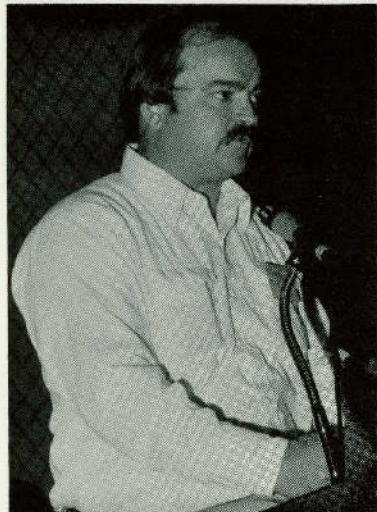
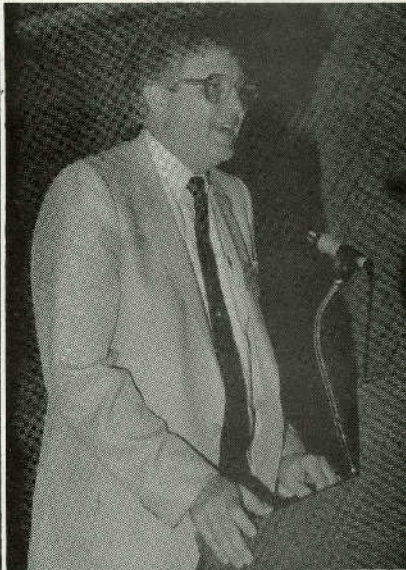
A variety of very specific issues regarding each program area was discussed as well as general Texas Education Agency and Coordinating Board practices.

### **XIV. Curriculum Centers**

A consensus of the testimony supported continued funding of the curriculum centers. Quality instructional materials and effective research are essential components in effective vocational education.

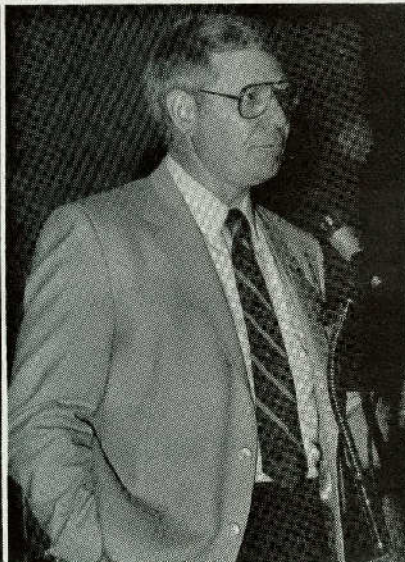
### **XV. Image of Vocational Education**

Vocational education must present a positive image rather than a negative out-of-date image.



**PUBLIC HEARING**  
on  
**VOCATIONAL EDUCATION**

Sponsored by:  
**Advisory Council on  
Technical-Vocational  
Education in Texas**



## **Summary of Public Testimony**

**Laura Mays, President, Anchor Crane & Hoist Service Company, Irving**

Being involved in the marketing education field, I wish to address this program area. Just about anything that we consume, wear, use, or require to survive has been or must be marketed in one fashion or another.

The list of "priority occupations" includes store managers, sales clerks, (all) other sales work in greater numbers than any other program area. Therefore, we encourage a strong marketing education program within our high schools.

Home economics, agriculture, and career guidance (3 areas) have over 70% of our enrollment in vocational programs. Although these are important programs, they are not career oriented nor do they fill the need in the job markets of today. Therefore, consideration should be given to cutting back drastically on those programs and adding support to the programs that business and industry are in the greatest need in today's market.

**Larry Hampton, Senior Vice President, Director of Gordon Jewelry Corporation, Houston (read by Laura Mays)**

Earlier in Texas history, vocational and the Future Farmers of America (FFA) were viable programs. Yet today, when only 3% of the jobs are in agriculture, why are we devoting such a major portion of our vocational energies to this sluggish or decadent occupational area?

Prior to the war years, cooking, sewing, and homemaking were the major role for women. Yet, over the next decade, of the predicted 10 to 20 million new jobs created by the economy, 60% will be filled by women increasing the total work force of women from the current 43% to 46%. With this knowledge, why is homemaking classified as a vocational program when other electives such as typing, shorthand, and bookkeeping are not?

Vocational Office Education (VOE) is an extremely effective and viable program based on job expectancy.

U.S. business will create 3 million new jobs in 1986 with the largest increase of employment in the finance, insurance, and real estate sector.

Being responsible for the recruiting, hiring, and training of

over 7,000 associates, I firmly believe every student should be provided some type of vocational orientation. By providing 8th or 9th grade students with psychological attitude tests, analyzed through computers, this could ascertain the students' vocational or academic tendencies or capabilities. Course selection should be through some type of professional analysis and not left strictly to the "whim" of the student.

**Joe Gunn, Secretary-Treasurer, Texas AFL-CIO, Austin**

Texas employment patterns are moving away from manufacturing and toward service-type jobs which continues to support the need for vocational training. More than half the new jobs will be in small businesses which hire pre-trained personnel.

In the next legislative session, every state program is going to have to meet tough standards. Many will be killed by the budget crunch. Vocational programs at all levels must meet the test of effectiveness.

Secondary voc ed programs should produce students with basic skills that prepare them to enter post-high school training or apprentice programs. Vocational training is not universally available. Part of this problem is the stigma attached to voc ed. The aim of voc ed should be to teach skills needed today and in the future.

Programs are going to have to be examined carefully to determine which will meet the needs of the future. The Legislature will have to make some hard decisions and will be looking for programs to kill. To save voc-tech, the Council must recommend a system that works. This system should include basic skills which are in demand and which can be built upon.

**Wayne Martin, President & General Manager, Plains Cooperative Oil Mill, Lubbock**

Plains Cooperative Oil Mill is one of the largest cottonseed processing plants in the world with an \$80 million annual volume of business. This plant employs 250 people and serves 12,000 Texas farmers.

According to State Comptroller Bob Bullock, Texas farmers and ranchers brought in \$10.3 billion in 1984 which represents 19% of the gross State product, 20% of the State's business establishments, and 21% of the State's employment.

We must continue to train more students for ever-expanding agri-business occupations. New technologies being developed today

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We must continue to train more students for ever-expanding agribusiness occupations. New technologies being developed today



will continue the trend of more and more products being produced by fewer and fewer, but the support force necessary to service these producers will demand more and better trained technicians.

Students are gaining basic training at the secondary level which will allow them to enter agribusiness occupations directly or continue in advanced studies at the college level.

Vo-Ag is currently doing a good job, but it must continue to upgrade and keep current with the latest developments.

Along with the need for well trained people in agriculture, we have a need for many people highly trained in the industrial and technical trades.

**Ray Marshall, Chairman of State Job Training Coordinating Council, Former Secretary of Labor, Austin**

A misconception exists today that we have to make a choice between vocational education and academic education. This is a false dichotomy in that vocational education requires a strong academic background. From personal experience and long observation, one of the most important ways to teach academic skills is through the vocational process.

The economy of our State and Nation is in transition. A lot of the jobs in Texas are on their way to the third world. The only way we are going to be able to maintain relatively high wages and a relatively high standard of living for our people in this rapidly changing dynamic internationalized information world is to have people well trained and well educated.

**Jim Hudson, Regional Sales Manager, General Mills, Houston**

Strengthening our academic programs, especially during the early years, is most important. However, I am very concerned about the de-emphasis of vocational education in Texas.

In Houston, there are active Marketing/Distributive Education (MDE) programs, serving 1,500 students. Business/industry has been very supportive. Many impressive success stories have resulted from this partnership with MDE students progressing into important management positions.

Without this successful program, many of these young people would have dropped out of school with no marketable skill and a low self-esteem. Their future would have been prison, welfare, or in other ways living on the taxpayer.

MDE is not just flipping hamburgers and buying cars. It involves training programs initiated by Foley's, Sears, and others to create productive citizens.

Another example of a successful cooperative effort between MDE and the food industry is a scholarship program. This program during the past few years has grown from \$1,500 to \$46,000. In addition to scholarships, the companies follow the young persons progress. Through providing college scholarships, continuing to provide them with summer and part-time jobs, counseling with them, and offering them jobs upon graduation, business maintains an active role.

The cooperation between the schools and business/industry in Houston has resulted in a very impressive MDE program.

**Bob McPherson, Deputy Assistant for Programs, Governor's Office of Programs, Austin**

The vocational education system should not be a separate education system in this State. It should be an alternative in the regular education system with no stigma.

Vocational education must be responsive to the needs of employers. This requires a good statewide system of labor market information. The labor market information system must be composed of two parts. The formal part must provide information on both the supply and demand side of the labor equation. The other part is an informal system which relies on information from employers in local areas.

Vocational education must be accountable for the education provided and for the results of the educational effort. That demands a good management information system which provides follow-up information. Also measurable goals and objectives must be established. Voc ed must have performance standards and be held accountable at all levels.

Vocational education and job training programs should be planned and implemented together.

The formal education of today is not like the formal education of tomorrow. Flexibility is the key. Systems must be responsive. The system today will look nothing like the system of tomorrow if the system of tomorrow responds to the labor market.

**Jan Friedheim, Owner, Executive Secretarial School, Dallas**

Basic skills are important for students exiting secondary

schools, but vocational understanding and education are also very important. It is a tax advantage to produce this type of student, because he can become taxpaying at a more rapid rate.

The reality of the future is that only 20% of the jobs will require a college degree. Yet, in our current curriculum we seem obsessed with putting every student into a college entry program. Also, jobs of the future are going to be in small businesses; and if we proceed the way we are going in Texas, we will continue to have a mismatch of employment force and jobs that are available.

Other states have improved their educational quality without diminishing the importance of vocational-technical education. They are actually strengthening and improving voc ed.

A possible solution might include innovative programs that get business and industry involved in the actual training and development of the student. Another solution would be to develop cooperative programs where postsecondary institutions could be utilized in providing training.

A final suggestion would be to form a Task Force of non-educators to look at some of the solutions in vocational education.

**William Czervinske, Manager, DOT/Federal Aviation Administration, San Antonio**

High technology industries are encountering a critical shortage of employees with high tech skills. A lack of interest by students in high tech training and a meager response to this problem is causing a technological decay as our skills resource base dries up. This cannot continue because the United States must maintain its technological expertise if it is to be competitive in world trade, maintain national security, and allow democracy to survive.

If we are to reverse our present trend in coping with the critical high tech shortage, the following must be accomplished:

1. The education system must meet the needs of the Nation, both in educating our youth and providing a resource for its survival.
2. Industry and education must become active partners in coping with meeting critical high tech needs. Industry has the resources and motivation.
3. The academic arena must break down their ivory walls, provide better guidance to students, and let in the fresh air of creativity needed for education to survive the remainder of the century.
4. Make a concerted effort to expand upon established pro-

grams that have already proven effective and provide the skills required of the high tech era enlisting the help of the private sector and government education to help meet these objectives.

5. The high tech internship in the San Antonio area is a proven approach to fill the high tech gap in critical skills.

**Bill Gaylor, Director, Transmission Systems Technology, Rockwell International, Dallas**

Some things need to be put in perspective. A great majority of the citizens of Texas strongly support educational improvements. Texans want excellence in their educational system at an affordable cost. We must improve our academic achievement and provide meaningful vocational programs at both secondary and postsecondary levels.

To provide the necessary economic support for our society, our education system must furnish academic and vocational programs that prepare our citizens for paid occupations. The current and future needs of the job market must be considered in determining programs to be offered. Nonpaid occupations like home economics are also important.

According to the Department of Education, only 20% of the jobs during the next decade will require a four-year university education or higher. This emphasizes the need for improved and expanded secondary and postsecondary vocational programs in order to provide training for the jobs of the majority of the citizens of this State in the future.

Although four-year universities are important, our finances must be redirected to primary, secondary, and two-year postsecondary. Statistics from the Texas Department of Corrections show that 85% of the inmates do not have a high school education or marketable skills.

The price for ignorance is very high. The price for a good education is a real bargain especially one that is directed toward real needs.

**Robert H. Carpenter, Veterinarian and President, Research Biogenics, Incorporated, Bastrop**

The Texas economy is changing from an Oil/Agriculture economy to an Information/Biotechnology society. For Texas to make this dramatic economic change, we must have highly skilled vocational workers to provide the infrastructure skills required to support

the new economy.

Vocational programs needing immediate attention are robotics and maintenance; research laboratory skill training; electronics repair and maintenance; information processing; decision making with artificial intelligence assistance; vocational agriculture programs to include computers and biotechnology innovations in genetic improvements of animals, crops, and fertilizers; and skill programs for the handicapped via artificial intelligence and process monitoring.

Texas must successfully compete against Japan and other nations where high tech vocational training provides well trained relatively inexpensive labor. Texas must address the issues of supplying an appropriately trained labor force for the year 2000 and not train for the skills of the 1970's.

The new cost must be borne by the State rather than passed on to local taxes. Property and business owners are not an endless source of revenue.

**Jack Stubbs, Apprentice Coordinator, Texas Bricklayers Joint Apprenticeship Committee, Houston**

If the quality of the U.S. labor pool is not improved over the next few years, the negative effects on productivity spell trouble for the Nation and the economy.

Educational institutions must return emphasis to career education. Career education was and remains a sincere call for reform in helping people ready themselves for work. I am concerned about what is happening in our schools and what our counselors and educators are teaching about the world of work.

I charge all of you not to just talk to one another, but talk to your lawmakers, your neighbors, your teacher friends, and to anyone that will listen to our cries in the wilderness of learning.

**Billy Spannagel, Vocational Director, Northside ISD, San Antonio**

My number one concern is for special needs students. After nearly 20 years of implementing, coordinating, and working with special needs programs, I know they are providing a valuable service to our disadvantaged and handicapped youth.

Restrictions resulting from House Bill 72 are preventing these students from participating in youth leadership activities. These leadership activities are the very motivating factor that

allowed them to "achieve" for the first time in their life. Without this program, these students would be lost in the street and we would be paying tax money to support them the rest of their lives.

I strongly support occupational investigation. It is one of the best things that has happened to the education and guidance of children. However, Northside ISD was forced to drop this from the middle schools because there was no longer time in the school day due to increased requirements of House Bill 72.

In the area of duplication, Northside is working diligently to implement articulation agreements with all of the postsecondary institutions in the area.

Another area of concern is consumer and homemaking. This is basically the only program in secondary education that speaks to home and family living.

**Dianne Bynum, Vice President, The Bloom Companies, Dallas**

Creativity is the key in determining new directions for vocational education. As the pie of funds shrinks, it is important to cut that pie better to serve the young people.

In business we use funding incentives which could also be utilized by vocational education to trigger innovative program curriculums. Examples of possible creativity include combining programs. Textiles from home economics could be combined with marketing skills to prepare young people to become buyers in retail stores. Agriculture skills could be combined with marketing skills to allow a student to have both technical information and skill training.

This incentive funding approach could also be used to insure an articulated program that meets the needs of the secondary and postsecondary students in a particular area.

Another occupational exploration program at some level uniformly offered throughout the State is an answer to helping young people identify their career potential.

We cannot continue to sit on our turfdom as vocational educators or as business people recognizing the needs and survive into the 21st century.

**Macey Reasoner, Chair of Planning Committee, State Job Training Coordinating Council, Houston**

I represent one of the youngest entities in the broadly defined field of vocational education - that of federally funded job

training for the disadvantaged. Our goal is the same as your goal which is to educate each generation of citizens for meaningful employment.

A mandate of the State Job Training Coordinating Council is to foster coordination between all employment and training systems in Texas. This is a high priority of the Governor. We appreciate the ongoing cooperation received from voc ed and urge the Advisory Council to become even more vigorous in the building of future bridges between us.

If voc ed will join the Job Training Partnership Act (JTPA) in combating mutual suspicions, the barrier to active participation will fall - and the needs of a new economic era can be met.

Speaking as "the newest kids on the block" to the proud originators in the job training business, we offer the total commitment of JTPA to Vocational Education in that vital endeavor.

James Hawkins, Chairman, Texas State Apprenticeship Training Commission, Port Arthur

With todays rapidly changing technology, it is paramount that we thoroughly train our new and upcoming craftsmen. We all recognize that good employees coupled with good management equates good productivity. Apprenticeship training is good business for all.

Apprenticeship programs are in place and operating with more than 80% of the capital being privately funded by labor and management. By assuming most of the cost, the programs were not a burden to society.

Our industry is now in distress and many of our programs are in jeopardy and will fail without some outside assistance.

Apprenticeship programs are time tested and have a proven performance. Many of the programs furnish their own facilities. Apprentices are required to attend class while receiving paid on-the-job training.

As a business person, the apprenticeship program appears to be the most efficient and expeditious method of placing a person in a vocation of their choosing and making him a taxpaying citizen.

Ronald P. O'Riley, Consultant, Innovative Education, Incorporated, Dallas

An individual's potential income is directly proportional to the God given abilities amplified by education. Apprenticeship in

vocational education offers a proven way of amplifying an individual's abilities and thereby increases potential income. An individual's potential income is directly proportional to his taxpaying ability. Therefore, taxpaying ability is directly proportional to ability amplified by education.

Apprenticeship works toward a wage and a standard of living that will make a satisfied, independent, taxpaying citizen for the community and for the state.

When considering the number of apprentices (7,500) and multiplying that times taxes generated (4,000), the total equals \$29,250,000 which is a 40 to 1 pay back during training time. When reviewing the buying power, this equals \$117,000,000. For every tax dollar invested in apprenticeship, \$117 is put back into the economy. According to the National Community College Monthly, for every tax dollar invested in college, \$4 went back into the economy.

Apprenticeship is one of the most valuable, cost-effective adult vocational education methods of training. Apprenticeship training is in the best interest of the youth of Texas and a prudent investment of tax dollars. Apprenticeship dollars cut from the last biennial budget need to be reinstated.

**Margaret Baillargeon, Vice President, North Central Ford, Richardson**

A critical need for individuals trained in high tech repairs will continue to exist. I will address the need for qualified automotive repair persons and how that need can be met.

The Brookhaven College - Ford Motor Company Automotive Student Services Education Training Company Program serves as a model for what can be accomplished when the business community and those in education develop a working partnership.

The Automotive Student Services Educational Training Program (ASSET) is a two-year work study program designed to develop technical competence and a professional level for incoming dealership technicians.

The total program is 90 weeks with approximately 50 weeks in the classroom and 40 weeks in a dealership. Each specialized subject is taught in the classroom and immediately followed by related paid work experience in the dealership.

The student has the opportunity to become familiar with the dealership environment and organizational structure, and learns what is expected of a professional automotive technician.



Before being accepted into the program, the student must fulfill the employment requirement of a sponsoring dealership. The student is responsible for the actual program cost.

This serves as a model for what can be achieved when the business community and an educational facility work together to meet a pressing need for highly trained specialists.

**E. C. Leslie, Superintendent of Schools, Lubbock ISD, Lubbock**

As superintendent of a large school system in Texas, I would like to make five points concerning vocational education. The first point is that vocational education is and must continue to be a vital part of the total concept of a comprehensive educational program.

The second point that I would like to make is that it is going to be necessary for the state to assume a larger and larger share of the cost if vocational education is going to be equally available to students of wealthy and poor school districts. A study of the costs and needs for each vocational program needs to be conducted. State allocations to local districts should be based on a schedule of those program costs and needs that have been noted in the labor market.

Thirdly, the business world must become the classroom for vocational students in most of our programs. To keep up with technological advances, students must be trained with current modern equipment which can best be accomplished by forming cooperative teams with the business world.

The fourth point is in order to motivate business partnerships with education, we must determine ways for it to be financially advantageous. I would suggest legislation that would grant tax incentives to those businesses cooperating with school districts in their vocational education program.

The fifth point is that we as educators must become agents of change rather than protectors of the system. We must continue programs only on the basis of merit of training and meeting of the current industrial needs. Vocational educators of the future may not be the skill deliverers that we have known in the past, but we must become the attitude developers that make it possible for workers in the business world to transmit those skills to our students.

**R. J. Cotter, Vice President, Tezel & Cotter Air Conditioning Company, San Antonio**

Upon completing a vocational education class, students have a better idea of what they want to do, a better understanding of

the "Free Enterprise" system, and a better knowledge of the "World of Work." I am sold on vocational education as much as I am sold on the apprenticeship system for training skilled craftsmen which we have had around several hundred years. If we hurt vocational education, we will definitely hurt apprenticeship. This could cause a shortage of skilled labor which we would feel within just a few years. We need to keep in mind most of these people become "taxpayers" immediately upon graduation.

I am not an educator. I am not trying to protect some shop teacher's job or some school district's source of funds. I am here to help protect the proven system of educating skilled craftsmen, through apprenticeship and through voc ed.

Most of the new rules are great, but to hinder our voc ed programs fits right in there between the "Edsel" and "New Coke." It takes a brave person to try something new and different, but it takes an even greater person to admit being wrong and to say we went too far and we need to try another approach.

**George McLaughlin, Chair, Technology Training Board; Member, Texas Economic Commission; Chancellor, Lamar University System, Beaumont**

We feel very strongly that vocational education not only plays an important role in our education system, but that it also plays a critical role in developing the technology infrastructure and human resources needed to support the diversification of our state's economy.

The Technology Training Board, created by House Bill 553, was set up as a "one-stop" information referral center for technology-oriented skills training and related research.

The Technology Board has begun data collection about technology training activity in Texas, as well as technology training programs in other states. Program development is planned to coincide with the development of proposals by related technology industry constituents. In order to accomplish this objective, we strongly encourage representatives from industry, labor, government, and education to work with us. We are hopeful that this hearing will provide us with the beginning of a new strategic alliance for promoting the potential of voc ed and technology training in Texas.

**T. Carl McMillan, Superintendent, Harlingen ISD, Harlingen**

A problem that evolved in our vocational programs as a result of the change brought on by reform is dropping enrollment in all vocational student leadership activity education programs. An

example is Vocational Industrial Clubs of America (VICA) which had 26,000 members in 1984-85 and only 12,000 members in 1985-86. The elimination of field staff is one reason for the decline in enrollment. Another reason is classification of the club activities as extracurricular which brought into play the no pass/no play rule.

A solution to the enrollment decline would be a multi-occupational regional staff to serve the vocational education area. Also, the youth organization activities should be classified as co-curricular.

A second problem is the requirement of teachers to be on level 2 within six years which will eliminate some vocational teachers from the profession. These teachers should be exempt through appropriate evaluation so they can remain in education. Some very good teachers are going to be eliminated from the profession.

A third problem is dropouts. Forty percent of the kids in Harlingen drop out between the 8th and 12th grade. We need to provide some alternative education programs where the students are immersed into vocational programs where the basic skills of reading, math, language arts, and computer literacy are related to a chosen occupation.

**Wava Hurley, President, Vocational Home Economics Teachers Association of Texas, Austin**

The occupation of homemaking requires knowledge and skills that are interrelated and necessary for optimum quality of life for individuals and families. Some of the same concepts and applications basic to the preparation of the occupation of homemaking are basic to home economics occupations classified as paid employment.

Information supporting consumer and home economics includes: the monetary worth of the homemaker, national research results, how home economics responds to the change in society, the relationship of home life on work/work on the family, single parents, Consumer and Home Economics effectiveness study, and the need for decisionmaking skills.

Recommendations for improvements include:

1. Expand coalitions and collaborative efforts with business and industry including business/industry summer training programs for ALL vocational educators.
2. Provide adequate funding for personnel development.
3. Provide adequate funding for Vocational Curriculum

- Centers.
4. Stress "application" of basic skills in vocational education rather than the responsibility of teaching basic skills.
  5. Encourage State Board of Education (SBOE) rules that set appropriate optimum enrollments in vocational education programs.
  6. Reinstate the collection of data at the Texas Education Agency (TEA) that can be used for planning and implementation of changes or redirection of vocational education programs where needed.
  7. Improve dialogue between the Advisory Council staff, the Vocational Program Directors at TEA, and the professional organizations.

In summary, we recommend that the 14 million people in Texas that will have more than one career be given the opportunity to enroll in a vocational home economics program if they choose.

**Aaron Alejandro, President, Texas Future Farmers of America, Farmers Branch**

I am a firm believer that communication is the key to any success and you, the Advisory Council, fill the void in the communication gap between our organizations and state officials. I am a firm believer that American Agriculture youth and leadership are undoubtedly some of America's most vital resources. I know of but one organization, Future Farmers of America (FFA), that combines all three to form the well-rounded leaders of tomorrow.

I am pleading from the student's standpoint on why we need to keep vocational programs. After visiting over 300 high schools across the state, I think the students we are producing are well worth our money, time, and efforts to save the program.

**Clay Wilkins, Executive Director, Texas Aeronautics Commission, Austin**

My remarks relate to concerns in our state's multi-billion dollar air and space transportation industry. As we look toward the 21st Century, a critical need exists for more technically qualified managers and employees.

I will address two basic concerns. The first is that students, in general, in Texas public schools are not motivated to undertake studies in math, science, and technical subjects. The result is a serious shortfall of trainable labor available for technical careers. This impinges directly on our nation's and our state's productive capacity, our infrastructure, and our

society.

A recommendation to reduce this problem would be to have Texas Occupational Education provide informational and motivational technical themes and activities for elementary and middle school students.

The second problem is that many technically based industries in Texas are facing serious shortages within their trained and trainable labor force. As a result, most of these industries are attempting to train their own work force; which is very uneconomical and places them at a tremendous disadvantage with foreign competitors.

To help solve this problem, Texas Occupational Education should modify the high school curriculum so as to allow and encourage schools to include training with industry options in technical skills as the local situation might demand.

**Steffie Odle, American Affairs Chairman, Women's American Organization for Rehabilitation (ORT), Houston**

ORT, the Organization for Rehabilitation through Training, is the world's largest nongovernmental program of technical and vocational education. ORT has earned worldwide acclaim for its vanguard, flexible, and futuristic system of career-oriented education for employment. Our international network of schools serves over 130,000 students in 800 facilities in 30 countries.

We identify strongly with your task - to provide for the best technical-vocational education for the students of Texas as our state enters a period of high unemployment and increased need for people with trained technological skills.

We view the needs of our state in two categories: (a) Career Education, and (b) appropriate voc-tech skills to meet current and future market demands. Career education is a motivation for learning by relating the marketplace to the basics. It is the bridge to inspiring students to pursue vocational and technical education by providing career awareness and guidance in the early years.

If we are to develop the appropriate programs to meet current and future market demands, we must look critically at the quality of our state programs to see if they meet the criteria for the future. To attract the best and brightest students with the best aptitude for technology, we must raise the status of our voc-tech programs. In order to provide for the large number of students who can enter these fields, we must plan to provide attractive alternatives to existing education opportunities. In order to

attract these students, they as well as their families and counselors need to understand the importance of technological training at every level.

We strongly urge that you address the needs of the special populations who could become productive and self-sufficient if trained properly at an early age.

The task is great! The coming together of the education, business, industry, and community leadership can provide a vehicle for open discussion and free thinking that could stimulate a basis for sound education planning for the future. We offer ORT's 100 years of success as a model to the Council.

**Jim Hensley, Superintendent, Ysleta ISD, El Paso**

As superintendent of the 7th largest district in the state, I am here to talk with you about some ideas we have for the future.

Recently, Mr. Owen Butler, Chairman of the Board of Procter and Gamble Company, visited our district. He has served on a committee composed of more than 200 top corporate executives that issued a report entitled "Investing in Our Children: Business and the Public Schools." In the report they stressed the need for cooperation between education and business. Also, they advocate a strong pre-school program which can be in the long-run the solution to many problems.

Among the many observations, one had to do with employability. Two things make students ultimately employable. (1) competency in English language skills, and (2) proper work habits and attitudes.

After reviewing this report, I have several suggestions that might improve our current system. (1) The existing Coordinated Vocational Academic Education (CVAE) programs need to be overhauled. (2) All voc ed programs should have a basic curriculum related to proper attitudes and work habits and this possibly should be required of all students. (3) Examine the current objective of students leaving vocational ed with a saleable skill. Is this realistic? We need to produce employable students with basic English skills, good work habits and attitudes, and finally some basic vocational skills. (4) Voc ed needs to become involved intricately with the adopt-a-school program.

**Jane Hanna, Education Director, Association of Builders and Contractors of North Texas, Dallas**

I come to you this morning requesting that you pay attention to

the construction industry's needs.

By 1995, projections indicate that the construction industry nationally will have a 2.4 million shortfall in trained construction workers.

We are in desperate need to not only maintain what currently exists, but to build up the work force to meet that need in less than 10 years.

The construction trades are not glamorous, but they are vitally essential. We must move forward in providing trained workers, or by 1995 we may be in greater difficulty than we are now.

**Keith Byrom, Associated General Contractors of Texas (AGC), San Antonio**

AGC, which represents general contractors engaged in highway, utility, and heavy industrial and commercial building construction, predicts a severe manpower shortage by 1995. This is due to the increase in activity resulting from infrastructure repair, retirements, and people leaving the industry.

In training students entering the construction industry, AGC feels strongly that specific relevant skills training is necessary. Specific relevant skills training reduces on-the-job training time from 12 to 24 months. This decreased training time saves money for contractors as well as increases employees' learning capacity.

AGC believes the purpose of public education is to prepare workers to enter the work place, find a job, and meet the needs of industry. AGC is currently working with the Texas Education Agency on the development and implementation of a competency based curriculum for construction workers which would include cooperative training, instructors, materials, and equipment.

Some employees may benefit from broad-based general type vocational training, but not to the detriment of the specific skills training.

**Ross Clegg, College Coordinator for the Southern Region of the U.S., General Motors Corporation, Garland**

My job is to coordinate different programs with the post-secondary institutions around the southern part of the country. It is projected that by 1987 every automotive technician, whether or not they are a factory affiliated dealership or independent

repair shop, will be required to work with advanced systems or be out of work. Automation, computer technology, and changing diagnostic equipment have impacted nearly every trade and discipline and promise to continue into the 1990's.

Skilled craftsmen have not been adequately retrained in sufficient numbers to keep up with the pace. Inadequately trained craftsmen, like obsolete equipment, pose a serious threat to every industry's economic growth and stability. Upgrading for today's automotive servicing utilizes forced feeding of concentrated technology; however, forced feeding requires that trainees have a better basic education to understand this technology.

Since customer satisfaction is dependent upon this greater level of efficiency, upgrading of automotive technicians is of paramount importance to the auto service industry. This retraining will have to take place in conjunction with two-year colleges and vocational-technical schools where reading comprehension, applied mathematics, basic electricity, and electronics and computer technology are emphasized.

General Motors products service training has developed three significant training innovations since 1978 which we hope will set the pace for the entire automobile service industry. The programs are apprentice type programs where a student receives classroom instruction and actual experience in an automotive shop.

**Bill Stotesbery, Director of Government and Public Affairs,  
Microelectronics and Computer Technology Corporation, Austin**

Vocational education's capacity in a technology economy must be closely tied with business and industry. Both the educational and industrial communities recognize the need to prepare people for the changing compositions and requirements of Texas industry. Working together they can effectively meet that need.

It is a legitimate goal of the state to provide trained workers for the changing economy, but in a time of scarce resources and rapid technological change, Texas vocational education leaders must actively seek support from the private sector. This support can include cooperative financial arrangements and program planning involvement.

Programs have been initiated in other states which involve business, educational institutions, and government in expanding skills training programs to meet state employment needs. The Massachusetts Bay States Skills Corporation is a model where educational institutions and industry share the cost of training



and retraining for the state's high growth occupations. The North Carolina customized job training program is a largely state supported effort that responds to industry needs for retraining. The Florida Engineering Education Delivery System uses video technology to carry continuing education to employers in the states not served by engineering schools. These are excellent examples of cooperative programs which bring together all the sectors into joint sponsorship, joint funding, and joint operation.

Texas has an important opportunity to involve its business and community more closely with the vocational education system.

Cooperative programs, such as these, are one way to enhance that relationship, and encourage individual and institutional flexibility.

**John Taylor, High Technology Coordinator, Judson ISD, Converse**

Vocational education has been under attack for the past several years at every level of effort - local, state, and national.

Vocational education is absolutely essential in the American economy for the 80% +/- students who do not complete college. Therefore, voc ed should stop trying to defend current programs as being essential and concentrate instead on improving voc ed.

The problem is not vocational courses, it is vocational people. Too many people have been permitted to come into vocational education whose only qualification was knowledge of a skill.

Texas Occupational Education should establish more stringent approval criteria for vocational certification through testing, demonstrated competencies, and education.

Secondary schools are not effectively encouraging students to undertake careers in technical disciplines. The Agency should foster more "partnership" programs patterned after the Judson High Technology Internship experience to provide training in technical skills. After three years in operation, over 90% of the students in the Judson program have continued their education/training in their high tech discipline; a success story without parallel in voc ed.

**Elizabeth Haley, Dean, College of Home Economics, Texas Tech, Lubbock**

Educators and parents are asking about the future of education, and we have been described as a nation at risk of mismanaging our

most precious resource...people. Vocational education serves an important role in preparing productive citizens who contribute to economic development. Consumer and homemaking education has a great potential to address the risks that individuals and families in our Nation are facing, for it prepares men and women for future paid employment as well as for the role of homemaker.

Quality instructional materials and effective research are essential components in effective vocational education. Quality instructional materials have had high priority in Texas and teachers and students alike have benefitted. The Texas Education Agency is to be commended for its farsightedness in giving high priority to curriculum development. Such priority must continue to address new and emerging occupations and changing needs of families.

The emphasis of vocational curriculum center materials is to reinforce basic skills in every class, to develop thinking skills, and to insure the transferability and marketability of skills.

Home economics is an important component of vocational education. We anticipate the results of research projects will confirm the interrelationships of the work place and the home. I encourage you to continue to strengthen consumer and homemaking education programs because they can make a difference.

**Larry Evans, Executive Director, Texas Commission for the Deaf,  
Austin**

I have six issues I would like to bring to your attention. My interest is in students who are deaf and hearing-impaired.

1. Since the implementation of Public Law 94-142, there have been schooling opportunities for a much greater number of our youth. Although these students are being provided educational opportunities, the vocational opportunities to these youth have been minimal.
2. Additionally, although many of our youth were provided educational opportunities through the passage of Public Law 94-142, a large number of these students were successfully mainstreamed into "regular" vocational programs. Unfortunately, many of the more severely handicapped students were tracked into traditional programs of self-contained classes.
3. There will be minimal growth in manufacturing jobs through the end of the twentieth century, but there will be continued growth in service industries. This is an area that needs more focus in our vocational education programs.

4. With the rapid changes in technology, equipment should be leased in order to avoid the expense of obsolete equipment. This eliminates service headaches and ensures that up-to-date equipment is available.
5. In a recent Austin American-Statesman article, there was mention that 15 to 20% of the students graduating from high school did not have the skills necessary to obtain employment. Although they knew their subject areas in school, they did not know about finding and keeping a job.
6. Public awareness is very important. Some type of networking of successful public relations programs should be established.

**Willie Kocurek, Attorney, Austin**

Being 76 years old, I speak from the mountaintop...the snowcovered mountaintop. I have been here long enough to have been career oriented. I think vocational education is career orientation. Careers start in the beginning and mine started 76 years ago.

My parents gave me career instruction as they taught me to pick cotton and how to hold the hoe handle to do the chopping. They taught me how to be an agriculturalist.

The English teacher taught us to use words appropriately which automatically taught us many things that are career oriented. You were also taught to speak and make presentations by the English teacher. This is career education. The word should be career and not vocational education.

All of the things that are oriented into a career come from the side effects of so many people that you work with and so many ideas that you get through a world of 30 or 40 business years.

Someone has to give you a vision, a vocation to want to achieve. Then you must generate the enthusiasm to achieve it.

I am proud to be here to say that I can testify to 76 years worth of career education.

**Lane Murray, Superintendent, Windham School System, Texas  
Department of Corrections (TDC), Huntsville**

The mission of the Windham School System is to provide quality academic and vocational education to all TDC inmates with less than a high school diploma regardless of their ages. We serve those from 15 to 75.

The Windham School System is budgeted at \$20 million and is funded through the same state funds that underwrite the public schools. Eighty-five percent of the TDC inmates are school dropouts. Forty percent have never held a steady job, yet 96% of these people will walk the streets again and their time spent with us is less than three years.

To date, almost 29,000 inmates have completed a General Education Development (GED) certificate and 351 have completed a high school diploma. Competency based instruction in 35 vocational trade areas has resulted in over 29,000 inmates participating in vocational training since 1970. Through state appropriated funds for postsecondary programs, 2,851 inmates have earned associate degrees, 10,000 have earned junior college vocational training certificates, almost 400 apprentices have earned journeyman certificates, and 239 have earned baccalaureate degrees.

Recently a census bureau study found that the Nation's illiteracy rate has advanced from one-half of one percent in 1979 to a staggering 13 percent in 1986. This Advisory Council and all adult educators must find a better way of dealing with illiteracy. We are losing the battle.

Education costs for Texas inmates are no higher than those of the public schools. However, when we add \$22.77 per day or over \$8,000 annually as maintenance costs for one inmate, it is obvious that the cost is overwhelming. When you add the construction cost of \$38,000 per individual cell or \$10,000 per dormitory bedspace and multiply that number times the total TDC population of 38,000, the cost is staggering. We must keep our youth in school until high school completion. Whatever it may cost to offer them vocational training for employment, it is worth it. We can pay now or pay later.

**Richard Pulaski, Director, Vocational Education, Angelina College, Lufkin**

Cooperation in the community is the goal and driving force in community colleges. We are comprehensive. Our programs are driven by the local labor market and local economy. In West Texas there are concentrations of ag programs, in the Gulf Coast area there are petrochemical programs, etc.

We cooperate with secondary programs. The employers are the center of focus of what we do and we train for them in a general way.

Our postsecondary programs serve a variety of needs including apprenticeship programs, upgrade programs, industrial start-up, college transfer, etc.

Funding, in general, comes from state appropriated funds which are generated by what it costs to operate programs. Every two years studies are made of what the various programs cost to operate, and then the formula amount is set. In addition, there are local ad valorem monies and student tuition and fees. Sunset rules are not needed at the postsecondary level, because if the jobs are not there, the students are not there; and consequently, the program is not there.

The Coordinating Board has asked the community colleges to hold the line on new programs. Those that are absolutely necessary will usually be approved if they can be funded without new state expenditures.

**John Baker, Executive Director, Texas Association of Private Industry Councils, Austin**

Private Industry Councils are charged with policy guidance and oversight of local programs funded by the Job Training Partnership Act (JTPA) which is a federally funded employment and training program for economically disadvantaged and dislocated workers.

I would like to make five points:

1. Coordination should occur with all vocational education funds. This should not only apply to programs supported with federal funds, but to state and local funds so that all vocational education is being coordinated with all programs funded under the Job Training Partnership Act.
2. Use the existing regional planning process that is in place under the Job Training Partnership Act. The Texas Legislature requires that vocational programs be designed to meet the needs of new and emerging occupations and that priority be given to requests for vocational programs specifically identified as training for priority occupations. Local JTPA planners have developed an expertise and have a system in place that provides for regional analysis of labor markets including these priority occupations.
3. Funding priority should be given to priority occupations and occupationally specific training. We recognize important skills are taught in nonspecific, nonpaid occupational programs; however, as the nation and state face diminishing funds for vocational programs, funding priority should be given to programs which meet regional labor market needs for paid occupations.
4. There should be a hardline evaluation of the existing programs. Assessment and evaluation of the vocational education system should be a vital ongoing component of

- all vocational programs.
5. There needs to be a goal or a good communication flow between vocational education and the private sector. If the vocational education system is the cornerstone of this state's employment and training programs, it is crucial that the Private Industry Councils and the vocational system work together.

**Joellen Simmons, Assistant Commissioner, Texas Rehabilitation Commission (TRC), Austin**

On behalf of the Texas Rehabilitation Commission, we do wish to convey how important we feel vocational education is, especially to the clients that we currently serve of which 6,000 are school age.

I wish to underscore that we recognize that students who have had a solid vocational education program are much better prepared for employment and for the services at TRC.

Beginning in the 9th grade, vocational courses should focus on preparation for skills for specific employment. All courses should include the application of computers in demonstrating the relatedness to the occupational area in which the student is interested.

As far as special education, there is much to do. Senate Concurrent Resolution 129 requires leaders from the Texas Education Agency (TEA), Mental Health/Mental Retardation (MHMR), and the Texas Rehabilitation Commission (TRC) to coordinate a process for special ed students after age 22 to enter the community. Also, school districts will find their role increasing with special needs students as the state deinstitutionalizes schools for the severely handicapped.

We propose that special ed students who are unable to mainstream in regular vocational education classes receive special education curriculum focused on employment and independent living skills which will better prepare them for a vocational education program and that vocational education assist special ed to identify key curriculum elements and competencies required for these courses in Vocational Education for the Handicapped (VEH) classes. The vocational adjustment coordinator, vocational education teacher, and the TRC counselor should coordinate with MHMR caseworkers as the program nears transition.

In summary, we feel that coordination is necessary to facilitate the transition needs of our special needs students. We are able to assist with resources to make this actually work. TRC has state funds which can assist school districts in drawing down

federal funds from the Carl Perkins Act which could greatly enhance the voc ed programs, of which we will demonstrate in the lower Valley school areas.

**John Holcomb, Professor Emeritus, Texas A&M University, College Station**

I was invited here because of my knowledge of vocational agriculture. The decreasing number of farmers and farms has been accompanied by increases in a wide variety of occupations that require knowledge and skills in agriculture.

I served as coordinator of the Curriculum Materials Center located at Texas A&M which produces curriculum materials for agricultural and industrial vocational education. Dr. Gary Briers of the Agricultural Education Department is conducting research on the contribution of agriculture curriculum to the application of science and math. The project is not complete, but enough evidence is in to verify the contribution is high.

Currently, the Center distributes approximately 900 publications. The general concept originally was the Texas Education Agency through contracts would provide funds to produce the first sheet and reproduction and distribution would be paid for by schools.

**Delbert Gibbs, Associate Professor, Corpus Christi State University, Weslaco**

This presentation will contain criticism of prior actions and recommendations for future directions. Recently the Advisory Council made some recommendations regarding "Projects to Improve Vocational Education." Upon analysis of the recommendations, the academic curriculum is being invaded even to the extent that vocational education would design courses to meet academic graduation requirements.

Voc ed at the secondary level cannot and was not intended to replace a need for a good basic academic education, but rather to become a part of a well-rounded, comprehensive high school course offering.

If we are going to offer vocational training to students, we must have six things:

1. Well-defined training programs.
2. Teachers well prepared to deliver the training.
3. A place in the curriculum which affords students the opportunity to elect the training.
4. Appropriate support services; i.e., guidance and job

- placement.
5. Students capable of being trained.
  6. Leadership by the Central Education Agency.

The Commissioner of Education recommended support for vocational curriculum centers be cut 50% and vocational teacher education by 30% while the overall budget for vocational projects was increased by 20%.

Our programs are working as evidenced by the unemployment rate of our training completers which is under 5%. The statewide unemployment rate for 18-23 year olds ranged from 25% to 40%. We must be doing something right.

**Harold Bayles, Advisory Committee Chairman, Birdville ISD, Fort Worth**

As the chairman of an Advisory Committee, our goal is not for one, but for all. I have heard a lot of people talk today, and I respect their comments. They support certain goals in their particular field. In our school system, we are fortunate to span the spectrum from varied special ed programs to high technology.

We must be realistic with the students of our state. My challenge is to look at all areas and determine which areas can best serve the community and student.

**Milton Schiller, Mayor of Cameron, Cameron**

There are six points that I would address related strictly to postsecondary technical-vocational education:

1. The priorities in higher education must be adjusted to reflect the fact that 80% of the jobs today and in the future require two years or less post-high school training.
2. The most effective way to help people either enter the job market for the first time or reenter the job market in some new vocation is by postsecondary technical-vocational training.
3. The first priority in higher education should be placed on preparing students for employment primarily through postsecondary technical-vocational education.
4. Where postsecondary technical-vocational education is mixed together with programs of academic and general education, the objectives of the technical-vocational programs are almost invariably compromised which results in graduates being less prepared to be productive employees upon graduation.



5. Technical-vocational training programs must be competency based and the teaching programs designed using measurable learning objectives.
6. Industry is spending over \$230 billion per year in training, an amount which exceeds the total national budget for primary, secondary, and higher education. We must find some way to combine efforts between the public and private sectors to achieve a reduction in these expenditures for job training.

**Richard Sheppard, Associate Professor, Corpus Christi State University, Corpus Christi**

I am the parent of a 16 year old who wants to take Vocational Office Education (VOE) next year. She has been advised by the school counselor that if she takes a vocational subject, she cannot get a college preparatory diploma. My daughter perceived this as not being able to go to college. After talking with some of her peers, many of them share this same perception.

If this college prep diploma is viewed as a prerequisite to enter college, many high school students who need, want, and can benefit from high school vocational education will choose the college prep diploma anyway. In their minds, they are deleting the option of going to college if they take vocational education in high school. As long as we retain the two diploma system, this myth will continue. In the students minds, there are two types of diplomas; a first class diploma and a second class diploma. If they choose to participate in vocational education, they have eliminated the option of acquiring the first class diploma.

I am asking this Advisory Council to recommend to the State Board of Education the elimination of the second class diploma. We must have one first class diploma that will allow students to participate in high school vocational education and/or go to college, if they so choose. We do not want an elitist program oriented only toward those students who are entering occupations requiring college degrees. The high school programs in Texas have obligations to all students entering society, whatever occupation they may choose.

**Kenneth Daughtry, Vice President, Remington Savings and Loan Association; Mayor of Elgin, Elgin**

In today's Texas economy, vocational education must serve a multiple role. Vocational education must provide a career for our youth who are going directly into the work place. If they do not have the necessary skills when they leave high school, there

are no programs available to them in today's work place.

I do not have the answers, but I feel it is important to keep a viable vocational program. One possible option that we may have is the utilization of business and industry expertise by exchange programs between personnel by utilizing business and industrial facilities and encouraging more training programs in the technical areas.

Vocational education has served a vital role in the past and has a vital role to serve in the future. The economy of Texas will change in the future as will society's needs. Therefore, vocational education must be willing to meet these future needs.

The State Legislature has a major push on for academics. Our Legislature's philosophy for education seems to be that all of our students must fit into the same round hole. There has been a dramatic shift in priority from the vocational to the academic. A balanced education is important, but we are not all the same with the same abilities and the same goals. Some of us are square pegs and will not fit.

By the turnout that you have here today, I feel a broad section of Texas realizes the importance of a good vocational program. For our vocational programs to survive, we must have an informed Governor and Legislature who are aware of the needs of our young people and will work to meet these needs.

**Charles Akins, Assistant Superintendent, Austin ISD, Austin**

It is apparent that we must educate students for life after high school in an America that is constantly changing, at a time of severe cutbacks in federal funding, and at a time when basic budgets must be reduced.

What appears to be needed is a revised focus for vocational education and this new focus should be based on the following assumption.

Vocational education should be attuned to a rapidly changing industrial and technological society in which new technological advances will generate new occupations which will generate new vocational skills. To allow for this flexibility, it is necessary to help our students transfer their training.

It is clear that in the future, electronics, automation, robotics, and computerized diagnosis will render our present vocational education curriculum obsolete if we do not make revisions.

What is needed to cope with these changes is a broad based

curriculum for vocational education to reinforce basic skills in language arts, math, science, and computer literacy.

The refocused curriculum projects should include new emphasis on technology programs, occupational awareness, home and career skills, and expanding private sector involvement.

Another aspect for consideration is the need to market our vocational education programs and to recruit students. There is a perception by many that vocational courses do not prepare students for college. This myth must be dispelled, and we must campaign to increase student interest and enrollment.

Also, we should familiarize parents with the potentials of vocational programs with regard to students. With good information, proper counseling on selection of electives, and a clear understanding of the program objectives, parents can assist students in making good vocational education choices.

We should explain to business people, nonparent taxpayers, government leaders, and the general public that the benefits of a strong vocational education program in the public schools of Texas will enhance life in this era of high technology.

**Joe Bishop, Instructor in Electrical Technology, Dallas Community College District, Irving**

It has been a real privilege for me to be associated with the community college for the past six years because of the things community colleges represent. They cooperate with the community by providing services for educational needs that are obvious in the community they serve. Community colleges are flexible which is demonstrated in the innovative programs, the flex entry type programs, and the fast track programs.

North Lake College has developed one of the largest real estate programs in Texas with the help of the real estate industry. The community college also cooperates with Boeing Electronics in the electronics program, Eastman Kodak in their photocopier repair center, Dallas Water Utilities in the electrical technology program, just to name a few.

North Lake College is also actively cooperating with the secondary level at Irving ISD. The electrical trades program of Irving ISD is being taught on the college campus in a very cost effective way.

We know there are many problems with vocational education in the State. The system of area supervisors for Vocational Industrial Clubs of America (VICA) and Vocational Opportunities Clubs of

Texas (VOCT) needs to be reinstated. Also, we need to beef up the curriculum on the secondary level for trade and industry students especially in the areas of mathematics and communications. The problems in voc ed can be solved if we work together.

**M. Doyle Butler, Division Head, Vocational Industrial Teacher Education Division, Texas Engineering Extension Service, Texas A&M University System, College Station**

If I have a theme for my presentation, I suppose it would be "Change - Not Eliminate." If we believe that the working man does exist, then we must accept that the working man must be trained and educated. This is what vocational training is all about. If we believe this, our problem is to work out a solution to improve this training.

Vocational education training should not suffer the brunt for the basics not being taught. Teaching the basics is general education's problem. Vocational education was never subsidized for the purpose of general education of an individual, but for the purpose of training an individual for a specific occupation.

Today we say we want a generic person, one who has had the basics. I have never in my life hired a generic. They were either a carpenter, a plumber, an electrician, a secretary, a teacher educator, but never a "generic." If we want an all around person with learning skills, then we want a person trained by general education, not vocational education.

The workers of today were trained by the system we are attempting to fix. Once students know how to read and write in whatever language, let's teach those same people an occupation.

**Jan Ivie, President, Marketing and Distributive Educators of Texas; Teacher, Corsicana ISD, Corsicana**

Our concern is that we feel there needs to be established in writing, minimum program standards for all cooperative education programs in secondary schools in Texas.

I have outlined four areas that I feel are important issues that must be addressed in order to turn out quality programs.

1. Work overload

- a. Overload of student enrollment - Some teachers are reporting as many as 40 students in a class. Twenty students should be the maximum amount that any

cooperative education teacher should teach to assure a quality level of instruction.

- b. Overload number of classes and preparation duties - Many cooperative teachers are being assigned as many as five class periods a day for instruction and in many cases they are teaching other subjects requiring additional lesson preparations.
2. Lack of sufficient teaching materials
    - a. Textbooks - The issuing of state adopted textbooks has not reached the level of the growth of most programs.
    - b. Individualized instructional materials - A limitation of the number of students existing materials must serve is needed.
  3. Teacher schedules - A cooperative teacher needs at least two consecutive coordination periods per class to maintain a quality program due to frequency of visits and geographical location of training stations.
  4. Level of instruction - Since the written program standards for level of instruction no longer exist, many cooperative education teachers report that first and second year students are being combined in one class. Yet there is a separate set of essential elements for first and second year cooperative students.

These concerns are specific and remedies are essential to provide quality cooperative training.

**Dorothy McNutt, Chair, Division of Business, College of the Mainland, Texas City**

My purpose today is to brief you on the mission and the status of Texas public community colleges with emphasis on what we can do best for the economy of this State.

Community college educators face the greatest challenge and opportunity in their history as enrollments increase with minority students, part-time students, and adults with obsolete skills. Adults who need training, retraining, and upgrading are on our doorstep seeking an education for jobs that have resulted from an increase in entrepreneurial endeavors, service oriented employment, and high technology applications.

Presently enrolling over 45% of all students in Texas public higher education, public community colleges have experienced a

continuing expansion of their mission. A 1969 statewide plan gave Texas public community colleges responsibility not only for programs in general collegiate education, but also for technical-vocational programs leading to associate degrees, vocational programs leading to skilled employment, and for vocational continuing education courses. In 17 years the community colleges have more than tripled their credit enrollments, reporting 300,000 credit students in 1985 with an additional 250,000 students enrolling in broad based noncredit, continuing education courses. The over one-half million students in credit and non-credit programs in 1985 attended classes in physical facilities worth over 850 million dollars, which are financed and maintained with local tax dollars.

The present and projected shortfall in state appropriations, which represent 50% of the cost of operating our programs, can prove damaging to an already overloaded learning delivery system. Texas is the only state in the Nation to show a decrease in state appropriations in 1985 which amounted to 3%. While faced with the prospect of reduced funding in community colleges, we are also faced with meeting the increased training, retraining, and upgrading needs of an energy- to a service-based economy. Unemployed, displaced, economically disadvantaged, dislocated, and reentry are words that describe the reality of many Texas adults who have no marketable skills and who see little promise for the future.

A rate of 80 to 85 percent placement of our Texas technical and vocational students certainly attests to our success, as does our national record of conducting over 18 percent of all the training required by business and industry last year. From the individual and business perspective, the location or accessibility of the 49 community college districts makes them primary centers for training. Community colleges can respond quickly to local employment conditions and resulting training needs. Perhaps more important to the success of the community colleges are the technical and vocational faculty who have first proven their knowledges and skills through successful work experience in their teaching field. Most faculty deliver instruction day and night and may extend themselves to weekend teaching for special training needs requested by business.

The community colleges of Texas already have land, facilities, learning delivery systems and human resources, as well as maturity of purpose, proven track records, flexibility, responsiveness and commitment to mission--qualities that the State of Texas needs for training, retraining, and upgrading its work force, its adults. Whether community colleges become the primary learning delivery system for training and retraining in Texas is critical to business and industry and the prosperity of this State.

**Lee Barron, Institute Associate, John Gray Institute, Beaumont**

After working at a plumbing company for two years, I began my apprenticeship training program in the plumbing craft. I have served on labor management apprenticeship committee programs ever since.

I have watched voc ed change and advance in the skills for the craft trades. I have yet to see a computer build a house or a hospital.

Our apprentice program is interested in each and every young person that believes they may want to make a craft or plumbing their life trade. This is where basic beliefs start in vocational education.

We need a place for vocational education instructors to stay in this system. We need the best for the future. One cannot teach these things unless he has been there.

Let's find a way to strengthen vocational education so in 25 years another craftsman can stand before a similar committee and say, "Hey, vocational education apprenticeship programs have done this for me."

**John Hall, Vocational Counselor, Alief ISD, Alief**

I would like to briefly outline six areas of concern regarding vocational education in Texas today at the secondary level. These are areas that could be well addressed by our Legislature, State Board of Education, Texas Education Agency, and the Advisory Council.

1. Our associated vocational leadership organizations need to be made co-curricular as opposed to extracurricular. Students in Health Occupations Students of America (HOSA), Distributive Education Clubs of America (DECA), Vocational Industrial Clubs of America (VICA), and particularly Vocational Opportunities Clubs of Texas (VOCT) are not being allowed to learn the importance of professional responsibility, professional communication, professional ethics, professional association, professional growth, and the associated duties, responsibilities, and privileges that are essential to long-range career success.
2. Flexibility of co-op scheduling. More flexibility is needed in students who have two work periods to be in the same co-op with students who have one work period.
3. Professional involvement by industry and business. Every encouragement and incentive should be given to

- industrial and business concerns to interact with our programs and allow our students employment, provide our programs with guest speakers, and allow students to investigate various trades and professions by visitations and on-site investigation. A "Shadow Program" would also be beneficial.
4. Business math and machinery courses. An additional high-interest real-world business mathematics machinery course that utilizes calculators, computers, cash registers, and adding machines while encompassing theory and practice procedures in recordkeeping, accounting, finance, insurance, and income tax is highly desirable.
  5. Support personnel availability from the Texas Education Agency (TEA). Curriculum and counseling personnel visitations and inservices illustrating new practices and techniques in vocational education, trade and technical trends, and employment projections would be helpful.
  6. Career training employing strategies for professional mobility. There is a need for infusion of curriculum and training for our students to be specially trained in particular areas while at the same time being trained to be technically and professionally flexible in order to cope with changing economic trends. Curriculum must be designed and implemented to help prepare our students for changing demands and expectations from the job market place.

**Mibbs Lyons, Registered Nurse, Holy Cross Hospital; Member of Women's American Organization for Rehabilitation through Training (ORT), Austin**

I identify strongly with your desire to provide for the best technical-vocational education a student in Texas can receive in order to be able to enter the work force without difficulty. Vocational education must be of high quality with teachers who are well prepared and whose skills are updated as necessary. There must be adequate supervision, a full range of programs utilizing up-to-date relevant curriculum and facilities.

Vocational education should be an education that provides people with the skills they will need to succeed in a constantly changing work environment. It should allow workers to update their skills as jobs change and allow homemakers, displaced workers, and others with specific needs to be effectively integrated into the work force.

The comprehensive high school and vocational-technical schools must cooperate to provide opportunities for meaningful adult education. Schools must be flexible in meeting the needs of high



school dropouts, displaced workers, and new entrants into the labor force by offering programs during the day and at night.

The trends described call for a concerted response from educators, business, industry, and labor. Schools must be willing to explore innovative programs to meet tomorrow's needs.

Generalists are people that have a vast experience, but without a specific skill are unable to be placed in a job. There is not a job description for a generalist. We live in a world of specialists. Therefore, business, industry, and labor all have an enormous stake in the total process of education.

Business and labor leaders must be intimately involved in curriculum development to insure its relevance and currency. There must be programs to provide retraining for those individuals who are displaced and need to enter a new occupation or career. Vocational education must be made readily accessible to all persons who want, need, and wish to profit from these programs.

**W. A. Mayfield, Executive Secretary, Texas Industrial Arts Association, University of Texas at Tyler, Tyler**

We have spent several hours in talking about the concerns and challenges we face in vocational education. In spite of the problems, we still have one of the better vocational programs in the Nation.

I have selected one of the program areas to briefly discuss. In Industrial Arts/Technology Education, many positive changes are occurring. We have developed a futuristic curriculum which has been streamlined from 42 courses to 19 courses.

We have identified the specific body of knowledge that addresses concepts related to human relation attitudes, technical literacy, computer applications, safety skills, consumerism, entrepreneurship, and leadership skills while interfacing with the basic education skills and exploratory activities that relate to thinking, learning, and creating.

We are providing retraining for our teachers in the field and strengthening our programs immensely. We are interfacing our curriculum change with input from business and industry leaders in the State of Texas. Career awareness is being integrated in all our courses from grades 7 through 12.

We once had a program called manual training, then practical arts, and then industrial arts, and now we are looking at technology education.

We have provided broad basic concepts in technologies that relate to communication technology, energy technology, and production technology. Texas is considered a leader in the Nation in Industrial Arts.

The few concerns we have in Industrial Arts include duplication and funding process. Only about 2/3 of our junior high programs are vocationally funded with none of the high school programs receiving funding. This creates imbalances in program structure which is an area in which we hope the Council will lend assistance.

**Myra Hasty, Texas Vocational Guidance Association, Grand Prairie**

The vocational guidance community around the state was elated to find in the draft copy of the Master Plan a requirement for a comprehensive career guidance program. However, in your report you acknowledged that "comprehensive career guidance is necessary for all public school students," yet you also stated "the 1/2 unit requirement should be removed to allow school districts flexibility in meeting this requirement."

We feel that if career guidance is necessary for all students, and we think it is, then it should be required for all students and adequate funding should be provided.

Another issue of concern to vocational guidance personnel is certification of vocational supervisors. Our concern lies with the TEACHING EXPERIENCE requirement that states: "At least two (years) of which must be in an approved vocational education program preparing students for GAINFUL employment."

This teaching experience requirement is restrictive and prejudicial. It excludes most vocational guidance personnel from attaining vocational supervisory certification. In the proposed Vocational Supervisor endorsement, the only vocational personnel excluded from vocational supervision are vocational guidance personnel.

Therefore, since exemptions will exist for all program areas except vocational guidance, we urge you to recommend to the State Board of Education (SBOE) that they adopt a reasonable, consistant, and fair experience requirement for the position of "vocational supervisor" that would allow all vocational personnel equal opportunity for advancement in the vocational field.

**Bill Lovelace, Professor, North Texas State University, Denton**

In trying to identify the real problem which is responsible for the condition of vocational education, I have made several observations.

1. If Part H of Vocational Education, House Bill 72, was implemented completely as written, vocational education would achieve the status and quality which is needed to be responsive to the needs of our youth and the labor force.
2. The present organization of the Central Education Agency does not identify:
  - a. a state director of vocational education, and
  - b. an associate commissioner for occupational education and technology.
3. The State Board of Education has not met as the State Board for Vocational Education.

The problem or cause for the present condition of vocational education in public schools of Texas is decision makers at all levels who do not totally implement or adhere to state and federal mandates and to rules and regulations developed for the administration and delivery of secondary vocational education programs, services, and activities.

No one individual is responsible for this problem--we all share responsibility. Two entities that have major responsibility for leadership and accountability in correcting or solving the problem are the State Board of Education and the Advisory Council for Technical-Vocational Education in Texas.

Based on this conclusion, it is recommended that the number one priority of the Council for this year is to take whatever action it can to assure that the Council, the State Board of Education, and the Texas Education Agency take immediate action to comply with and implement state and federal mandates for the administration and delivery of secondary vocational education.

If it is determined by the Council that the State Board of Education has not achieved the task of total compliance with state and federal mandates for vocational education at the end of one year, it is recommended, and only as a last resort, that the Council support legislation that would create a single State Board for all vocational education and job skill training in the State of Texas.

**Clyde Woerner, President, Allied Feed, Georgetown**

One thing that would help solve a lot of problems would be for someone to convince the Legislature that every student in school should be required to take one year of vocational education training.

Being a product of vocational education and a former teacher, I have seen some of the products that have resulted from vocational ag. A good example is the young man that spoke earlier that is currently president of the Future Farmers of America (FFA). There are many other examples of successful individuals that gained their leadership skills from vocational activities.

We must mold training and subject matter according to today's and tomorrow's needs. In the vo ag programs, we have to change as the standards for livestock and poultry needs change.

We are here to train these vocational students for a saleable skill. Many of them change jobs five or six times after they get a college degree.

I do not think we can expect a 12 to 13 year old kid to make a career decision. They simply do not know.

**James Goldsmith, Director of Vocational Education Teacher Education, Southwest Texas State University, San Marcos**

It is good that we are receiving the ideas of a very broad segment of persons across our state. I hope that you carry them forward to the persons that determine the policies and decisions that determine the destiny or fate of vocational education.

In viewing the new directions for vocational teacher education, I feel we must assist our vocational teachers to stay current. This can best be accomplished by providing work experience internships. A second alternative would be to utilize videotapes produced through grants to bring the latest training methods, techniques, materials, and equipment to them. Quality inservice workshops must be maintained. The Advisory Council could be of assistance by identifying the best businesses and industries to cooperate with us to assist in updating our teachers.

Also, we need to try to recruit outstanding vocational public and postsecondary students to become vocational teachers.

Another area we are working to improve are course offerings for vocational teachers. We are seeking approval for new courses including instruction in teaching students with special needs, using microcomputers in vocational education, teaching entrepreneurship in voc ed, and leadership activities for vocational teachers.

At a time when we are trying to look to the future and offer more services and move in new directions, we are facing a funding dilemma. Teacher education received a 30% cut last year and has

recently received another 30% cut which makes it very difficult to proceed with the things that we would like to do. We need your help in addressing this matter.

Another concern I share with others is the youth leadership organizations. Of the ones that I have worked with this year, attendance has been down 50%. Another year or two like this and we are going to be out of business with the youth leadership. Coordinated Vocational Academic Education (CVAE) is particularly suffering. These people already have problems and the new rules are making their participation impossible.

Change is coming, but we should not throw out the good with the bad just for the sake of change.

**Thomas O. Moore, Training Coordinator, Sheet Metal Workers, San Antonio**

Two reasons stand out as reasons for conducting today's hearing. One is the necessity to teach the skills and attitudes necessary to successfully compete in today's labor force. Students with little to offer the business world exit high school expecting to enter the work force at \$30,000 a year and full fringe benefits.

Attitude is important and students should be taught the importance of the work ethic of good attendance, punctuality, appearance, and following directions. Plain old hard work should be firmly impressed upon our students, both in academic and vocational subjects to better prepare them to enter the world of work.

The second reason for the hearing was to seek suggestions for strengthening voc ed. There was a time when voc ed was vigorously sought after and highly respected as an alternative to a college degree, but slowly a change has taken place. Voc ed has in too many cases been a dumping ground for students who are not academically inclined.

This is a grave injustice in that all students need the basic skills to succeed in any vocation. Construction workers, electricians, plumbers, carpenters, and sheetmetal workers must all be capable of reading and understanding complex job specifications in order to provide and install the proper materials and equipment. Math is also an absolute necessity in that electricians probably have a better working knowledge of algebra than most bank presidents. Plumbers and pipefitters must have knowledge of physics while sheetmetal workers use extensive geometry in the layout and fabrication of various shaped metal products.

The preparation for a skilled vocation should be as extensive as preparation for a profession. After preparing themselves academically, vocational students should be provided adequate facilities, modern equipment, and knowledgeable instructors. Vocational training should be looked upon for what it really is, preparation for entry level into a vocation of one's choice.

**Rex Howard, Director of Education, St. Anthony's Hospital, Amarillo**

One thing that I would like you to consider is to remember the total State in your deliberations and your recommendations. Local input with some broad guidelines is important. Different parts of the State have different needs and requirements.

Another area of concern is teacher preparation. This Council needs to have some input in that. If we are going to properly educate our kids, we need to have properly educated teachers in the classroom. I do not think enough attention has been given to teacher preparation.

Thirdly, education and training are not synonymous yet they have been used interchangeably. We do not train kids; we train dogs and cats. We educate people. Education means thinking and doing whereas training means only doing.

**Orbry Holden, Executive Director, Texas Association of School Boards, Austin**

Our membership supports technical-vocational education. We realize there needs to be changes. Our funding structure must be reviewed. We must look to the future.

Texas public schools will be adding 80,000 students a year which will cost an additional 1/2 billion dollars a year. These students are predominantly minority. Also, the majority of our graduates from our public schools are not going to be required to have a college education. Therefore, our vocational-technical programs must be reexamined to meet the needs of the changing economy.

We are currently working on the delivery system in the math and science area. We are using an interactive video disk and a computer to do simulations. My experience with technical-vocational education tells me that those delivery systems are very appropriate for the future.

The satellite systems are also becoming very popular with industry and hold all kinds of opportunities for students and teachers. Through this media, the very best people and the very

best presentations can be utilized in the classroom and for teacher training.

I do not know all of the problems in technical-vocational education, but I do know that we have on our boards of education statewide people that make up every major industry in the State. Our major input today is to say we are willing to help. The leaders that serve on our school boards want the best technical-vocational program in the world.

**Tripp Garza, Austin ISD Coordinated Vocational Academic Education (CVAE) Advisory Committee, Austin**

As a businessman in Austin, I became interested in vocational education when I heard a school board member brag that in Austin we have only a 25% dropout rate compared to a 42% national rate. I was appalled because if we lose 25% of our income in business, we are bankrupt.

I particularly became interested in CVAE because this program directly attacks the dropout problem. Few people really understand the full ramifications of this program. It is a viable and effective program for high risk students who are potential dropouts. If those students did not have the option of going to CVAE co-op, many would drop out altogether. This is the only program specifically designed and functioning for high risk potential dropouts.

Through this program, they have the opportunity to receive the basic academic instructions required for graduation as well as high school credits for physical education and learning on-the-job.

Without this program, many students would be unable and unwilling to finish school. They would leave school without the skills necessary to be wage earners or functional taxpayers.

In Austin ISD, under the new funding structure, CVAE is generating more than its share of the vocational dollars.

The economy of Texas is changing and we are beginning to focus on services. I recommend that CVAE come out of the umbrella of other programs and be its own vocational program.

**Harold Massey, Executive Director, Texas Association of Secondary School Principals, Austin**

It is obvious that we need more vocational education in Texas. The only place that public school students can be exposed to a

full range of vocational courses is either to drop out and go to the job corps or penitentiary.

In a recent survey of high school and junior high principals in Texas which dealt with the impact of education reform, of the 1,444 replies, 45% of the high school principals and 27% of the junior high principals stated there was a decrease in enrollment in vocational-technical programs. Yet 50% of the high school principals and 58% of the junior high/middle school principals reported that they needed more vocational courses for low ability students.

House Bill 72 emphasized increasing the academic achievement of students. Little concern was shown for encouraging students to enroll in vocational-technical courses. Increased graduation requirements are forcing students out of the vocational-technical classes.

Of the high school principals surveyed, 43% reported an increase in the dropout rate this year. By increasing the graduation requirements to 21 credits with a passing grade of 70 and then adding an exit test, we face an explosion in the dropout rate of over 40%.

We encourage the Council to establish vocational courses with both academic and vocational instruction structured in a manner that will make it possible for these students to succeed.

In analyzing the programs at the Job Corps and at the penitentiary, we found that they restructured the support academic courses. This is the key to their success.

**Sue Couch, Director of Home Economics Education, Texas Tech, Lubbock**

I am pleased with the points made by many of the previous speakers. I would like to reemphasize some of the points because I do not think in all cases they realized they were supporting consumer and homemaking education.

Consumer and homemaking education has been a vital part of vocational education in the United States and in Texas for nearly 70 years. Beginning with the Smith-Hughes Act in 1917, the Congress of the United States has repeatedly and consistently appropriated special line item funding for consumer and homemaking education.

Consumer and homemaking education has always been a high priority in the State of Texas. Consumer and homemaking should be a part of vocational education because it prepares individuals for the



occupation of homemaking. Furthermore, it provides preparation for the adult roles of homemaker, parent, worker, and citizen. Although the occupation is unpaid, economists have for many years placed an economic value on the work of a homemaker which would be equivalent to about \$20,000 to \$30,000 annually.

Consumer and homemaking education encompasses the subject areas of child and family development, foods and nutrition, family finance and consumer education, management and decision making, clothing and textiles, housing and design, youth leadership development, and career education.

Many of the major issues which concern our society today are addressed in consumer and homemaking education which include parenting, nutrition and health, stress management, adolescent pregnancy, latchkey children, teen suicide, child abuse and other forms of family violence, single parenting, dual earner families, working parents, and the linkage between family life and work performance.

Consumer education is the only vocational program which can claim virtually 100% placement of its graduates.

Consumer and homemaking education contributes to occupational competency in all occupational areas by helping workers manage the dual responsibilities of work and family in an effective manner.

Consumer and homemaking education is the only vocational program that focuses specifically on human relationships and helps students develop the communication and interpersonal skills which employers tell us are necessary for job success.

Consumer and homemaking, like other vocational programs, makes learning relevant and meaningful for thousands of high school students, many of whom might otherwise become dropouts and lose their potential for economic productivity.

I urge the Council to carefully consider the role of consumer and homemaking education in the overall vocational education program and to make decisions that recognize the valuable contribution of this program to the economic development of Texas and the Nation.

**June Karp, Assistant to the President, Texas Federation of Teachers, Austin**

Change is a must and our organization believes that we must look ahead in every aspect of education, but particularly in vocational-technical education to the year 2000. We intend, in the next legislative session, to make sure that vocational-

technical education does not get cut. I tell you in no uncertain terms that the legislators are getting ready with their knives. If you as an advisory committee do not take some immediate action, all of the good things that have been said today are going for naught.

The view of technical-vocational education in the State of Texas today is that we are back in the 1890's. This must be changed. It can only happen if this Council and the vocational community make it happen. Repetition is the key to convincing the public and in turn the legislators regarding the value of vocational education.

If the vocational community does not prepare a convincing case, in January the legislative axe is going to really descend and all of your good work and our good work will have been for naught.

The Council serves as the crux of all of us who serve as lobbyists to those legislators to help tell them that vocational-technical education in the State of Texas is vital. They do not understand that and unless we bring the picture into the 21st century, they are not going to listen to us.

An aggressive public relations campaign should be high on the Council's agenda. Working with community leaders and supporters, the Council should inaugurate a "selling campaign" to bring the public's awareness level way up. The need for "voc-tech high tech" must be broadcast.

### **Tom Harris, Task Force Member, Target 90 Goals for San Antonio, San Antonio**

Target 90 Goals for San Antonio represents civic issues determined by the grassroots of San Antonio. The committee on which I serve is called the Technical-Vocational Task Force. This Task Force answers to the educational and economic councils of Target 90. The major goal for our Task Force is to coordinate the efforts of local vocational and technical training institutions to focus on technologies.

The Task Force is a network of secondary and postsecondary, public and private occupational training institutions and schools, community based organizations, various consumers of vocational education products or graduates, and any other persons interested in the supply and demand for vocational training.

The dialogue produced by the Task Force is responsible for some innovative and productive happenings in technical-vocational education.

The Task Force would like to submit the following as directions for future activities of the Council. First, we would like you to encourage other communities to develop a city or areawide technical-vocational committee like ours to take a broad look at the local supply and demand for vocational and technical education. Second, we would like you to encourage communities to develop a close working relationship with what we term second chance organizations or community based organizations. Third, we would encourage you to promote the use of more locally established businesses as high tech educational laboratories rather than to develop high tech laboratories in the public schools. Fourth, we ask that you promote the development of a local computerized labor supply and demand information system which is updated annually and available at a minimal cost. Fifth, we would ask that you would promote a Texas Education Agency (TEA) policy change to allow high school health occupations education students to take their clinicals without pay in various health care facilities similar to the high tech education internships that have already been approved.

**Susan Hunter, Supervisor, Texas Commission for the Blind, Austin**

The Texas Commission for the Blind has a statutory responsibility to provide vocational rehabilitation services to the visually handicapped and deaf/blind citizens of Texas including vocational training. One way training is provided is through accessing existing programs in the communities.

Blind individuals have the same interests and abilities as the nondisabled population of this State. Since the blind population is small in relation to the community as a whole, many educators have not been exposed to their needs and desires. We encourage voc ed to educate their staff on the needs of the disabled community and to show flexibility in the modification or restructuring of training programs to insure accessibility to the handicapped population.

**Bob Olin, Vocational Administrator, Victoria ISD, Victoria**

I am going to limit my remarks to students who we consider disadvantaged and in our handicapped programs. For a number of years, we have served students in the special population areas and primarily in the areas of Coordinated Vocational Academic Education (CVAE) programs as well as Vocational Education for the Handicapped (VEH) programs.

We would like to point out some problems we are experiencing in serving these types of students. The Carl Perkins legislation, House Bill 246 and House Bill 72, have mandated some adjustments

which we must make that have caused some real problems involving funding and our ability to assist these students.

The new state legislation which requires additional graduation requirements will really affect the students in the lower 25 percentile. We are looking at strong possibilities of many of these students exiting our programs and our schools without ever having attained the basic skills which are so necessary.

I strongly recommend that you consider reinstating the original concept of the CVAE programs that has an academic component as well as a vocational component. The academic component took the students at the level they were performing and brought them forward so that they could gain these basic skills. The classes were small and cost more to offer, but the additional cost now is a wise investment to assist these students in bridging the gap.

Another approach being used in other states is instituting an on-campus General Education Development (GED) program which does require some vocational training as well.

We need to continue to upgrade vocational education in order to serve the new industries which will be coming into our state and these new technologies which are going to be developed.

**Russell Walker, Teacher and Member, Texas Federation of Teachers Vocational Education Task Force, Austin**

We would like to address some of the issues that we consider to be very important for the future of vocational education in this State. A definite sequence of vocational education instruction should be developed and administered through the Texas Education Agency so that students would know a proper direction to go in vocational education. This is not currently defined in vocational education. This could eliminate much of the confusion for students and parents by knowing what programs are needed for college and options available for those terminating training upon high school graduation.

If there is one issue that affects the effectiveness of any educational discipline, it is the teacher in the classroom. We are very concerned that our nondegreed teachers be legislated onto the career ladder. Teachers need support, encouragement, and opportunities to further develop their skills. Two basic ways to accomplish this are through preservice and inservice training and through curriculum development.

Preservice and inservice training should include computer training for vocational education personnel. Each vocational teacher should have an opportunity to complete a basic computer

literacy course, organized and administered through the Texas Education Service Center in cooperation with business and industry. Also, preservice/in-service training should include updates in programs through internships, exchange programs, interchange programs, etc.

Curriculum centers and curriculum consortiums can reinforce vocational education instruction by developing competency based materials that incorporate the basic skills necessary for a student to earn a high school diploma as well as developing competency based computer literacy programs for instructors.

Special needs programs have been discussed at length today. It is necessary we continue our effort in dealing with the dropout rate.

Career guidance is also important. Counselors could help implement the sequence of vocational education and training programs, and evaluate research.

Private sector involvement is a necessity. Without it vocational education cannot exist.

**W. H. Meischen, Executive Director, Vocational Agriculture Teachers Association of Texas, Austin**

The first point I would like to share with you is that agri-business should be one of the priority occupations on your list instead of just having farmers and ranchers. Twenty-one percent of the people employed in Texas work in agriculture or agri-business. We think it would enhance the fact that Texas is one of the leading agriculture states in the country for us to have agri-business listed as one of the priority occupations.

Also, the funding aspect of vocational education should be improved because the 1.45 level certainly does not deliver the funds necessary to carry on quality vocational agriculture education programs.

The materials centers are vital to the ongoing of a quality vocational agriculture education program in the public schools.

Also, we think this Council should help us get some resemblance of field staff back in place in vocational education. The field staff is very vital in the youth leadership organizations.

We are involved in some awards and degree checks in which Future Farmers of America (FFA) members will receive about \$646,000 worth of scholarships.

The vocational agriculture program has always been accountable in Texas. The bottom line in vocational education across the spectrum is the teacher that you have in the classroom. Without a well qualified teacher, you are not going to have quality accountable vocational education.

**Alton D. Ice, Executive Director, Texas Vocational Technical Association, Austin**

Something unique has happened in the 70-year history of vocational education in Texas and that is enrollments have declined in the past few months which is a result of curriculum and graduation requirements.

We have heard a lot about the need to maintain quality. We have been criticized for obsolete equipment and not staying up-to-date in training, yet in recent years our funding has been cut.

We have lost funding for ancillary personnel and funding for instructional resources. Curriculum centers have received a 50% cut which is the very heart of quality vocational education.

Also, we need differentiated costs in voc ed. We hope the study being conducted presently will focus upon the cost of the programs and not on instructional arrangements.

Regional planning has received a lot of attention in recent years. Studies are currently on the shelf because there has never been a commitment to fund, staff, and carry them out. Vocational people would respond to the information, if someone carried it out properly.

Priority occupations is another area of concern. The list is simply those occupations that occur most frequently within our job market. This list should be "a" consideration, but not "the" consideration in determining programs. Local districts must have more flexibility.

The inordinate reduction in state vocational staff coupled with the reorganization of the Texas Education Agency (TEA) has been devastating to certain aspects of vocational education, particularly youth organizations. Youth organizations have survived this year because of dedicated vocational educators, but it is doubtful this can be sustained on a continuing basis.

Quality is a major concern and sunseting was made a provision in House Bill 72. If this is carried out in a positive and effective manner, it can do that fine tuning on a consistent and continuing basis to maintain quality programs.

**Julie Schick, Consumer and Homemaking Student, Southwest Texas State University, San Marcos**

By a scheduling blunder I found myself as a freshman in high school in home economics. I joined the Future Homemakers of America (FHA) and found out how many benefits were available to me through home economics and FHA.

I found that home economics was more than just cooking and sewing. The skills taught in this class were ones I could use the rest of my life. It cannot be compared to an academic class because it provided many opportunities for the students.

FHA is the only youth organization that has the family as its main focus. Service projects not only help others in the society, it also helped me to become a more effective leader by utilizing organizational skills.

The training I gained in my involvement in home economics and FHA helped me tremendously in finding jobs and working with people.

I have become an outgoing, self-confident person because of my role in home economics and FHA. It has played a large part in my life. The training and the opportunities that I acquired through home economics in high school have led me to pursue a career in vocational home economics education at Southwest Texas State University.

**Kristy Champagne, Student, Southwest Texas State University, San Marcos**

My experience with vocational home economics began as a child because my mother is a vocational home economics teacher. My experience in home economics taught me to be a responsible family member.

The career studies created interest in my classmates to further their education in such areas as child development. Friends in Coordinated Vocational Academic Education (CVAE) classes learned skills enabling them to find work after high school. Many of these students are employed in food service, day care centers, and florist shops.

Our curriculum was current because of the activity of our Vocational Advisory Committee. The Committee helped in finding summer jobs. I worked in bookkeeping which is why I selected accounting as a college major.

A reward that is a result of vocational home economics is having the opportunity of becoming a member of Future Homemakers of

America (FHA). Future Homemakers of America/Home Economics Related Occupations (HERO) is the vocational student organization. It places major emphasis on preparation for jobs and careers and recognizes those workers who fill multiple roles as homemakers and community leaders. Leadership training is the end result of the opportunity of organizational members. FHA/HERO is the only youth organization which centers around the family.

As an active member and leader of FHA, I was afforded a variety of experiences that developed my leadership qualities. The training helped me to deal with differing age groups and ethnic and educational backgrounds. Planning meetings with attendances varying from 25 to 7,000 was a challenge with which I felt very comfortable due to my acquired leadership skills.

Vocational home economics provides the technical knowledge and skills and FHA/HERO provides young people the opportunity to practice their skills. With all our studies and latest inventions, we still all come home and fulfill the job of homemaker.

**Roy Lewis, President, Texas Industrial Vocational Association (TIVA), Lubbock**

TIVA represents 3,000 Trade and Industrial teachers in about 70 different trade programs in high schools in Texas. We advocate change, but caution decision makers to make it a constructive, worthwhile change and not just change for change sake.

We must examine all programs and retain those which are good and retool or redirect those which are not first quality.

There is presently in our state a vacuum with regard to a clear cut direction for vocational education. There is a critical need for timely, definitive leadership from the State Board of Education in response to vocational education needs; and from the upper administrative levels within the Agency a commitment for the continued development of the vocational student organizations.

There are too many layers in the education bureaucracy to penetrate before decisions can be reached.

Cooperative agreements between business, industry, and schools, with the business community supplying needed equipment and public schools supplying needed instructors, would be helpful to provide job specific training.

From our business contacts, we hear that businesses need higher quality students completing vocational courses and entering their



labor force. If they want this to happen, they can apply pressure on those local school districts where they are major taxpayers to direct the talented students into vocational programs.

Large business could "adopt a vocational faculty" and provide financial support or travel funds for summer inservice and rewards to teachers who retrain or update their skills.

Business lobby groups can place legislative pressure as needed to cause vocational education to become a legislative priority.

Texas may no longer be able to rely on oil related industries as our major source of state income, but we have more lasting resources in our pool of secondary students, our human inventory, our climate, our vastness, and our ability to gear up and provide quality vocational education. These resources have been only superficially tapped. Public vocational education is the key to these untapped resources.

**Joyce Crow, President Elect, Texas Vocational Administration and Supervisory Association, Temple**

We no longer train for entry into occupations in our communities, but for entry into occupations that will put our students into community, state, national, and international competition. It is indeed a challenge for all educators.

It is expensive to train people for entry into the new and emerging occupations. This must be looked on as an investment in our future. The American dream is to provide educational opportunities that challenge our recipients to their maximum potential.

How do we finance such educational opportunities? It has to be a joint effort utilizing federal, state, and local monies.

It is up to the vocational community to let the public know the results of follow-up studies showing the successes and accomplishments of our students. This should make the public aware that money spent on vocational training is not money ill spent.

The Cost Accountability Study Committee must realize that its work must be very thorough when studying the costs of vocational education. We specifically ask that appropriate weights be applied by the instructional arrangement rather than by program.

We must provide training for those occupations identified as priority occupations. The present funding system causes emphasis

to be based on the amount of money a program can generate rather than on the needs of the students and the needs of business and industry.

**Cecil Allen, Representative of the Legislative Committee, Texas Vocational Technical Association, Abilene**

I would like to address a very vital issue which is the support of funds to the vocational education curriculum centers. A key ingredient to the total effort of education reform is a meaningful and uniform curriculum.

Before House Bill 246, school districts were free to develop their own course outlines and materials. Some districts were large enough to have personnel develop curriculum, although most were not. For the first time all students in automotive mechanics, machine shop, and so forth will be exposed to the same curriculum.

Curriculum centers utilize both business individuals and vocational teachers to assist in material development. This results in up-to-date and useful materials.

We are hearing the need for vocational subjects to integrate more of the basic skills. Without the total effort of the curriculum centers, this would be slow in being accomplished.

Curriculum centers also have a vital role in teacher in-service.

If the curriculum centers are abandoned, there is much speculation about who would develop curriculum. The Texas Education Agency staff already has more than they can do. If private industry were to assume the role, materials would be slow in coming, slow to be changed, and not be meaningful for teachers.

The vocational education community encourages your support to reinstate full funding to the curriculum centers.

**Georgia Lou West, Vocational Advisory Committee Member, Austin ISD, Austin**

I started the Vocational Office Education (VOE) program at McCallum High School in 1966 and continued the program until I retired in 1984. During those years, I saw a variety of success stories including those that went directly to work and those that utilized their skills to work their way through college.

I have been quite concerned about the downplay of vocational

education with the emphasis on academics. I taught English before I taught office education. I felt just as much a teacher of academics when I taught office education as I did when I taught English. Besides skills, office education includes work ethics, attitudes, and many things not offered in other courses.

We are much in need of improvement of our image in vocational education. We need to tell our story better in our schools and to the parents.

It is critical that weighted funding be continued in vocational education, otherwise the teachers would be required to have more students and more classes than they could do justice.

The training provided in office education is excellent. The jobs are available for the students. Therefore, I would like to make a plea that we do everything possible to enhance the image of vocational education so that these opportunities can continue.

**Ann Gordon, Coordinated Vocational Academic Education-Office Duplicating Practices Teacher (CVAE-ODP), Bastrop ISD, Bastrop**

I am here to testify on behalf of VOCCT, Vocational Office Career Clubs of Texas, which is a youth organization serving disadvantaged students and handicapped students enrolled in CVAE or Vocational Education for the Handicapped (VEH) Office Duplication Practices.

I ask your support of co-curricular status for VOCCT. The extra-curricular status which involves the no pass/no play ruling has hurt the student labeled as slow learner or disadvantaged. These students need the recognition and rewarding experiences offered by leadership and competitive events.

VOCCT leadership activities are co-curricular and not extra-curricular. Attending and participating in leadership conferences is a teaching tool and experience. VOCCT competitive events are a continuation of class and a reinforcement of the essential elements.

To give you an example, Opening and Closing Ceremony had to be cancelled last week after practicing daily for one month. We are obligated through the essential elements to teach parliamentary procedures. Yet, labeling VOCCT as extracurricular disallows the student from achieving the final goal in the learning process which is competition.

Please consider recommending to the decision makers that our classrooms will be better learning situations through the co-

curricular activities of the VOCCT youth organization.

**Mike Moeller, Deputy Commissioner, Texas Department of Agriculture, Austin**

Since the Texas Department of Agriculture deals specifically with the farming and ranching industry here in the State, I would like to confine my remarks to the vocational agriculture program.

Ag related industries in Texas employ over 20% of the work force in the State, and we believe that is a number that can grow. Current thinking among some folks is that farming and ranching is a "no growth" industry in Texas and the vocational programs for ag should be left to wither on the vine.

The recent abolition of the vocational agriculture field staff and the reallocation of resources for vo ag are two ways the Texas Education Agency has demonstrated its de-emphasis of vocational agriculture.

Our farmers and ranchers are not merely poised for the transition into the information age, they are leading the charge. Today's farmers and ranchers are in most cases computer literate, futures market smart, and technology oriented.

The State of Texas has a tremendous potential in the agricultural sector. Our greatest asset we believe is still the land that we have and the people that farm the land. Our potential for agricultural economic development is very strong from diversifying our crop basis to building a whole range of processing facilities for our native crop production.

Texas is the number three state in ag production, yet we send the majority of that production to other places to be processed into its final form. Our contention is that the future of the agriculture industry in Texas is not simply 40 acres, a plow, and a mule, but high technology agriculture both in production and processing. The key to making that work is an educated work force led by a strong vocational ag program.

Also, the Department of Agriculture feels strongly about the need for an active visible field component in vocational agriculture. In order to reach our constituents in 254 counties, the Texas Department of Agriculture utilizes some 13 field offices. It is inconceivable that vocational agriculture can maintain a viable program for the sons and daughters of those same constituents without a single field office. We strongly urge this Council to include in its recommendations the immediate restoration of an adequate field component for vocational agriculture.

Mr. Hightower and I are committed to taking the case of vocational agriculture to the citizens and the lawmakers of Texas, and we ask you to join us in being supporters of vo/ag and the Future Farmers. These programs can be a part of the solution of Texas' long-term economic problems.

**Harvey Hilderbran, Assistant Director of State Affairs, Texas Farm Bureau, Austin**

While our organization supports all vocational education programs, we are particularly interested in vocational agriculture and home economics. Few educational programs have been as successful as vocational education in developing skills and attitudes necessary in preparing young people for the work place and few have been as successful as vocational agriculture and home economics in emphasizing and providing leadership training.

This type of leadership training has produced countless numbers of individuals who make important contributions to our country and economy. A list of these individuals includes former Lieutenant Governor Ben Barnes; State Representative Jerry Clark; Senator Bill Sarpalius; Congressman Charles Stenholm; Congressman Larry Combest; Governatorial Candidate Kent Hance; and Fred McClure, Special Assistant to the President.

Many people view vocational agriculture as obsolete based on current economic factors afflicting agriculture. We strongly disagree and point to the many other careers besides farming and ranching which include nutrition, biogenetics, biotechnology, soil science, horticulture, forestry, food processing, marketing, and many more.

Statistics show that 50% of Future Farmers of America (FFA) members are emphasizing agribusiness as opposed to agriculture production and that shows that FFA "ain't just plows and cows." Vocational agriculture and home economics provide the educational foundation for these important ag related fields.

When you consider that agriculture is the second leading industry in Texas and one of the major industries in the United States supporting 25% of the jobs produced in the total economy, it makes sense to continue vocational agricultural programs. As our economy moves more and more toward the service oriented economy, it also makes sense for vocational education to explore ways to improve and adapt to our changing economy and society.

Not only does vocational agriculture educate our farmers and ranchers of tomorrow, it also prepares our business leaders and political leaders of tomorrow.

**Darrell C. McGonagill, Electrical Training Director, Texas Gulf Coast Joint Apprenticeship Training Council (JATC), Corpus Christi**

As training director of the International Brotherhood of Electrical Workers Local Union 278 and the National Electrical Contractors Association, I deal with jobs. I put people to work. I assign the apprentice electricians.

We do not take dropouts. Our requirements call for a high school graduate with a year of algebra. A General Education Development (GED) person must acquire a semester of algebra and a semester of English at a college prerequisite level.

The Legislature is cutting monies and this could cause a dropout situation. We use graduates from high school. The only dropouts we take are those from postsecondary.

We specifically look for academics in our training program, but we also found that people that have had vocational courses in high school are better oriented to work toward the work ethic and have the proper job attitudes needed. We have a very selective procedure for people coming in our apprenticeship programs.

I serve on the Corpus Christi Independent School District Vocational Advisory Committee and also on the Del Mar College Vocational Advisory Council. I feel in our area of the Corpus Christi Independent School District that vocational education is strong and is meeting the challenges. Old programs are dropped, nonattended programs are dropped, and new ones are added. New directions are currently being taken to meet the needs of a changing work force at both the college and the high school level.

Any reduction in the working force is going to be a great injustice not only to this State but our entire system.

**Richard Ward, Personnel Director, Medical Plaza Hospital, Fort Worth**

I want to talk about the health care segment of vocational-technical training as opposed to industry.

In listening to the comments made today and talking with the people in the Fort Worth ISD, it is evident that vocational education has an image problem. I wish the Legislature had been here today to hear these dedicated people make their presentations. But they were not and it is incumbent on this Advisory Council to carry this message to the Legislature.

One thing in personnel that I have learned is that the average individual changes occupations about three times during their lifetime. I hope that somewhere in the vo tech program you are preparing students to make these changes.

Another area that this Council might consider undertaking is the encouragement of business through tax incentives to support additional co-op teachers within the district. With House Bill 246, more emphasis is being placed on subject rather than vo tech education which is affecting funding.

In the health care industry, we are undergoing rapid changes. We have seen more changes in the last two years than we have seen in the last 10 years. Licensed Vocational Nurses (LVN's) are no longer being hired and they are being replaced by Registered Nurses which is important in setting up programs for health care careers with students.

**Stella Cuellar, School Board member, McAllen ISD, McAllen (read by Filomena Leo)**

As a result of House Bill 72 and Chapter 75, vocational education is being polarized to serve those students at the high and low end of the scale.

The middle-of-the-road students who experience a few failures along the way will probably have difficulty fitting in the traditional vocational programs. Requirements are being increased and time to meet these requirements is being decreased.

Vocational education needs to be cross-linked at the academic top of the scale - physics, mathematics, chemistry with robotics, electronics, coatings, and communications. Cross linkages do not come at the expense of either academic or vocational education, but both should enhance one another, and curriculums should be developed that incorporate both at a high level of attainment.

At the other end of the scale, vocational education should become the apprentice approach to education. It should be the teacher of communication skills (reading, writing, speaking), mathematical skills (addition, subtraction, multiplication, division, percentages, fractions, measurements, etc.), and skills in general areas of work that are transferable to many fields (nonlimiting).

The ideal situation would be to have the same teacher instructing in all these areas so that the students grasp these skills as all embracing and not isolated areas of endeavor. These students would work for a competency certification rather than a diploma.

Under proper situations, the whole of business and industry can participate, with mutual benefit to both, in the education and salvation of these students that otherwise become the low end of humanity.



## Summary of Written Testimony

**Terry P. Thompson, Corporate Secretary, Brown & Root, Incorporated, Houston**

I am concerned with the lack of business related information and technical preparation currently provided Texas' vocational students as they prepare for world class competition.

Unlike others testifying this morning, I do not believe that tomorrow's service or informational markets will replace the need for trade or industrial education in Texas secondary and postsecondary schools. This state continues to require a strong, sound industrial base to successfully compete in domestic and international markets. Service and information providers will continue to augment these base industrial markets. We should not abandon existing trade and industrial programs for the coming of the so called Informational Age. However, we should infuse today's information and information processing equipment into existing vocational and technical curricula. Existing curriculum for most vocational and technical programs needs to be reevaluated as our immediate objective is the preparation of vocational-technical students for competition in the international world of work.

Texas must compete successfully in world class skill "games" if we are to regain lost markets and to maintain leadership in the remaining industrial and manufacturing markets. This will require that we provide vocational students with more meaningful preparation in today's classrooms. Texas needs to involve their vocational students in an educational process that requires that they master certain business related math, English, and science knowledge in formative grades before routing them to expensive "hands-on" occupational labs that teach the skills and techniques of a particular vocation. These students must be given informational insight into the international language of business. They need to be provided information that will assure that they understand the principles of productivity, quality assurance, and profitability. They need to be involved in an educational process that will allow them to communicate with others, to compete with others, and to manage the work of others. They need to be educated in the legislative process; learning how state and federal governments establish laws and regulations that affect their occupation and industrial field. They need to know how to successfully establish their own business ventures within their communities and how to respond to competition.

The issue before you this morning is not the preparation of vocational education for tomorrow's Informational Age. The real issue this morning is the survival of industry in Texas and the standard of living we have come to enjoy. For this reason I sincerely hope vocational students living in Houston, Crockett, McAllen, or Sulphur Springs are challenged by world class competition and that this state provides them the best training and informational support available.

**Robert E. Johnson, Executive Vice President of Corporate Operations, Lennox Industries, Incorporated, Dallas**

Lennox Industries is a manufacturer of heating and air-conditioning equipment that is sold to dealers and contractors who in turn install for the consumer.

Lennox has maintained educational departments for many years to assist the dealers and contractors in the training of their personnel. At the present time, we are providing training to approximately 3,000 students nationwide in a wide range of topics.

I am Chairman of the Air-Conditioning and Refrigeration Institute (ARI) Education Committee. The goal of this Committee is to work with the technical-vocational education system to improve the skills and knowledge of the vo-tech graduate from the heating, air-conditioning, refrigeration curriculum.

The major thrust of the ARI Education Committee is to prepare a comprehensive final examination that will be offered to vocational schools. The purpose of this is to coordinate the skills and knowledge needed by the student to be more effective as he enters industry at the entry level.

There is a broad spectrum of instructor capabilities, curriculum, and facilities as we view vo-tech schools across the country. ARI felt that it would be most effective in working within the vo-tech environment to provide assistance with this comprehensive examination. We would hope to have these materials ready by the spring of 1987.

At the present time, there are approximately 20,000 students in this curriculum across the country and industry could easily absorb 30,000 per year.

Some educators seem to believe that only the poorer students should be encouraged to go to vo-tech schools rather than drop out altogether. I would submit to you that the marginal college students should be encouraged to come into the vo-tech curriculum.

**James Litton, President, The National Bank of Mineola, Mineola**

We should make every effort to insure that all of our children attain satisfactory, or better, reading and writing skills to the best of their ability. Beyond the basics - our schools should offer a broad range of educational opportunities.

I believe that vocational education is vital to our public schools for the benefit of the majority of the people. The majority of the people may not be interested in vocational education for themselves; however, all of us benefit in one way or another from those students that do learn and develop from vocational education.

What would we do with all of our students on a daily basis if Technical-Vocational Education was not offered in our public schools? I believe the dropout rate would increase.

**Gary E. Miller, Commissioner, Texas Department of Mental Health and Mental Retardation (TDMHMR), Austin**

Be assured that TDMHMR recognizes and fully supports vocational education programs. The Department is currently participating on several key task forces specifically related to vocational education services.

The need to develop commonalities among agencies ranging from terminology to commingling of funds, are some of the endeavors we are pursuing. The development of a system to insure appropriate vocational education and transition into the employment arena is a critical concern--again, one we are striving to achieve. Through the efforts of highly qualified individuals, such as those on the Advisory Council, our efforts to insure appropriate vocational training and employment are greatly heightened. By combining our forces, this goal should become a reality in the near future.

**Roy W. Roundtree, Pittsburg**

Twenty-five years ago technical-vocational education was placed on the back burner and great emphasis was placed on becoming a college graduate. Vocational education became a dumping ground for slow learners and troublemakers.

Most of our successful contractors today got their start in the high school classroom. Building trade students would construct at least one nice home each semester. Carpenters, brick masons, plumbers, electricians, draftsmen, interior designers, painters, air-conditioning repairmen, and landscape skills are in great

demand. The wage scale is excellent and a master of this trade can always find employment.

The average high school graduate does not have a trade skill, work knowledge, or goal in life. If they are not college bound, that piece of paper known as a diploma will not open a door in the work force.

I strongly recommend that our secondary school system again place great emphasis on vocational education in order to attract students with an interest in working with both their hands and minds. Remove the stigma from the vocational education classroom that it is a haven for slow learners and troublemakers.

School and student recognition for excellence in vocational education will again return pride and prestige to the vocational education classroom.

**Aubrey Rummel, National Electrical Contractors Association, Incorporated, Lubbock**

Technical and vocational education through apprenticeship training has been the lifeblood of our industry and a source of our manpower supply.

For too many years society has looked upon apprenticeship and vocational training as a garbage dump for the "not too bright" student or the "troublemaker." Only in the last two decades has progress been made to truly place apprenticeship and vocational education in its rightful position as part of our educational process. The public now is beginning to understand that all students graduating from high school do not necessarily have to attend college in order to become productive members of society.

In 1977, when House Bill 788 authorized a line item in the state budget for apprenticeship training, a great step forward was taken, although much of the financing was still furnished by the sponsoring groups. In the 1985 Legislature, this item was tremendously reduced by legislators who again pushed apprentice training backwards. These dollars need to be restored and above all, vocational education and apprenticeship training must be understood, accepted, and made a part of the educational system and not become a garbage dump again.

**Arra Wiseman, Manager, Personnel Services, Espey, Huston & Associates, Incorporated, Austin**

With advance technology in the word processing and personal computer field developing, voc-ed has certainly been challenged.

Exposure to state-of-the-art technical equipment seems to be a basic, vital challenge to our educational system for the strongest development of its students. Yet, the student's attitude toward a job, toward being in a working environment, and toward striving to be a better employee is an old challenge that still needs attention.

I am aware that employers in the work place may need educating on providing a suitable environment for a student so that learning and proper attitudinal development may be maximized. Voc-ed and business need to continue building a close relationship with the rewards of such a union made obvious to both sides.

**Gayle Noll, Dean of Continuing Education at Odessa College and President of the Texas Administrators of Continuing Education for Community and Junior Colleges, Odessa**

Our organization develops and oversees the noncredit Community Services/Continuing Education (CS/CE) course offered to the communities which the colleges serve. These courses include:

1. Special education and training for the disadvantaged adults in cooperation with the Job Training Partnership Act (JTPA); various courses for handicapped adults.
2. Numerous specially tailored classes for current business and industry employees; training for displaced and undertrained workers; and assistance for new and expanding industries.
3. The general population, including senior citizens not interested in pursuing courses for academic credit.

These opportunities provide direct educational services to vast numbers of the taxpaying public, and constitute a sizeable part of the educational system not always recognized in the State. The noncredit CS/CE program is often overlooked when higher education is being discussed, but our work is never overlooked by the people we serve. We are serving real needs for real people. The workers in the trenches are often overlooked, and that's where we are.

Those of us in CS/CE feel that the services we provide are the "best kept secret in Texas higher education," since the State required reporting reflects only a minimal picture of what we do. If the small amount of funding received from the State is compared to the overall effort of what we do, we believe that we may be the best bargain in the State in higher education.

**Lawrence J. Wolf, Dean of the College of Technology, University of Houston, Houston**

I would like to make some comments for the record.

1. Too many vocational teachers do not possess a college degree. A person lacking a degree cannot have the proficiency in English, science, and mathematics now required to keep up with the changes in modern industry. Furthermore, nondegree teachers lack the confidence and often the ability to become effective spokespersons within their schools and the communities for vocational and technical education. Texas should set up a timetable that would ensure that all vocational teachers are degree qualified within ten years. Exceptions for vocational teachers to the new state teacher criteria should be phased out within three years.
2. A low rate of accreditation of postsecondary associate degree programs in engineering technology exists. At present, only two associate degree programs in engineering technology are accredited in Texas and they are located at Del Mar College in Corpus Christi and Houston Community College. This is an incredibly low rate of participation for a state this size.

Accreditation ensures that technicians are educated to national or international standards. Most accredited institutions find a sufficient amount of flexibility to accommodate local needs.

Accreditation is not embraced by many schools because it means that these schools will have to submit their programs to periodic external reviews by quality teachers from across the country on the basis of objective criteria concerning curriculum, faculty qualifications, and laboratory equipment.

**Jim Morriss, Executive Vice President, Texas Electric Cooperatives, Austin**

Rural electric cooperatives support vocational education training and related youth organization activities in the state. In 1986, the Texas Employment Commission has surpassed the \$1,000,000 level of support of youth and young adult activities in Texas.

To prepare my comments for this testimony; specifically to address the issue of vocational education, a vocational education survey of my employees was conducted. One-third of my 150 Austin-based employees indicated that they had participated in vocational education training programs.

I would like to share with you the response to the question: "What benefits did you receive from your vocational education experiences?" Their responses adequately illustrate the value of vocational education.

1. Vocational experience led to my first job.

2. Public speaking/leadership skills/confidence.
3. On-the-job training.
4. Labor saving practices--"I fix it myself!"
5. Developed good work ethic.
6. Became acquainted with business/industry leaders.
7. Positive attitude.
8. Received career counseling.
9. Better prepared for interview/resume writing.
10. Responsibility--chance to perform.

The balance of my remarks will represent personal, philosophical comments related to vocational education and the educational reform in place in Texas.

Most Texans will not argue the need to get back to the basics in the classroom. What are the basics? I am convinced that we must expand our traditional views to include: reading, writing, arithmetic, communications, and a saleable skill. Too many students leave the classroom rich in information and poor in work experiences. They have a tough time making the transition to the real world of work and making a living. We must bring the real world of work into the school.

The most important concept we can get across to the student is that all work is important. We must realize that there is dignity in all forms of diligent labor, whether that labor be behind a desk or a cutting torch.

I am troubled with the emphasis being placed on high tech preparatory education when it is at the expense of neglect and severe budget cuts to our vocational education programs. Realistically, not everyone wants to be a computer programmer, scientist, or of the high tech persuasion. There should be no stigma attached to people wanting to be a beautician, welder, auto mechanic, farmer, or carpenter. House Bill 246 establishes an advanced academic curriculum career path and a general academic curriculum career path. This concept and the term "higher education" imply that if the career path chosen is not "advanced or higher," it is second rate.

The education reforms passed by the Texas Legislature mandate just that--reform, not necessarily elimination of entire programs. Let's fix the vocational education program if it is broken! Our education system is charged with the responsibility to deliver quality education to all Texas students. The nearly 500,000 vocational education students in Texas merit our attention and support.

**Nita Griffin, President, Vocational Office Education Teachers Association of Texas, Pearland**

Adequately trained employees for business and industry are vitally important in today's rapidly changing job market. Vocational Office Education (VOE) provides the training needed for high school graduates to compete for these jobs.

There are two categories of funding currently available from the Texas Education Agency (TEA) for personnel and curriculum development which, I feel, have not been equitably distributed among the existing vocational education programs in our state.

There has been a rapid growth of targeted jobs in Office Education Word Processing and Data Processing, Office Duplicating, Pre-employment Lab, and Office Education Cooperative Training due to increased demands for qualified personnel.

In my view, all education is vocational, and a well-rounded curriculum including one or more of our programs is an absolute necessity. The funds are needed so that we may continually upgrade our programs to meet the constantly changing demands of the high tech job market in business and industry. State-of-the-art equipment and supplies to teach students in all areas of Office Education are desperately needed. Employers want workers trained with adequate entry level skills and knowledge in transcription, calculating, typing, and computer/word processing skills. All of these require updating teacher training, and modern equipment in our classrooms. It is our job as educators, indeed our duty, to make every effort to meet these demands for the future of our young people and the State of Texas.



## **About the Council**

The Advisory Council for Technical-Vocational Education in Texas, a 13-member lay citizen advisory group, operates under both federal and state laws. The Council's chief function is to advise the State Board of Education on technical-vocational education programs offered in the State's secondary and post-secondary schools.

Council members, appointed by the Governor and confirmed by the State Senate, serve a four-year term ending January 1, 1989. These appointments represent business, industry, agriculture, labor, education, career guidance/counseling, and special populations.

Specific responsibilities of the Council include:

- o analyzing the distribution of spending and availability of voc ed activities and services, as they relate to current and future labor market and citizen needs,
- o recommending policies and initiatives to strengthen and modernize vocational programs in Texas,
- o encouraging and facilitating education/private sector partnerships,
- o recommending coordination between voc ed and Job Training Partnership Act delivery systems, and
- o identifying and documenting citizen needs, issues, and concerns.

The Council staff is comprised of: Will Reece, Executive Director; Sharon Willis, Program Officer; Val Blaschke, Administrative Technician; and Lynda Permenter, Secretary.

### **1985-86 Council Membership**

1. Janey Lack, Chairman, Financial Specialist, Nonprofit Organizations, Victoria.
2. Gary O. Boren, Vice Chairman, Owner, Boren Services, Lubbock.
3. Hank S. Brown, Past President, Texas AFL-CIO, San Antonio.
4. Shirlene S. Cook, Vocational Counselor, Beaumont ISD,

Beaumont.

5. John C. Cox, Executive Manager, Occupational and Continuing Education, Houston ISD, Houston.
6. Jim N. Hutchins, Owner, J-H Land & Cattle Company, Estelline.
7. Filomena Leo, Director, Special Education, La Joya ISD, La Joya.
8. Ted Martinez, Jr., District Director, Career and Continuing Education, Dallas County Community College District, Dallas.
9. George F. Matott, Manager, Employee Education Center, Texas Instruments, Austin.
10. Joe Pentony, Chairman, Psychology Department, University of St. Thomas, Houston.
11. Donna Price, Licensed Professional Counselor, I.A. Kraft M.D. P.A. & Associates, Houston.
12. T. D. Steinke, International Representative, United Rubber Workers of America, Waco.
13. William E. Zinsmeyer, President, William E. Zinsmeyer & Associates, San Antonio.



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